Environmental Review Record

for the

Gardenia Courtyards Senior Apartments Project

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APPENDIX A

GARDENIA COURTYARDS SENIOR APARTMENTS PROJECT FLOODPLAIN MANAGEMENT DETERMINATION STEP 3: ALTERNATIVE SITE ANALYSIS

FLOODPLAIN MANAGEMENT DETERMINATION
STEP 3: ALTERNATIVE SITE ANALYSIS

INTRODUCTION

The primary intent of the Floodplain Management Determination Step 3, as stated in Title 44, Section 9.9 b of the Code of Federal Regulation, is to "[…] identify and evaluate practicable alternatives to carrying out a proposed action in floodplains or wetlands, including; (1) Alternative sites outside the floodplain or wetland; (2) Alternative actions which serve essentially the same purpose as the proposed action, but which have less potential to affect or be affected by the floodplain or wetlands; and (3) No action."

Pursuant to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 06107C0954E, effective June 16, 2009, the project site is located within a 500-year floodplain and is identified as an Area with 0.2 Percent Annual Chance Flood Hazard.[1] An area within a 500-year floodplain is defined as an area, including the base flood elevation (BFE), subject to inundation from a flood having a 0.2 percent chance or greater of being equaled or exceeded in any given year. Therefore, potential impacts related to flood risks could occur, and development of the project site through assistance provided by the U.S. Department of Housing and Urban Development (HUD) is subject to the 8-Step Decision-Making Process for Executive Order 11988.

PROJECT DESCRIPTION SUMMARY

The 2.39-acre project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California, and is identified by Assessor's Parcel Number (APN) 111-290-015. Currently, the project site consists of undeveloped land with a private, dirt stubbed street on the project site's southern frontage. The City of Farmersville General Plan designates the project site as Medium High Density Residential and the project site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of an affordable senior housing community consisting of 42 senior housing units within one two-story residential building. The senior housing development would include 34 one-bedroom units at 607 square feet (sf) each and eight two-bedroom units at 804 sf each. The proposed project would include 41 low-income units for seniors, which would be restricted for seniors aged 62 or above earning between 30 and 60 percent of the Area Median Income (AMI) of Tulare County, and one two-bedroom manager's unit.

With respect to the on-site amenities, the proposed project would include a 3,469-sf community center, community garden, fenced dog park, bocce ball court, and a picnic table area with a BBQ. The 3,469-sf two-story community center would include an elevator, a 877-sf kitchen and community space, 444-sf flex space, 599-sf exercise room, 374-sf laundry room, 129-sf office, 194-sf office lobby, 56-sf unisex restroom, and an 85-sf unisex restroom.

[1] Federal Emergency Management Agency. *Flood Insurance Rate Map 06107C0954E.* Available at: https://msc.fema.gov/portal/home. Accessed May 2025.

Primary site access would be provided from Farmersville Road to the west through the existing stubbed street on the project site's southern frontage, which would be paved into a private drive. A drive aisle would extend north from the private drive into the site, providing vehicular access to the proposed senior housing development. Parking for 67 vehicles would be available throughout the senior housing development, including 47 covered spaces and 20 uncovered spaces. Three of the 47 covered parking spaces and one of the 20 uncovered parking spaces would be designed in compliance with the Americans with Disabilities Act (ADA). Of the total 67 parking spaces, 35 spaces would be electric vehicle (EV) capable, including 27 EV-ready low power receptacles, one van accessible EV charging space, one accessible EV charging space, one ambulatory EV charging space, and five standard EV charging spaces. The project would also provide long-term storage for four bicycles and short-term storage for 20 bicycles on the project site.

ALTERNATIVES

The alternatives evaluated in this section are included for discussion in order to attempt to minimize or eliminate impacts associated with the floodplain. The alternatives to the proposed project evaluated in this section are as follows (see Figure 1):

1. Locate the Project in the Floodplain;
2. Locate the Project Outside of the Floodplain; and
3. No Action Alternative.

1. Locate the Project in the Floodplain

Alternative 1 would be located immediately west of North Ventura Avenue, south of West Chandler Street, and north of West Citrus Drive, and would implement the same components of the proposed project, including the construction of an affordable senior housing community consisting of 42 senior housing units within one two-story residential building and the associated amenities and on-site parking. The Alternative 1 site is currently vacant, undeveloped, and relatively flat with ruderal grasses throughout and trees located around the perimeter of the site. Thus, although pursuant to FEMA FIRM 06107C0962E, effective June 16, 2009, FEMA designates the site as an Area with 0.2 Percent Annual Chance Flood Hazard within the 500-year floodplain, the Alternative 1 site is among the few locations within close proximity to the project site that is developable, would not require demolition of existing structures or removal of existing agricultural uses, and is within relatively close proximity to existing commercial uses and healthcare facilities.[2]

Natural Environment

Based on the natural environment, occupants of the Alternative 1 site would be subject to potential adverse effects related to flooding. In addition, construction of Alternative 1 could result in potential adverse effects related to endangered species and historic preservation, due to on-site trees and the potential for unknown subsurface resources to be present on-site, which could be disturbed during construction. Furthermore, similar to the proposed project, according to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, the Alternative 1 site is designated as "Prime farmland if irrigated."[3]

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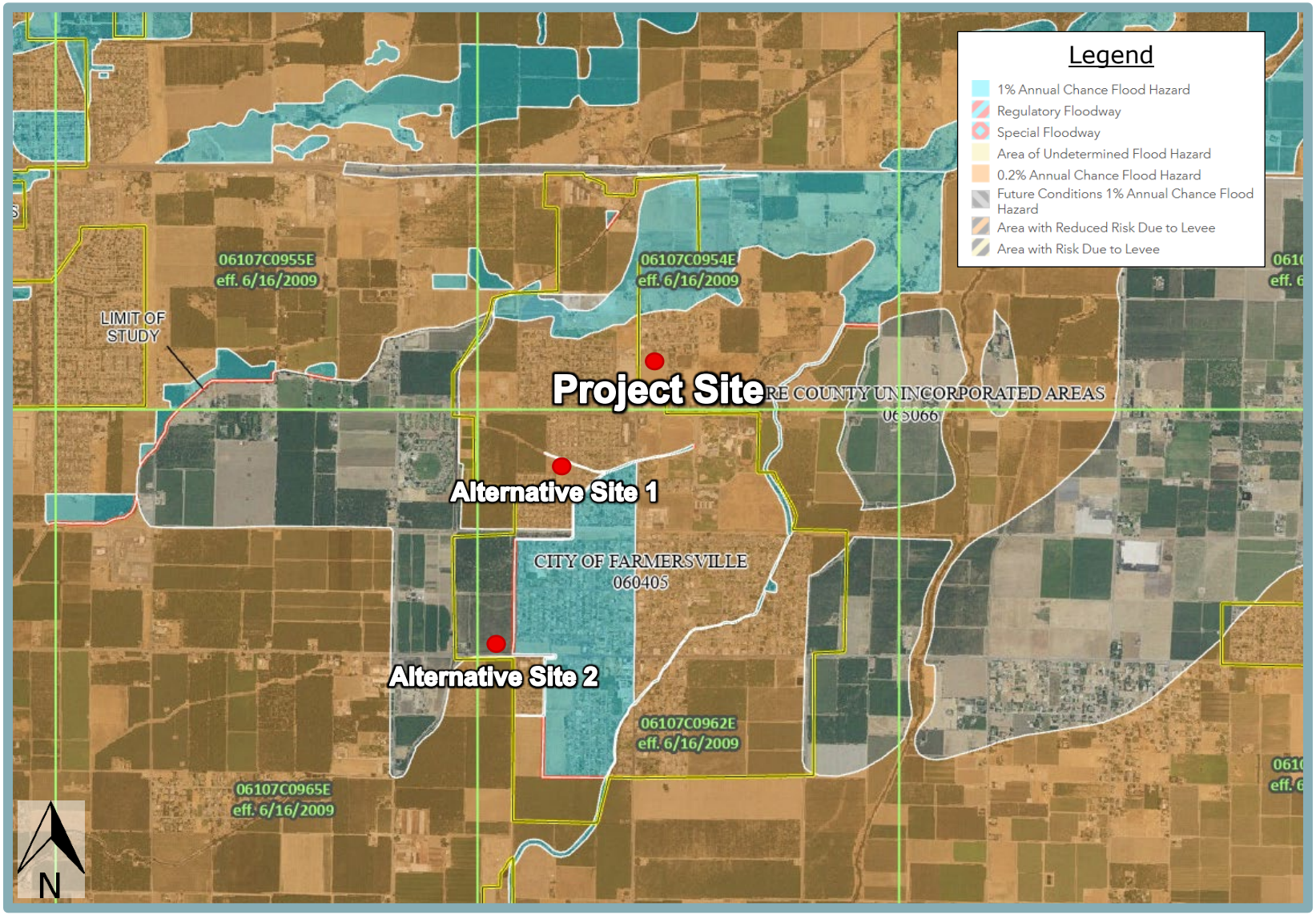
[2] Federal Emergency Management Agency. *FEMA's National Flood Hazard Layer (NFHL) Viewer.* Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed January 2026.

[3] U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey.* Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed January 2026.

Figure 1
Alternative Site Locations



Thus, development of the Alternative 1 site could result in potential adverse effects related to agricultural resources. Based on the above, potential adverse effects related to the natural environment would be similar to or greater than those associated with development of the proposed project.

Social Concerns

The Alternative 1 site is located approximately 0.48-mile to the southwest of the project site and, similar to the proposed project, the Alternative 1 site would be located adjacent to a neighborhood street, not a major roadway. As such, future residents of Alternative 1, similar to residents of the proposed project, would not be exposed to excessive noise and toxic air contaminants generated from traffic travelling on nearby roadways. In addition, both the proposed project and Alternative 1 site are located in residential neighborhoods, with similar access and proximity to public transportation stops in the City. Thus, the proposed project and the Alternative 1 site would provide similar feasibility for low-income and disabled residents to access facilities located in Farmersville. However, the Alternative 1 site is located directly adjacent to agricultural land on the project site's western boundary. As such, future residents of the Alternative 1 site could be exposed to pesticides related to the agricultural land on the project site's western frontage. Therefore, given the close proximity of the Alternative site 1 to agricultural land, the site would be subject to potential adverse effects associated with environmental justice and social concerns, specifically related to equal protection from environmental and health hazards and equal access to a healthy environment in which to live.

Economic Aspects

The Alternative 1 site is not owned by the project applicant. Purchase of the Alternative 1 site could render the proposed affordable senior housing development economically infeasible due to the lack of available funding.

Legal Constraints

Unlike the proposed project site, the Alternative 1 site is designated Medium Density Residential and is zoned Single Family Residential (R-1). The Medium Density Residential land use designation allows for a mix of single family and multi-family uses, including duplex, tri-plex, four-plex units, and mobile home parks. In addition, the Medium Density Residential land use designation allows for a maximum of 15 dwelling units per gross acre (du/ac), or 42 persons per acre. Pursuant to the City's Municipal Code Chapter 17.40, examples of typical uses within R-1 zoned parcels include single-family dwellings and accessory buildings and uses. The development of 42 senior housing units within one two-story residential building would not comply with the allowed single family and multi-family uses in the Medium Density Residential land use designation and R-1 zoning. As such, development of the Alternative would not be consistent with the General Plan, and Alternative 1 would require a General Plan Amendment (GPA) and rezoning to allow for development of the project on the Alternative 1 site.

Conclusion

As discussed above, the Alternative 1 site is not designated or zoned to allow for the development of a 42-unit senior housing development. In addition, construction of Alternative 1 could result in potential adverse effects related to agricultural resources, endangered species, and historic preservation equal to or potentially greater than those associated with the proposed project. In order to address potential increased impacts related to environmental justice, social concerns, endangered species, and historic preservation, development of Alternative 1 would require mitigation measures similar to those set forth in the Environmental Assessment prepared for the

proposed project. Finally, considering that the Alternative 1 site is not owned by the project applicant, purchase of the site could render development of the affordable senior housing project on the Alternative 1 site economically infeasible. Overall, Alternative 1 would not diminish the number of substantial environmental adverse effects that would occur, relative to those associated with the proposed project, such that the merits of the Alternative would override the economic infeasibility and lack of community benefits of the Alternative.

2. Locate the Project Outside of the Floodplain

Alternative 2 would be constructed on a site that is currently developed with agricultural land, located immediately to the north of West Visalia Road. Alternative 2 would implement the same components of the proposed project, including the construction of an affordable senior housing community consisting of 42 senior housing units within one two-story residential building and the associated amenities and on-site parking. The Alternative 2 site is currently developed with agricultural trees and a residence in the southwestern corner of the site. FEMA designates the site as an Area of Minimal Flood Hazard, which is outside of the 100-year and 500-year floodplain.[4]

Natural Environment

The Alternative 2 site is within an Area of Minimal Flood Hazard, outside of the 100-year and 500-year floodplains and, as such, would not be subject to potentially substantial adverse effects related to flooding. The site is developed with agricultural trees and a residence, limiting the site's potential to accommodate endangered species. However, similar to the proposed project, according to the USDA NRCS Web Soil Survey, the site is designated as "Prime farmland if irrigated"[5] and development of the site would involve the removal of the existing agricultural trees, which could result in potential adverse impacts related to agricultural resources and biological resources; for example, tree removal could result in impacts to birds nesting in the on-site trees. The project site is bordered by West Visalia Road to the south. Based on the natural environment, occupants of the Alternative 2 site could be subject to potential adverse effects related to air quality and excessive noise, due to the site's proximity to West Visalia Road. Construction of Alternative 2 could result in potential adverse effects related to historic preservation, due to the potential for unknown subsurface resources to exist on-site and to the demolition of the existing on-site residence, as well as potential air quality and noise adverse effects to sensitive receptors in the vicinity. Based on the above, potential adverse effects related to the natural environment would be similar to or greater than those associated with development of the proposed project.

Social Concerns

The Alternative 2 site is located approximately 1.08 miles to the southwest of the project site and, similar to the proposed project, the Alternative 2 site would be located adjacent to West Visalia Road, which is not a major roadway. As such, future residents of Alternative 2, similar to residents of the proposed project, would not be exposed to excessive noise and toxic air contaminants generated from traffic travelling on nearby roadways. In addition, both the proposed project and Alternative 2 site are located in or adjacent to residential neighborhoods, with similar access and proximity to public transportation stops in the City. Thus, the proposed project and the Alternative 2 site would provide similar feasibility for low-income and disabled residents to access facilities

[4] Federal Emergency Management Agency. *FEMA's National Flood Hazard Layer (NFHL) Viewer.* Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed January 2026.

[5] U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey.* Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed January 2026.

located in Farmersville. However, Alternative 2 is currently developed with an on-site residence. Development of the site would involve the demolition of the residence and the displacement of any potential current inhabitants of the residence. As the proposed project does not contain any residences on the site, Alternative 2 would displace residents whereas the proposed project would not. Furthermore, the Alternative 2 site is currently developed with an orchard. As such, future residents of the Alternative 2 site could potentially be exposed to pesticides in the soil related to the agricultural land currently located on the project site. Therefore, given that the Alternative site 2 is currently being used as agricultural land, the site would be subject to potential adverse effects associated with environmental justice and social concerns, specifically related to equal protection from environmental and health hazards and equal access to a healthy environment in which to live. Based on the above, Alternative 2 would not produce an equal level of community benefits to the surrounding neighborhood, and would be subject to additional potential environmental justice and social concerns relative to the proposed project.

Economic Aspects

The Alternative 2 site is not owned by the project applicant. Purchase of the Alternative 2 site could render the proposed affordable senior housing development economically infeasible due to the lack of available funding. In addition, development of the Alternative 2 site would require the removal of the existing orchard, leading to destruction of potential revenue for the property owner and the City of Farmersville.

Legal Constraints

Unlike the proposed project site, the Alternative 2 site is designated Medium Density Residential and General Commercial and is zoned R-1 and General Commercial (CG). The Medium Density Residential land use designation allows for a mix of single-family and multi-family uses, including duplex, tri-plex, four-plex units, and mobile home parks. In addition, the Medium Density Residential land use designation allows for a maximum of 15 du/ac, or 42 persons per acre. The General Commercial land use designation allows for shopping centers, retail uses, and offices. Pursuant to the City's Municipal Code Chapter 17.40, examples of typical uses within R-1 zoned parcels include single-family dwellings and accessory buildings and uses. Additionally, pursuant to the City's Municipal Code Chapter 17.44, the CG zone is intended to provide a general commercial area for the sale of commodities or the performance of services to serve the entire community. The development of 42 senior housing units within one two-story residential building would not comply with the allowed single family and multi-family uses in the Medium Density Residential land use designation and R-1 zoning, and the project would include residential development rather than the commercial development in the existing CG land use designation and zoning. As such, development of the Alternative would not be consistent with the General Plan, and Alternative 2 would require City approval of a GPA and Rezone to allow for development of the project on the Alternative 2 site.

Conclusion

The Alternative 2 site is not designated to allow for the proposed uses. In addition, development of the Alternative 2 site could expose future residents to potential impacts related to environmental justice that would be equal to or potentially greater than those associated with the proposed project. Furthermore, construction of Alternative 2 could result in potential adverse effects related to agricultural resources, endangered species, and historic preservation equal to or potentially greater than those associated with the proposed project. To address such impacts, development of Alternative 2 would require mitigation measures similar to those set forth in the Environmental Assessment prepared for the proposed project. Considering that the Alternative 2 site is not

owned by the project applicant, purchase of the site could render development of the affordable senior housing project on the Alternative 2 site economically infeasible. Overall, Alternative 2 would not diminish the number of substantial environmental adverse effects that would occur, relative to those associated with the proposed project, such that the merits of the Alternative would override the economic infeasibility and lack of community benefits of the Alternative.

3. No Action Alternative

Under the No Action Alternative, the proposed project would not be developed and the project site would remain in its current state. A project proponent could choose to develop the project site in accordance with the site's existing Medium High Density Residential land use designation and RM-2.5 zoning designation. However, considering that the proposed project is generally consistent with the uses allowed under the site's land use and zoning designations, development of the project site facilitated by the No Action Alternative would likely result in similar potential adverse effects and require similar mitigation measures as those identified in the Environmental Assessment prepared for the proposed project. As such, future structures built at the project site in accordance with the existing land use and zoning designations would require measures to prevent potential adverse geological effects, as required by Mitigation Measure 1 of the Environmental Assessment, and adverse effects related to noise, as required by Mitigation Measure 2 of the Environmental Assessment. Thus, any future potential development of the site facilitated by the No Action Alternative would likely result in similar potential adverse effects relative to those identified for the proposed project.

Finally, the City of Farmersville 2023-2031 Housing Element establishes the existing housing needs in Farmersville. According to the Housing Element, there is a resource need in Farmersville of 42 units for lower-income seniors.[6] The No Action Alternative could hinder the City's ability to achieve the affordable senior housing goals identified in the City's General Plan, if, in the event that future development of the site would be multi-family residential, such development is not affordable and restricted to seniors. Furthermore, the proposed project would consist of low-income senior housing units restricted for seniors earning between 30 and 60 percent of the AMI for Tulare County. Even if future development was affordable, such development may not provide the same amount of affordable housing and, thus, would meet the County's need for affordable housing to a lesser extent.

[6] City of Farmersville. *City of Farmersville 2023-2031 Housing Element.* June 2024.

APPENDIX B

CALEEMOD: GARDENIA COURTYARD SENIOR APARTMENTS

Gardenia Courtyard Senior Apartments Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Gardenia Courtyard Senior Apartments
Construction Start Date	2/2/2026
Operational Year	2027
Lead Agency	City of Farmersville
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	24.4
Location	36.31547426350308, -119.20524819619953
County	Tulare
City	Farmersville
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2719
EDFZ	9
Electric Utility	Eastside Power Authority
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	42.0	Dwelling Unit	1.63	40,285	38,352	—	142	—

Parking Lot	67.0	Space	0.76	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.52	2.25	11.2	14.5	0.03	0.38	0.22	0.61	0.35	0.05	0.41	—	2,643	2,643	0.11	0.04	1.00	2,660
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.50	2.22	12.9	14.4	0.03	0.58	7.14	7.72	0.53	3.44	3.97	—	2,755	2,755	0.11	0.04	0.03	2,765
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.55	1.38	7.19	9.11	0.02	0.25	0.26	0.52	0.23	0.09	0.32	—	1,678	1,678	0.07	0.03	0.26	1,688
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28	0.25	1.31	1.66	< 0.005	0.05	0.05	0.09	0.04	0.02	0.06	—	278	278	0.01	< 0.005	0.04	280

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	2.52	2.25	11.2	14.5	0.03	0.38	0.22	0.61	0.35	0.05	0.41	—	2,643	2,643	0.11	0.04	1.00	2,660
2027	2.44	2.18	10.7	14.3	0.03	0.34	0.22	0.57	0.31	0.05	0.37	—	2,637	2,637	0.11	0.04	0.90	2,653
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.50	2.22	12.9	14.4	0.03	0.58	7.14	7.72	0.53	3.44	3.97	—	2,755	2,755	0.11	0.04	0.03	2,765
2027	2.42	2.16	10.8	14.0	0.03	0.34	0.22	0.57	0.31	0.05	0.37	—	2,613	2,613	0.11	0.04	0.02	2,628
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.55	1.38	7.19	9.11	0.02	0.25	0.26	0.52	0.23	0.09	0.32	—	1,678	1,678	0.07	0.03	0.26	1,688
2027	0.83	0.74	3.58	4.69	0.01	0.11	0.07	0.19	0.10	0.02	0.12	—	871	871	0.04	0.01	0.13	876
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.28	0.25	1.31	1.66	< 0.005	0.05	0.05	0.09	0.04	0.02	0.06	—	278	278	0.01	< 0.005	0.04	280
2027	0.15	0.13	0.65	0.86	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	144	144	0.01	< 0.005	0.02	145

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.76	2.63	1.70	15.1	0.03	0.04	2.46	2.50	0.04	0.63	0.66	20.2	3,494	3,514	2.18	0.15	10.4	3,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.39	2.26	1.89	10.4	0.03	0.04	2.46	2.50	0.04	0.63	0.66	20.2	3,236	3,256	2.19	0.16	0.55	3,359
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.36	2.24	1.64	10.7	0.03	0.04	2.17	2.21	0.04	0.55	0.59	20.2	3,021	3,041	2.17	0.14	4.19	3,141
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.43	0.41	0.30	1.96	< 0.005	0.01	0.40	0.40	0.01	0.10	0.11	3.34	500	503	0.36	0.02	0.69	520

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.58	1.47	1.48	12.6	0.03	0.03	2.46	2.48	0.02	0.63	0.65	—	2,958	2,958	0.11	0.14	10.1	3,012
Area	1.16	1.15	0.02	2.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	—	6.39
Energy	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	519	519	0.04	< 0.005	—	521
Water	—	—	—	—	—	—	—	—	—	—	—	3.43	10.8	14.2	0.35	0.01	—	25.5
Waste	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Total	2.76	2.63	1.70	15.1	0.03	0.04	2.46	2.50	0.04	0.63	0.66	20.2	3,494	3,514	2.18	0.15	10.4	3,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.43	1.31	1.70	10.3	0.03	0.03	2.46	2.48	0.02	0.63	0.65	—	2,707	2,707	0.12	0.15	0.26	2,754
Area	0.94	0.94	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	519	519	0.04	< 0.005	—	521
Water	—	—	—	—	—	—	—	—	—	—	—	3.43	10.8	14.2	0.35	0.01	—	25.5
Waste	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Total	2.39	2.26	1.89	10.4	0.03	0.04	2.46	2.50	0.04	0.63	0.66	20.2	3,236	3,256	2.19	0.16	0.55	3,359
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.29	1.19	1.43	9.48	0.02	0.02	2.17	2.19	0.02	0.55	0.57	—	2,488	2,488	0.10	0.13	3.90	2,533
Area	1.05	1.04	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.14	3.14	< 0.005	< 0.005	—	3.15
Energy	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	519	519	0.04	< 0.005	—	521

Water	—	—	—	—	—	—	—	—	—	—	—	3.43	10.8	14.2	0.35	0.01	—	25.5
Waste	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Total	2.36	2.24	1.64	10.7	0.03	0.04	2.17	2.21	0.04	0.55	0.59	20.2	3,021	3,041	2.17	0.14	4.19	3,141
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.24	0.22	0.26	1.73	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10	—	412	412	0.02	0.02	0.65	419
Area	0.19	0.19	< 0.005	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.52	0.52	< 0.005	< 0.005	—	0.52
Energy	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	85.9	85.9	0.01	< 0.005	—	86.2
Water	—	—	—	—	—	—	—	—	—	—	—	0.57	1.78	2.35	0.06	< 0.005	—	4.22
Waste	—	—	—	—	—	—	—	—	—	—	—	2.77	0.00	2.77	0.28	0.00	—	9.70
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	0.43	0.41	0.30	1.96	< 0.005	0.01	0.40	0.40	0.01	0.10	0.11	3.34	500	503	0.36	0.02	0.69	520

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.13	9.84	10.8	0.03	0.42	—	0.42	0.39	—	0.39	—	2,716	2,716	0.11	0.02	—	2,725

Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.3	22.3	< 0.005	< 0.005	—	22.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.70	3.70	< 0.005	< 0.005	—	3.71
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.26	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.2	39.2	< 0.005	< 0.005	< 0.005	39.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	12.9	14.0	0.02	0.58	—	0.58	0.53	—	0.53	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.4	40.4	< 0.005	< 0.005	—	40.5
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.34	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.3	52.3	< 0.005	< 0.005	0.01	53.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.91

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.85	0.71	6.09	7.09	0.01	0.22	—	0.22	0.20	—	0.20	—	1,327	1,327	0.05	0.01	—	1,331
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.11	1.29	< 0.005	0.04	—	0.04	0.04	—	0.04	—	220	220	0.01	< 0.005	—	220
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.08	1.33	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	179	179	0.01	0.01	0.64	182
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.7	94.7	< 0.005	0.01	0.23	99.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.04	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	158	158	0.01	0.01	0.02	161
Vendor	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.8	94.8	< 0.005	0.01	0.01	99.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.65	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.8	98.8	0.01	< 0.005	0.17	101
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	57.1	57.1	< 0.005	0.01	0.06	59.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.4	16.4	< 0.005	< 0.005	0.03	16.6

Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.46	9.46	< 0.005	< 0.005	0.01	9.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.37	3.21	3.87	0.01	0.11	—	0.11	0.10	—	0.10	—	728	728	0.03	0.01	—	730
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.08	0.07	0.59	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	121	121	< 0.005	< 0.005	—	121
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.07	1.22	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	175	175	0.01	0.01	0.58	178
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	92.7	92.7	< 0.005	0.01	0.21	97.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.09	0.96	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	155	155	0.01	0.01	0.01	157
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	92.8	92.8	< 0.005	0.01	0.01	97.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.33	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.1	53.1	< 0.005	< 0.005	0.08	54.1
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.7	30.7	< 0.005	< 0.005	0.03	32.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.80	8.80	< 0.005	< 0.005	0.01	8.95
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.08	5.08	< 0.005	< 0.005	< 0.005	5.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.1	34.1	< 0.005	< 0.005	—	34.2
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.64	5.64	< 0.005	< 0.005	—	5.66
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.52	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	78.4	78.4	0.01	< 0.005	0.01	79.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.23	2.23	< 0.005	< 0.005	< 0.005	2.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	0.77	0.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	0.77	0.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.49	0.65	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.1
Architectural Coatings	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.7	12.7	< 0.005	< 0.005	—	12.8
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.27	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	0.13	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.21	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	< 0.005	32.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.9	18.9	< 0.005	< 0.005	0.03	19.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.12	3.12	< 0.005	< 0.005	0.01	3.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	0.77	0.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	0.77	0.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.8	47.8	< 0.005	< 0.005	—	48.0
Architectural Coatings	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.92	7.92	< 0.005	< 0.005	—	7.94

Architect Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.24	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.0	35.0	< 0.005	< 0.005	0.12	35.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.19	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.0	31.0	< 0.005	< 0.005	< 0.005	31.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.02	11.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	1.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	1.58	1.47	1.48	12.6	0.03	0.03	2.46	2.48	0.02	0.63	0.65	—	2,958	2,958	0.11	0.14	10.1	3,012
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.58	1.47	1.48	12.6	0.03	0.03	2.46	2.48	0.02	0.63	0.65	—	2,958	2,958	0.11	0.14	10.1	3,012
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	1.43	1.31	1.70	10.3	0.03	0.03	2.46	2.48	0.02	0.63	0.65	—	2,707	2,707	0.12	0.15	0.26	2,754
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.43	1.31	1.70	10.3	0.03	0.03	2.46	2.48	0.02	0.63	0.65	—	2,707	2,707	0.12	0.15	0.26	2,754
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.24	0.22	0.26	1.73	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10	—	412	412	0.02	0.02	0.65	419
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.24	0.22	0.26	1.73	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10	—	412	412	0.02	0.02	0.65	419

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	240	240	0.02	< 0.005	—	241
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	36.0	36.0	< 0.005	< 0.005	—	36.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	276	276	0.02	< 0.005	—	278
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	240	240	0.02	< 0.005	—	241
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	36.0	36.0	< 0.005	< 0.005	—	36.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	276	276	0.02	< 0.005	—	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	39.8	39.8	< 0.005	< 0.005	—	40.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.96	5.96	< 0.005	< 0.005	—	5.99
Total	—	—	—	—	—	—	—	—	—	—	—	—	45.8	45.8	< 0.005	< 0.005	—	46.0

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	242	242	0.02	< 0.005	—	243
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	242	242	0.02	< 0.005	—	243
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	242	242	0.02	< 0.005	—	243
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	242	242	0.02	< 0.005	—	243
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.1	40.1	< 0.005	< 0.005	—	40.2
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.1	40.1	< 0.005	< 0.005	—	40.2

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.22	0.21	0.02	2.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.37	6.37	< 0.005	< 0.005	—	6.39
Total	1.16	1.15	0.02	2.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	—	6.39
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.94	0.94	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.02	0.02	< 0.005	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.52	0.52	< 0.005	< 0.005	—	0.52
Total	0.19	0.19	< 0.005	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.52	0.52	< 0.005	< 0.005	—	0.52

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.43	10.8	14.2	0.35	0.01	—	25.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.43	10.8	14.2	0.35	0.01	—	25.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.43	10.8	14.2	0.35	0.01	—	25.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.43	10.8	14.2	0.35	0.01	—	25.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.57	1.78	2.35	0.06	< 0.005	—	4.22
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	0.57	1.78	2.35	0.06	< 0.005	—	4.22

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	2.77	0.00	2.77	0.28	0.00	—	9.70
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.77	0.00	2.77	0.28	0.00	—	9.70

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	2/2/2026	2/4/2026	5.00	3.00	—
Grading	Grading	2/5/2026	2/12/2026	5.00	6.00	—
Building Construction	Building Construction	2/27/2026	6/18/2027	5.00	341	—

Paving	Paving	2/13/2026	2/26/2026	5.00	10.0	—
Architectural Coating	Architectural Coating	3/13/2026	7/2/2027	5.00	341	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	—	6.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	—	6.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.2	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	6.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	—	6.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.05	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	6.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	81,577	27,192	0.00	0.00	1,987

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	4.50	0.00	—
Grading	—	—	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.76

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%
Parking Lot	0.76	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	453	0.03	< 0.005
2027	0.00	453	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Low Rise	307	342	264	111,734	3,112	3,461	2,670	1,131,148
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
81577.125	27,192	0.00	0.00	1,987

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Low Rise	193,617	453	0.0330	0.0040	756,004
Parking Lot	29,014	453	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Low Rise	1,787,631	676,495
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Low Rise	31.1	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Building square footage and acreage adjusted to represent project-specific information.
Construction: Construction Phases	Based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days. Phase timing is based on the project-specific construction timing provided by the applicant. Demolition not required for the proposed project.
Operations: Hearths	Based on applicant provided information, all 42 units would not include fireplaces.

APPENDIX C

PHASE I ENVIRONMENTAL SITE ASSESSMENT

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL, CIVIL & ENVIRONMENTAL

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Vacant Land
Client Project Identification: Gardenia
(APN: 111-290-015-000)
Farmersville, California 93223

Prepared For:

Pacific West Communities, Inc.
430 East State Street, Suite 100
Eagle, Idaho 83616

KCE-2025-348E-R1
January 5, 2026

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Alameda, CA

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I. SUMMARY AND CONCLUSIONS

KCE Matrix, Inc. (KCE Matrix) has been retained by Pacific West Communities, Inc. (referred to as "the client" and/or "the user" in this report) to conduct a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing and Materials (ASTM) standard practice E1527-21 for the property consisting of vacant land that has the Assessor's Parcel Number (APN) of 111-290-015-000, Farmersville, California (referred to as "the subject property" in this report).

The following summarizes the findings of this Phase I ESA:

- The subject property is located in a commercial/retail and residential area on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Avenue, in Farmersville, California. The property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed from the entire western property line along Farmersville Road and from vacant land located along the southern property line.

- Based on the historic information obtained during this investigation (including research of Sanborn Maps, Aerial Photographs, regulatory records and city directories), the subject property consisted of vacant unoccupied land with no structures from 1937 through the present. The site appears to have been used as agricultural land between approximately 1952 and 1984. As of 1994 and through the present, a private road has been and continues to be located in the central portion of the property that connects Farmersville Road along the western perimeter of the site to the properties located adjacent to and east of the subject site. On December 20, 2025, a representative of KCE Matrix conducted site inspection for the subject property and confirmed that the property currently consists of vacant unoccupied land with no structures and has a dirt surface.

- KCE Matrix previously performed a Phase I ESA for the subject property from November through December of 2022 and identified one REC consisting of the historic use of the property for agricultural purposes from at least approximately 1952 through 1984. Subsequently, and based on the subsurface environmental site assessment work performed by KCE Matrix in January of 2023, the subsurface soil at the subject property (former agricultural land use area) had not been impacted by OCPs, Arsenic and Lead; and therefore, had not been impacted by historic or past agricultural land use as may be related to pesticides. Based on these results, KCE Matrix no longer considered the past agricultural use of the subject property as a REC. Furthermore,

based on the results of the assessment work performed which included soil-vapor assessment work on the northwestern and southwestern most portions of the subject property, KCE Matrix also concluded that a Vapor Encroachment Condition (VEC) did not exist for the subject property, either originating from the subject site or immediate site vicinity as related to agricultural usage or related to auto repair facilities or petroleum storage and use at nearby properties.

- The environmental disclosure report obtained by KCE Matrix from EDR presents information with regard to other sites in the immediate and general site vicinity of the subject property. Based on review of the report as provided by EDR, several other sites were identified as being located in the general vicinity of the subject property. Two of these other sites have and/or have had at least one Underground Storage Tank (UST) used for regular product. One other site identified as being located in the general vicinity of the subject property was listed on the RCRA NONGEN / NLR database. This facility has been identified as a non-generator with no reported violations. Based on the information obtained during this investigation and the site vicinity reconnaissance performed, KCE Matrix did not discover or observe subsurface environmental site assessment activity that would indicate potential migration of contamination from other nearby sites towards the subject property.

- Based on the Vapor Encroachment Screen (VES) conducted during this investigation, a Vapor Encroachment Condition (VEC) originating from the subject property was not identified. Furthermore, based on the research conducted during this investigation, a VEC originating from other nearby sites in the vicinity for the subject property was not identified.

- KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on monitoring data collected from wells located at a site that is approximately 0.78-mile north of the subject site, the depth to groundwater was reported to range between 32.52 feet and 34.44 feet below the surface as monitored in May of 2012. Based on information as reported in the "Site Closure Summary" report dated April 1, 2003, for a property located approximately 0.75-mile south of the subject site, the highest depth to groundwater was reported as 13 feet below the top of well casings, and the lowest depth to groundwater was reported as 32 feet below the top of well casings, and the groundwater flow direction was reported to be towards the west.

The ASTM standard practice E1527-21 defines the following terms:

Recognized Environmental Condition (REC) as "(1) the presence of hazardous substances or petroleum products in, on or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances

or petroleum products in, on or at the subject property under conditions that pose a material threat of a future release to the environment".

Historical Recognized Environmental Condition (HREC) as "a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls". A historical recognized environmental condition is not a recognized environmental condition.

Controlled Recognized Environmental Condition (CREC) as "a recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls".

De Minimis Condition as "a condition related to a release that generally does not present a threat to human health or the environment that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies".

KCE Matrix has performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527-21 of the property consisting of vacant land with the APN of 111-290-015-000, Farmersville, California, the subject property. Any exceptions to, or deletions from, this practice are described in this report. This assessment has revealed no RECs, CRECs or significant data gaps in connection with the subject property.

In addition, this assessment has not revealed any HRECs or any "De Minimis" Conditions in connection with the subject property.

II. INTRODUCTION

A. Purpose

This report presents the results of a Phase I ESA conducted by KCE Matrix for the subject property. The purpose of this investigation is to research and report existing environmental conditions for the subject property based on the American Society of Testing and Materials (ASTM) standard practice E1527-21 and to document compliance with 24 CFR §58.5(i)(2) or §50.3(i). Performing a Phase I ESA according to the ASTM Standard E1527-21 is intended to permit a user to satisfy one of the requirements in qualifying for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* limitations on Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability (the "*landowner liability protections*," or "*LLPs*"). This practice constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice".

B. Detailed Scope-of-Services

The scope of services performed during this Phase I ESA project includes:

1. Collecting available information concerning the property as it pertains to:
   a. Past land use
   b. Past owners
   c. Location of buried storage tanks, hazardous waste storage, wastewater treatment facilities and/or on-site landfills, etc.
   d. Types of chemicals used on site, past and present
   e. Geologic and hydrogeologic features
   f. Past geotechnical investigations (if available)
   g. Other data pertinent to the specific site
2. Conducting a site visit to:
   a. Identify vegetative features
   b. Locate surface waters
   c. Assess physical features
   d. Observe adjacent land use
   e. Gather evidence of indiscriminate and/or illegal waste disposal
3. Conducting a review of records maintained by regulatory agencies as follows:
   a. Reviewing regulatory files regarding the property in question
   b. Contacting appropriate regulatory personnel
4. Conducting a Vapor Encroachment Screen.
5. Preparing the Phase I Environmental Site Assessment Report, summarizing our findings and inclusive of supporting documentation.

C. Significant Assumptions

No significant assumptions were made during the course of this investigation.

D. Limitations and Exceptions

As defined by the ASTM Standard E1527-21, the "Client" and/or "User" understands that no amount of environmental site assessment can "wholly eliminate uncertainty regarding the potential for recognized environmental conditions" to exist in connection with the subject property. Performance of a Phase I ESA in accordance with the ASTM Standard E1527-21 is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions to exist in connection with the subject property, and the ASTM standard practice recognizes these reasonable limits of time and cost.

This type of ESA does not include air, soil or water sampling; or sampling of building materials. Site-specific conditions such as soil deposits and rock formations may vary in thickness, lithology, saturation strength, and other properties across any site beyond what available documentation indicates. Therefore, it is possible that undocumented or concealed improvements or alterations to

the property could exist beyond the inquiry of the activities conducted during this site assessment. In addition, environmental changes, either naturally occurring or artificially induced, may cause changes or alterations (which can be significant) to the property as compared to the conditions found at the time that this assessment was conducted.

Based on the best available investigative technologies, no amount of assessment can guarantee that the subject property does not contain contaminants or hazardous substances. The activities conducted during this limited investigation cannot identify all potential concerns for the subject property, and do not eliminate the possibility that the subject property is completely free of environmental concerns.

KCE Matrix has analyzed and evaluated the information collected during this investigation using what we believe to be the currently applicable assessment and engineering techniques and principles. KCE Matrix assumes no liability from other parties involved in losses sustained as a result of decisions made based on interpretations of this report. KCE Matrix makes no warranty, either expressed or implied, regarding the work conducted, except that our services were performed in accordance with the generally accepted professional principles and practices existing for such work.

Extensive information regarding the historic use and occupancy of the subject property was obtained during this investigation, dating from as early as the late 1930s and through the present. As presented in this report, the historic use information was obtained by reviewing standard historical resources (including Sanborn Maps, Aerial Photographs, regulatory records and city directories). Based on the fact that the historic information sources were not available on five-year continuous intervals through all years, this matter can be interpreted or considered as a "data failure" based on Section 8.3.6 of the ASTM E1527-21 Standard. However, the historic information gathered covered numerous years and in sum, presents a detailed history of the subject property. As such, KCE Matrix does not consider this matter as a "data failure" and it does not impact the conclusions presented in this Phase I ESA report.

There are no "significant data gaps" or other "data gaps" to report during this investigation. There are no "data failures" to report during this investigation.

E. Special Terms and Conditions

This report and all information obtained during this site assessment are considered confidential and will not be released without written permission by the owner of the subject property, the owner authorized entity conducting this assessment, or as required by law. The owner of the subject property is typically responsible for mitigation of contamination, corrective or remedial action, and disclosure of any information related to environmental issues that may or may not be discovered during this site assessment.

F. User Reliance

This report was prepared for the exclusive use of the client and/or user. No other person or entity is entitled to rely upon this report without the specific written authorization of KCE Matrix. Any such reliance by any third party is at the sole risk of said third party, and such reliance is subject to the same limitations, terms and conditions as the original contract with the client. KCE Matrix specifically disclaims any responsibility for any unauthorized use of this report.

III. SITE DESCRIPTION

A. Location and Description

The subject property is located on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Avenue, in Farmersville, California. A Location Map, Site Plan, and Site Vicinity Map are presented in Appendix A, as Figures 1, 2 and 3, respectively.

B. Site and Vicinity General Characteristics

The subject property is located in a commercial/retail and residential area. The subject property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed from the entire western property line along Farmersville Road and from vacant land located along the southern property line.

C. Current Use of the Property

The subject property currently consists of vacant unoccupied land with no structures and has a dirt surface.

D. Description of Structures and Other Improvements

The subject property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed from the entire

western property line along Farmersville Road and from the vacant land located along the southern property line.

E. Current Uses of the Adjoining Properties

The adjoining properties are comprised of the following:

- North: Residential properties, an auto repair workshop/facility, Dillon Avenue and residential property.
- East: Residential properties and properties consisting of vacant land.
- South: Vacant land, agricultural land, a commercial/retail property (Rite Aid Store), residential property and East Walnut Avenue.
- West: Farmersville Road, commercial property, an auto repair facility, a public storage facility and residential properties along with residential streets.

IV. USER PROVIDED INFORMATION

A user questionnaire was completed by the client and was provided to KCE Matrix during this investigation. A copy of the completed user questionnaire is presented in Appendix E of this report.

A. Title Records

The client provided KCE Matrix with a copy of a Preliminary Title Report for the subject property as prepared by First American Title Company, dated November 20, 2025. Based on review of the title report for the subject property, no environmental liens and/or Activity and Use Limitations (AUL's), which indicate a past or present release of a hazardous substance or petroleum products, were presented or recorded. A copy of the title report as prepared by First American Title Company dated November 20, 2025 is presented in Appendix E.

B. Environmental Liens or Activity and Use Limitations

The user reported that he is not aware of any environmental cleanup liens that are filed or recorded against the property under federal, tribal, state or local law. The user also reported that he is not aware of any Activity and Use Limitations (AUL's) that are filed or recorded against the property.

C. Specialized Knowledge

The user did not report any specialized knowledge related to the property or to nearby properties.

D. Commonly Known or Reasonably Ascertainable Information

The user did not report any commonly known or reasonably ascertainable information related to the property.

E. Valuation Reduction for Environmental Issues

The user reported that the purchase price of the subject property reasonably reflects the fair market value of the property. The user did not report any other information with regard to the value of the subject property based on environmental issues.

F. Owner, Property Manager, and Occupant Information

The user identified Ms. Niki Slattery as a site contact for the subject property. The user also listed "Pacific West Communities, Inc." as a party who will rely on the Phase I report. The user did not provide any other information regarding the ownership, management or occupancy of the subject property.

G. Reason for Performing Phase I

This Phase I ESA is being performed for the client as part of a due diligence investigation of the subject site for construction loan purposes.

H. Vapor Encroachment

The user reported that the site consists of vacant land and will be developed with the construction of multi-family affordable housing apartments that will have slab-on-grade floors. The user reported that the future structure(s) will use hot air circulation as the heating system type and electricity as the type of fuel energy. The user also reported that neither a gas station nor a dry cleaner operates or will operate on site.

I. Other

The user did not report any other knowledge or experience for the subject property with regard to environmental condition.

V. RECORDS REVIEW

A. Standard Environmental Record Sources

KCE Matrix retained Environmental Data Resources, Inc. (EDR) to conduct a search of government and regulatory databases in an attempt to locate and obtain information about the subject site and other sites in the vicinity of the subject property that may affect the environmental quality of the property. The environmental disclosure report prepared by EDR provides a summary

of the various databases searched and is presented in Appendix B of this report. The database research presents summaries for the subject site and selected adjoining properties as follows:

A1. Subject Site

The target property was not listed in any of the databases searched by EDR.

A2. Site Vicinity

With regard to the summary report prepared by EDR, KCE Matrix has prepared the following table listing other sites located in the general vicinity of the subject property up to a reported search distance of approximately 650 feet. This summary table includes the site names, the reported distances from the subject property, as well as a brief summary of the information reported by the databases searched.

Facility Name	Address	Dist. (ft)	Database	Regulatory History and/or Reported Impact and Current Status
Ral Copping	28880 Rd 164	4 SSW	HIST UST	Reported one 260-gallon UST used for regular MV fuel.
Ralph Copping	28880 Road 164	4 SSW	HIST UST	Reported one 260-gallon UST used for regular product.
T Young Diesel Electric	29022 Road 164	127 NNW	RCRA NonGen / NLR	Classified the facility as not being a generator of Federal RCRA waste. No violations were reported.
Claudes Buggies Inc	28813 Farmersville Blvd	593 SSW	HIST UST	Reported one 1,500-gallon UST installed in 1977 and used for regular MV fuel.
Claudes Buggies Inc	28813 Farmersville Blvd	593 SSW	SWEEPS UST	Reported one 1,500-gallon UST used for MV fuel. Reported the status as "Active" as of April 20, 1988.
CB Performance Products Inc	1715 N Farmersville Blvd	652 SW	CUPA Listings	Reported the facility ID number and classified the facility as a small generator.

In addition, the EDR databases searched identified one unmapped site as follows:

Name	Address
City of Farmersville Sewerage Trmt Plt	Farmersville & Outside Creek Roads

The disclosure report prepared by EDR identified the one unmapped site as an Orphan site. Based on site vicinity reconnaissance up to an approximate search distance of 0.25-mile from the subject site and based on the address and information provided in the Orphan Site Summary as prepared by EDR, the one unmapped site was not observed to be located in the immediate vicinity of the subject property and appears to be located in excess of 0.25-mile from the subject site.

B. Additional Environmental Record Sources

Regional Water Quality Control Board

On December 1, 2025, KCE Matrix submitted a written request to the Regional Water Quality Control Board (RWQCB), Central Valley Region – File Review Department; for information regarding Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation for the subject property. Based on an email response issued by the RWQCB to KCE Matrix dated December 11, 2025, this agency does not maintain any records for the subject property. A copy of the written request made by KCE Matrix dated December 1, 2025, and a copy of the RWQCB response email dated December 11, 2025, are presented in Appendix C-1.

KCE Matrix also researched the records maintained by the State Water Resources Control Board (SWRCB) – Geotracker Database online for information regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. This database typically contains records that are also maintained by the various local RWQCB's. The results of this online research indicated that the SWRCB-RWQCB does not maintain such records for the subject property.

Department of Toxic Substances Control

On December 1, 2025, KCE Matrix submitted a written request to the California State Department of Toxic Substances Control (DTSC) – Sacramento Regional Office, for information regarding Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation for the subject property. Based on a letter response issued by the DTSC to KCE Matrix dated December 1, 2025, this agency was unable to provide information about the subject site based on APNs because their databases do not include APN information. In addition, the DTSC advised KCE Matrix to search for the requested records and information using the DTSC Envirostor Database available online. Copies of the written request made by KCE Matrix and the DTSC letter response both dated December 1, 2025, are presented in Appendix C-2.

KCE Matrix also researched the records maintained by the DTSC Envirostor Database online for information regarding environmental assessment and remediation matters for the subject property. The results of this online research indicated that the DTSC Envirostor Database does not maintain such records for the subject property.

In addition, KCE Matrix researched the records maintained by the DTSC Hazardous Waste Tracking System database online for information regarding hazardous wastes generated and/or stored at the subject property. The results of this online research indicated that the DTSC Hazardous Waste Tracking System online database does not maintain such records for the subject property.

Tulare County – Health and Human Services Agency

On December 1, 2025, KCE Matrix submitted a written request to the Tulare County – Health and Human Services Agency (TC-HHSA); for information regarding Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation for the subject property. Based on an email response issued by the TC-HHSA dated December 9, 2025, this agency does not maintain any records for the subject property. A copy of the written request submitted by KCE Matrix dated December 1, 2025, and a copy of the TC-HHSA email response dated December 9, 2025, are presented in Appendix C-3.

City of Farmersville Clerk's Office – (Fire Department and Building Department)

On December 1, 2025, KCE Matrix submitted an online public record request to the City of Farmersville – City Clerk's Office; regarding any records that may be maintained by the City Departments, including the Fire Department, particularly as may be related to USTs and hazardous materials; and the Building Department for site history, including historic and current permit applications, certificates of occupancy and violations. As of the date of this report, a response to this record request has not been received by KCE Matrix.

Previously, on March 4, 2024, KCE Matrix contacted the City of Farmersville – City Clerk's Office; regarding any records that may be maintained by the City Departments, including the Fire Department, particularly as may be related to USTs and hazardous materials; and the Building Department for site history, including historic and current permit applications, certificates of occupancy and violations. On March 4, 2024, KCE Matrix received records as maintained by the City Clerk's Office. The records consisted of documentation dated in 2023 related to a future multi-family affordable housing development project at the subject property. A copy of the online request submitted by KCE Matrix on December 1, 2025, a copy of the written request made by KCE Matrix dated March 4, 2024 along with copies of the records as maintained by the City Clerk's Office are presented in Appendix C-4.

California Geologic Energy Management Division

KCE Matrix researched the records maintained by the California Geologic Energy Management (CalGEM) Division (formerly known as the Division of Oil, Gas, and Geothermal Resources (DOGGR)) Database online for information regarding oil and natural gas wells for the subject property and the general vicinity. The results of this online research did not indicate references to any oil and/or natural gas wells as being located on the subject property.

California Environmental Protection Agency

KCE Matrix researched the records maintained by the California Environmental Protection Agency (CalEPA) Database online for information regarding environmentally regulated sites and facilities. The results of this online research indicated that the CalEPA Database does not maintain such records for the subject property.

C. Physical Setting Source(s)

C1. Topography

The site has an approximate elevation of 365 feet above mean sea level. A Location Map that shows the physical setting of the subject property and vicinity is presented in Appendix A, as Figure 1.

C2. Geology/Hydrogeology

KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on monitoring data collected from wells located at a site that is approximately 0.78-mile north of the subject site, the depth to groundwater was reported to range between 32.52 feet and 34.44 feet below the surface as monitored in May of 2012. Based on information as reported in the "Site Closure Summary" report dated April 1, 2003, for a property located approximately 0.75-mile south of the subject site, the highest depth to groundwater was reported as 13 feet below the top of well casings, and the lowest depth to groundwater was reported as 32 feet below the top of well casings, and the groundwater flow direction was reported to be towards the west. The groundwater information obtained from the SWRCB Geotracker Database for the general site vicinity is presented in Appendix C-5.

The surface of the subject property is essentially flat and has an approximate elevation of 61 feet above mean sea level. With regard to the surrounding area, the general topographic gradient is reported to have a gradual slope down to the west based on information obtained from EDR. General subsurface soil and topographic gradient information for the site and vicinity is presented in the Physical Setting Source Summary Report prepared by EDR in Appendix B (pages A-1 through A-6).

The National Wetlands Inventory (NWI) was established by the United States (U.S.) Fish and Wildlife Service (Service) in 1974 to conduct a nationwide inventory of U.S. wetlands to provide its biologists and others with information on the distribution of wetlands to aid in wetland conservation efforts. Based on review of information obtained from the NWI as maintained by the Service online, the subject property does not appear to be a designated wetland area. The NWI map identifies the following wetland(s) as the closest designated wetland area(s) in the vicinity of the subject property:

Wetland	Distance	
Cameron Creek	0.28-mile	To the northwest of the subject site
Creek	0.34-mile	To the southeast of the subject site
Deep Creek	0.50-mile	To the southeast of the subject site
Tulare Irrigation District Canal	0.55-mile	To the northwest of the subject site
Davis Ditch	0.88-mile	To the east of the subject site

The NWI wetland map for the vicinity of the subject property is presented in Appendix C-6. In addition, references to the nearest wetland areas are presented in the maps presented in the Executive Summary of the EDR report presented in Appendix B.

The Federal Emergency Management Agency (FEMA) has defined geographic areas as Flood Zones according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area. Based on review of information obtained from the FEMA's National Flood Hazard Layer (NFHL) Viewer online, the subject property is located in Zone X, an area of 0.2 percent annual chance flood hazard. The NFHL map for the general vicinity of the subject property is presented in Appendix C-7.

D. Historical Use Information - Subject Property

D1. Building Records

On December 1, 2025, KCE Matrix submitted an online public record request to the City of Farmersville – City Clerk's Office; regarding any records that may be maintained by the City Departments, including the Building Department for site history, including historic and current permit applications, certificates of occupancy and violations. As of the date of this report, a response to this record request has not been received by KCE Matrix.

Previously, on March 4, 2024, KCE Matrix contacted the City of Farmersville – City Clerk's Office; regarding any records that may be maintained by the City Departments, including the Fire Department, particularly as may be related to USTs and hazardous materials; and the Building Department for site history, including historic and current permit applications, certificates of occupancy and violations. On March 4, 2024, KCE Matrix received records as maintained by the City Clerk's Office. The records consisted of documentation dated in 2023 related to a future multi-family affordable housing development project at the subject property. A copy of the online request submitted by KCE Matrix on December 1, 2025, a copy of the written request made by KCE Matrix dated March 4, 2024 along with copies of the records as maintained by the City Clerk's Office are presented in Appendix C-4.

D2. Historic Maps

KCE Matrix contacted EDR in an effort to obtain historic Sanborn® Maps of the subject site and vicinity. Based on a search of the EDR historic map collection, no such historic maps were maintained by EDR for the subject property and immediate vicinity. A copy of the Sanborn® Map Report dated December 1, 2025 indicating that there is no coverage for the subject property and vicinity is presented in Appendix D-1.

D3. Aerial Photographs

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Aerial Photographs of the subject site and vicinity. Based on the Aerial Photographs for the subject property dated from 1937

through 2022 as obtained by KCE Matrix from EDR, the subject property consisted of vacant land with no structures between 1937 and 2022. The site appears to have been used as agricultural land between approximately 1952 and 1984. Between 1994 and 2022, a private road was located in the central portion of the property that connected Farmersville Road along the western perimeter of the site to the properties located adjacent to and east of the subject site. Copies of aerial photographs dated 1937, 1952, 1956, 1961, 1969, 1977, 1984, 1994, 2006, 2010, 2014, 2018 and 2022 for the subject property and general site vicinity as obtained by KCE Matrix from EDR are presented in Appendix D-2.

D4. Historical Topographic Maps

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Topographic Maps of the subject site and vicinity. Based on the historic and/or recent Topographic Maps dated 1926 through 2021 as obtained by KCE Matrix from EDR, the property appears to have been vacant land with no structures between 1926 and 1969. Detailed information regarding the subject property was not provided on the Topographic Maps dated 2012 through 2021. Between 2018 and 2021, a private road was located in the central portion of the property that connected Farmersville Road along the western perimeter of the site to the properties located adjacent to and east of the subject site. Copies of the Historical Topographic Maps dated 1926, 1950, 1952, 1969, 2012, 2015, 2018 and 2021 as obtained from EDR and reviewed by KCE Matrix are presented in Appendix D-3.

D5. City Directory Abstract

The target property was not listed in any of the databases searched by EDR. A copy of the City Directory Abstract report obtained from EDR and as reviewed by KCE Matrix is presented in Appendix D-4.

D6. Recorded Land Title Records

The client provided KCE Matrix with a copy of a Preliminary Title Report for the subject property as prepared by First American Title Company, dated November 20, 2025. Based on review of the title report for the subject property, no environmental liens and/or Activity and Use Limitations (AUL's), which indicate a past or present release of a hazardous substance or petroleum products, were presented or recorded. A copy of the title report as prepared by First American Title Company dated November 20, 2025 is presented in Appendix E.

E. Historical Use Information - Adjoining Properties

E1. Historic Maps

KCE Matrix contacted EDR in an effort to obtain historic Sanborn® Maps of the subject site and vicinity. Based on a search of the EDR historic map collection, no such historic maps were maintained by EDR for the subject property and immediate vicinity. A copy of the Sanborn® Map Report dated December 1, 2025 indicating that there is no coverage for the subject property and vicinity is presented in Appendix D-1.

E2. Aerial Photographs

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Aerial Photographs of the subject site and vicinity. Based on the Aerial Photographs for the subject property and vicinity dated from 1937 through 2022 as obtained by KCE Matrix from EDR, the general vicinity of the subject property appears to have been comprised of essentially vacant and/or agricultural land in 1937. Between 1952 and 1984, gradual development of essentially residential properties is evident in the general vicinity to the north of the subject property; and the remaining areas in the vicinity consisted of vacant and/or agricultural land. In 1994, further development of commercial properties is evident in the general vicinity to the west of the subject property. Between 2006 and 2022, the general vicinity of the subject property is developed with commercial and residential properties to the southwest and west and with residential properties to the north of the subject property; with some residential development to the southeast of the subject site. The remaining areas in the vicinity consist of essentially vacant properties. Copies of aerial photographs dated 1937, 1952, 1956, 1961, 1969, 1977, 1984, 1994, 2006, 2010, 2014, 2018 and 2022 for the subject property and general site vicinity as obtained by KCE Matrix from EDR are presented in Appendix D-2.

E3. Historical Topographic Maps

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Topographic Maps of the subject site and vicinity. Based on the historic and/or recent Topographic Maps for the subject property and the general vicinity dated from 1926 through 2021 as obtained by KCE Matrix from EDR, the general vicinity of the subject property appears to have been essentially vacant land in 1926, and vacant and/or agricultural land with dispersed residential properties, particularly in the areas to the west of the site between 1952 and 1969. In 2012, gradual development of properties is evident in the general vicinity, particularly in areas to the west and southwest of the subject property, and the vicinity elsewhere remains essentially as vacant land. Copies of the Historical Topographic Maps dated 1926, 1950, 1952, 1969, 2012, 2015, 2018 and 2021 as obtained from EDR and reviewed by KCE Matrix are presented in Appendix D-3.

E4. City Directory Abstract

Based on review of the City Directory Abstract report obtained by KCE Matrix from EDR; additional information with regard to addresses in the site vicinity is presented. Information with regard to listings that are or were located in the immediate vicinity of the subject property is presented on pages A2 through A19 of the referenced EDR City Directory Abstract report. A copy of the City Directory Abstract report obtained from EDR and reviewed by KCE Matrix is presented in Appendix D-4.

VI. SITE RECONNAISSANCE

A. Non-ASTM Scope Considerations

Site reconnaissance is limited to the areas accessible and inspected during this investigation. There were no buildings or structures observed on site during this investigation. As such, KCE Matrix did not observe any suspect Asbestos Containing Material (ACM) or Lead-Based Paint (LBP) in association with the subject property. No sampling or analysis of any building materials for asbestos content or paint for lead content was conducted during this assessment.

Exposure to asbestos is a health concern when building materials are friable. In working near, repairing or replacing materials such as these, a licensed asbestos abatement contractor, or personnel specially trained in working with or near asbestos should be employed. With regard to LBP, exposure to lead from LBP is a health concern when lead dust is created and can be inhaled or LBP chips are accessible for ingestion. In working near, assessing, repairing or replacing materials that contain LBP, certified lead professionals specially trained in working with or near LBP should be employed.

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The United States Environmental Protection Agency (EPA) and the California EPA have prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. It is important to note that the EPA has found homes with elevated levels of radon in all three designated zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. The map divides the country into three Radon Zones as follows:

- Zone 1: Highest Potential - Counties that have a predicted average indoor radon screening level greater than 4 picocuries per liter (pCi/L), the US EPA Action Limit.

- Zone 2: Moderate Potential - Counties that have a predicted average indoor radon screening level between 2 and 4 pCi/L.

- Zone 3: Low Potential - Counties that have a predicted average indoor radon screening level less than 2 pCi/L.

Radon sampling was not conducted as part of this assessment. Review of the California EPA Map of Radon Zones places the subject property in Zone 2, where average predicted radon levels are between 2.0 pCi/L and 4 pCi/L. Furthermore, the subject property was also reported as being located in Radon Zone 2 by EDR. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

B. General Site Setting

The subject property is located in a commercial/retail and residential area on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Avenue, in Farmersville, California. The property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed from the entire western property line along Farmersville Road and from vacant land located along the southern property line.

A Location Map, a Site Plan and a Site Vicinity Map are presented in Appendix A, as Figures 1, 2 and 3, respectively. During site reconnaissance, KCE Matrix also obtained photographs of the subject property and vicinity. Selected photographs are presented in Appendix F.

C. Observations

On December 20, 2025, a representative of KCE Matrix inspected the subject property and recorded the following observations:

	Description	Comments
1	Industrial Use	None observed
2	Gas Station	None observed
3	Motor Repair Facility	None observed
4	Commercial Printing Facility	None observed
5	Dry Cleaning	None observed
6	Photo Development Laboratory	None observed
7	Junkyard	None observed
8	Landfill	None observed
9	Waste Treatment	None observed
10	Storage Facility	None observed
11	Disposal Facility	None observed
12	Processing Facility	None observed
13	Recycling Facility	None observed
14	Batteries	None observed
15	Pesticides or agricultural activity	None observed
16	Paints	None observed
17	HazMat storage or use	None observed
18	Potential HazMat storage or use	None observed
19	Dumping or Improper Disposal of HazMat	None observed
20	Drums and Other Containers	None observed
21	PCBs, Transformers, Capacitors or Hydraulic equipment, other equipment	None observed
22	Chemical Products	None observed
23	Asbestos, Age of Building, Blueprints	None observed. The site consists of vacant land with no structures and has a dirt surface

	Description	Comments
24	Paint Condition, LBP	None observed. The site consists of vacant land with no structures and has a dirt surface
25	Building Demolition or Renovation	None observed
26	Fill Dirt From Other Locations	None observed
27	Stained Soil or Spills	None observed
28	Oil or Gas Wells	None observed
29	Underground Storage Tanks (USTs)	None observed
30	Above-ground Storage Tanks (ASTs)	None observed
31	Hydraulic Hoists	None observed
32	Clarifier/Wastewater Interceptor	None observed
33	Subsurface or Underground Pipes	None observed. The site consists of vacant land with no structures and has a dirt surface
34	Above Ground Pipes	None observed
35	Flooring, Drains or Walls Emitting Foul Odors	None observed
36	Pits, Ponds, Lagoons or Cesspools	None observed
37	Distressed Vegetation	None observed
38	Pools of Liquid, Drains, Sumps, Stains, Septic Tanks	None observed
39	Environmental Liens	None observed
40	Government Notifications Regarding Environmental Violation	None observed
41	HazMat Inventory	None
42	Disclosure of Hazardous Substances or Petroleum Products	None observed
43	Previously Conducted Environmental Site Assessments	None observed
44	Wastewater Generation or Disposal	None observed
45	Water Supply System, Water Usage	None observed
46	Regulated Air Emissions	None observed
47	Heating/Cooling	None observed. The site consists of vacant land with no structures and has a dirt surface
48	Potable, Irrigation, or Monitoring Wells	None observed
49	Storm water drainage	Dirt surface
50	Odors	Not perceived
51	Solid Waste	None observed

D. Site Vicinity Reconnaissance

KCE Matrix conducted a brief inspection of the immediate vicinity of the subject property. The adjoining properties are comprised of the following:

- North: Residential properties, an auto repair workshop/facility, Dillon Avenue and residential property.
- East: Residential properties and properties consisting of vacant land.
- South: Vacant land, agricultural land, a commercial/retail property (Rite Aid Store), residential property and East Walnut Avenue.

- West: Farmersville Road, commercial property, an auto repair facility, a public storage facility and residential properties along with residential streets.

VII. INTERVIEWS

A. Interview with Owner

KCE Matrix did not conduct an interview with the current owner of the subject property during this investigation.

B. Interview with Site Manager

The subject property currently consists of vacant land with no structures and is not occupied. Prior to site inspection, KCE Matrix notified the client with regard to the date and time of the inspection. However, a property site manager was not available for an interview at the time of site inspection. As such, KCE Matrix did not conduct an interview with the current manager of the property during this investigation.

C. Interviews with Occupants

The subject property currently consists of vacant land with no structures and is not occupied. Prior to site inspection, KCE Matrix notified the client with regard to the date and time of the inspection. Based on the fact that the site consists of vacant land with no occupants, KCE Matrix did not conduct an interview with any site occupant(s) of the property during this investigation.

D. Interviews with Local Government Officials

KCE Matrix did not interview any local government officials regarding the subject property during this investigation.

E. Interviews with Others

In December of 2025, KCE Matrix interviewed a representative of the client who provided KCE Matrix with the following Environmental Site Assessment (ESA) reports regarding the subject site:

- Phase I – ESA Report designated as (KCE-2022-454E-R1) dated December 6, 2022 as prepared by KCE Matrix, Inc.
- Subsurface ESA Report designated as (KCE-2022-454E-R2) dated February 9, 2023 as prepared by KCE Matrix, Inc.

Based on the information contained in the Phase I – ESA report referenced above, KCE Matrix identified one Recognized Environmental Condition (REC), as follows:

- REC – Historic agricultural land use. The subject property appears to have been used as agricultural land from at least approximately 1952 through 1984.

In addition, based on the Vapor Encroachment Screen (VES) conducted during the Phase I investigation, a Vapor Encroachment Condition (VEC) originating from the subject property could not be ruled out. Furthermore, a VEC originating from other nearby sites in the vicinity for the subject property could not be ruled out.

Based on the Phase I ESA performed, KCE Matrix recommended that subsurface environmental assessment work be performed for the subject property to determine whether or not the property had been impacted by the potential usage of pesticides over an extended period of time, and to assess any potential impact from metals (such as Arsenic and Lead). KCE Matrix also recommended that the proposed subsurface assessment work be conducted in a manner so as to address potential vapor encroachment conditions.

KCE Matrix subsequently returned to the subject property between January 11 and January 20, 2023, to perform the recommended subsurface assessment work. Between January 11 and January 13, 2023, forty (40) subsurface exploratory soil borings (designated as EB-1 through EB-40) were drilled and sampled to a total depth of four feet below the ground surface (bgs) at the subject property, using hand-auger field drilling and sampling equipment. Groundwater was not encountered in the 40 exploratory borings during drilling and sampling work performed. A total of 80 soil samples were collected from the 40 exploratory borings at depths of two feet and four feet bgs for lithologic logging purposes. Forty (40) of the 80 soil samples collected at a depth of two feet were selected for laboratory analysis from the 40 exploratory borings. All 40 soil samples collected at a depth of two feet bgs from the 40 exploratory borings (designated as EB-1(2) through EB-40(2)) were analyzed for Organochlorine Pesticides (OCPs) by EPA method 8081A and for Arsenic and Lead by EPA method 6010B.

In addition, on January 19, 2023, ten single-stage soil vapor probes (designated as VP-1 through VP-10) were drilled and installed to a total depth of five feet bgs as measured from the ground surface. On January 20, 2023, KCE Matrix collected soil-gas samples from the 10 single-stage vapor probes (designated as VP-1 through VP-10). The soil-gas samples were collected as follows:

- Ten (10) soil-gas samples collected from the 10 single-stage vapor probes VP-1 through VP-10, at a depth of five feet bgs (samples designated as VP-1(5) through VP-10(5)); and one field duplicate soil-gas sample collected from vapor probe VP-4 (sample designated as VP-4 (5)DUP)

The 11 soil-gas samples (designated as samples VP-1(5) through VP-10(5) and VP-4(5)DUP) collected on January 20, 2023, were analyzed for Volatile Organic Compounds (VOCs) and Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO) by EPA method 8260B.

Based on the subsurface environmental site assessment work performed by KCE Matrix in January of 2022 and the evaluation of the data, two of the 21 OCP constituents were detected at various concentrations in subsurface soil at depths of two feet bgs. The concentrations of one of these two

OCP constituents (4,4'-DDE) were below the RWQCB Tier 1 and Tier 2 ESLs. The concentrations of the one other OCP constituent (4,4'-DDE) were greater than the RWQCB Tier 1 ESL, but less than the Tier 2 and the RWQCB Direct Exposure Human Health Risk ESLs. Based on these results, KCE Matrix recommended no further subsurface soil assessment and/or remediation work in relation to OCPs for the subject site.

In addition, Arsenic was detected in only two of the 40 soil samples collected and analyzed. The concentrations of Arsenic detected were below the DTSC ambient screening level of 12 milligrams per Kilogram (mg/Kg). Based on these results, KCE Matrix recommended no further subsurface soil assessment and/or remediation work in relation to Arsenic for the subject site. Moreover, Lead was detected at various concentrations in the 40 soil samples collected and analyzed. The concentrations of Lead in all 40 soil samples were less than the RWQCB Tier 1 and Tier 2 ESLs. Based on these results, KCE Matrix recommended no further subsurface soil assessment and/or remediation work in relation to Lead for the subject site.

Based on the subsurface environmental site assessment work performed by KCE Matrix in January of 2023 and the evaluation of the data, the results of soil-gas samples collected and analyzed indicated concentrations of the contaminants of concern that were less than the RWQCB ESLs. In addition, the analytical results of the soil samples collected during investigation indicated concentrations that were less than the RWQCB ESLs. Based on these results, the Vapor Encroachment Conditions for the subject property were adequately assessed and KCE Matrix recommended no further subsurface soil and/or soil-gas assessment and/or remediation for the subject site.

As such, the REC identified in the Phase I ESA report designated as (KCE-2022-454E-R1) dated December 6, 2022 as prepared by KCE Matrix, was adequately assessed and KCE Matrix no longer considered the historic or past agricultural land use over an extended period of time at the subject site as a REC. In addition and based on the results of the subsurface ESA performed, the potential Vapor Encroachment Condition reported in the Phase I ESA report designated as (KCE-2022-454E-R1) dated December 6, 2022 as prepared by KCE Matrix, was adequately assessed and KCE Matrix concluded that a Vapor Encroachment Condition did not exist at the subject property.

Copies of the Phase I ESA report prepared by KCE Matrix, designated as (KCE-2022-454E-R1) dated December 6, 2022, and the subsurface environmental site assessment report prepared by KCE Matrix designated as (KCE-2022-454E-R2) dated February 9, 2023 are both presented in Appendix E.

KCE Matrix did not conduct any other interviews regarding the subject property during this investigation.

VIII. VAPOR ENCROACHMENT SCREEN

During this investigation, KCE Matrix conducted a Vapor Encroachment Screen (VES) for the subject property based on the ASTM E2600-10 guideline. The goal of conducting a VES as

established by the ASTM, is to identify a potential Vapor Encroachment Condition (VEC) for the subject property, which is defined as the presence or likely presence of Chemicals of Concern (COC) vapors in the subsurface of the subject property caused by the release of vapors from contaminated soil or groundwater either on or near the subject site. Detailed information with regard to the VES evaluation conducted, the methodology used, and the information for other sites located in the immediate vicinity of the subject property as provided to KCE Matrix by EDR is presented in a VES summary report presented in Appendix G of this report.

A. Subject Property - VES

Based on the research conducted during this investigation, the subject property consisted of vacant unoccupied land with no structures from 1937 through the present. The site appears to have been used as agricultural land between approximately 1952 and 1984. As of 1994 and through the present, a private road has been and continues to be located in the central portion of the property that connects Farmersville Road along the western perimeter of the site to the properties located adjacent to and east of the subject site.

On December 20, 2025, a representative of KCE Matrix conducted site inspection for the subject property and confirmed that the property currently consists of vacant unoccupied land with no structures and has a dirt surface.

As noted elsewhere in this report, KCE Matrix previously performed a Phase I ESA for the subject property from November through December of 2022 and identified one REC consisting of the historic use of the property for agricultural purposes from at least approximately 1952 through 1984. Subsequently, KCE Matrix performed subsurface ESA work on the subject property. Based on the subsurface environmental site assessment work performed by KCE Matrix in January of 2023, the subsurface soil at the property (former agricultural land use area) had not been impacted by OCPs, Arsenic and Lead; and therefore, had not been impacted by historic or past agricultural land use as may be related to pesticides. Based on these results, KCE Matrix no longer considered the past agricultural use of the subject property as a REC. Furthermore, based on the results of the subsurface assessment work performed, KCE Matrix also concluded that a Vapor Encroachment Condition (VEC) did not exist for the subject property, either originating from the subject site or immediate site vicinity. Copies of the Phase I ESA report prepared by KCE Matrix, designated as (KCE-2022-454E-R1) dated December 6, 2022, and the subsurface environmental site assessment report prepared by KCE Matrix designated as (KCE-2022-454E-R2) dated February 9, 2023 are both presented in Appendix E.

Since January of 2023, the subject property and immediate site vicinity have not been used for agricultural purposes and the site has remained as vacant land. Based on the site history of the subject property and the subsurface ESA work as described above, a VEC originating from the subject property is not identified.

B. Site Vicinity - VES

Based on the research conducted during this investigation for other sites located in the general vicinity of the subject property, several other sites were identified and/or evaluated during this VES. The evaluation of these other sites located closest to the subject property consists of the following:

Facility Name	Facility Address	Database
Ral Copping	28880 Rd 164	HIST UST
Ralph Copping	28880 Road 164	HIST UST
T Young Diesel Electric	29022 Road 164	RCRA NonGen / NLR
Claudes Buggies Inc	28813 Farmersville Blvd	SWEEPS UST, HIST UST
CB Performance Products Inc	1715 N Farmersville Blvd	CUPA Listings

Based on the review of the nearby sites as listed by EDR report, two of these other sites have and/or have had at least one Underground Storage Tank (UST) used for regular fuel product. The two other sites identified as being located in the general vicinity of the subject property have been reported as a non-generator and as a small quantity generator with no violations.

As noted elsewhere in this report, KCE Matrix previously performed a Phase I ESA for the subject property from November through December of 2022 and identified one REC consisting of the historic use of the property for agricultural purposes from at least approximately 1952 through 1984. Subsequently, KCE Matrix performed subsurface ESA work on the subject property. Based on the subsurface environmental site assessment work performed by KCE Matrix in January of 2023, the subsurface soil at the property (former agricultural land use area) had not been impacted by OCPs, Arsenic and Lead; and therefore, had not been impacted by historic or past agricultural land use as may be related to pesticides. Based on these results, KCE Matrix no longer considered the past agricultural use of the subject property as a REC.

Furthermore, based on the results of the assessment work performed which included soil-vapor assessment work on the northwestern and southwestern most portions of the subject property, KCE Matrix also concluded that a Vapor Encroachment Condition (VEC) did not exist for the subject property, either originating from the subject site or immediate site vicinity as related to agricultural usage or related to auto repair facilities or petroleum storage and use.

Copies of the Phase I ESA report prepared by KCE Matrix, designated as (KCE-2022-454E-R1) dated December 6, 2022, and the subsurface environmental site assessment report prepared by KCE Matrix designated as (KCE-2022-454E-R2) dated February 9, 2023 are both presented in Appendix E.

Based on the site history of the subject property and the relatively recent subsurface ESA work performed as described above, a VEC originating from the site vicinity for the subject property is not identified.

IX. FINDINGS

The following presents our findings based on the work performed during this Phase I ESA:

- The subject property is located in a commercial/retail and residential area on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Avenue, in Farmersville, California. The property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed from the entire western property line along Farmersville Road and from vacant land located along the southern property line.

- Based on the historic information obtained during this investigation (including research of Sanborn Maps, Aerial Photographs, regulatory records and city directories), the subject property consisted of vacant unoccupied land with no structures from 1937 through the present. The site appears to have been used as agricultural land between approximately 1952 and 1984. As of 1994 and through the present, a private road has been and continues to be located in the central portion of the property that connects Farmersville Road along the western perimeter of the site to the properties located adjacent to and east of the subject site. On December 20, 2025, a representative of KCE Matrix conducted site inspection for the subject property and confirmed that the property currently consists of vacant unoccupied land with no structures and has a dirt surface.

- KCE Matrix previously performed a Phase I ESA for the subject property from November through December of 2022 and identified one REC consisting of the historic use of the property for agricultural purposes from at least approximately 1952 through 1984. Subsequently, and based on the subsurface environmental site assessment work performed by KCE Matrix in January of 2023, the subsurface soil at the subject property (former agricultural land use area) had not been impacted by OCPs, Arsenic and Lead; and therefore, had not been impacted by historic or past agricultural land use as may be related to pesticides. Based on these results, KCE Matrix no longer considered the past agricultural use of the subject property as a REC. Furthermore, based on the results of the assessment work performed which included soil-vapor assessment work on the northwestern and southwestern most portions of the subject property, KCE Matrix also concluded that a Vapor Encroachment Condition (VEC) did not exist for the subject property, either originating from the subject site or immediate site vicinity as related to agricultural usage or related to auto repair facilities or petroleum storage and use at nearby properties.

- The environmental disclosure report obtained by KCE Matrix from EDR presents information with regard to other sites in the immediate and general site vicinity of the subject property. Based on review of the report as provided by EDR, several other sites were identified as being located in the general vicinity of the subject property. Two of these other sites have and/or have had at least one Underground Storage Tank (UST) used for regular product. One other site identified as being located in the general vicinity of the subject property was listed on the RCRA NONGEN / NLR database. This facility has been identified as a non-generator with no reported violations. Based on the information obtained during this investigation and the site vicinity reconnaissance performed, KCE Matrix did not discover or observe subsurface environmental site assessment activity that would indicate potential migration of contamination from other nearby sites towards the subject property.

- Based on the VES conducted during this investigation, a VEC originating from the subject property was not identified. Furthermore, based on the research conducted during this investigation, a VEC originating from other nearby sites in the vicinity for the subject property was not identified.

- KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on monitoring data collected from wells located at a site that is approximately 0.78-mile north of the subject site, the depth to groundwater was reported to range between 32.52 feet and 34.44 feet below the surface as monitored in May of 2012. Based on information as reported in the “Site Closure Summary” report dated April 1, 2003, for a property located approximately 0.75-mile south of the subject site, the highest depth to groundwater was reported as 13 feet below the top of well casings, and the lowest depth to groundwater was reported as 32 feet below the top of well casings, and the groundwater flow direction was reported to be towards the west.

X. SIGNATURE

KCE Matrix appreciates the opportunity to have provided services for this project. Should you have any questions regarding this report and the assessment work performed, please do not hesitate to contact our office at 818-559-5500.

Sincerely,

KCE Matrix, Inc.

Aram B. Kaloustian, P.E.
Project Manager

License No. C52428
Expiration Date: 12/31/2026

XI. QUALIFICATIONS

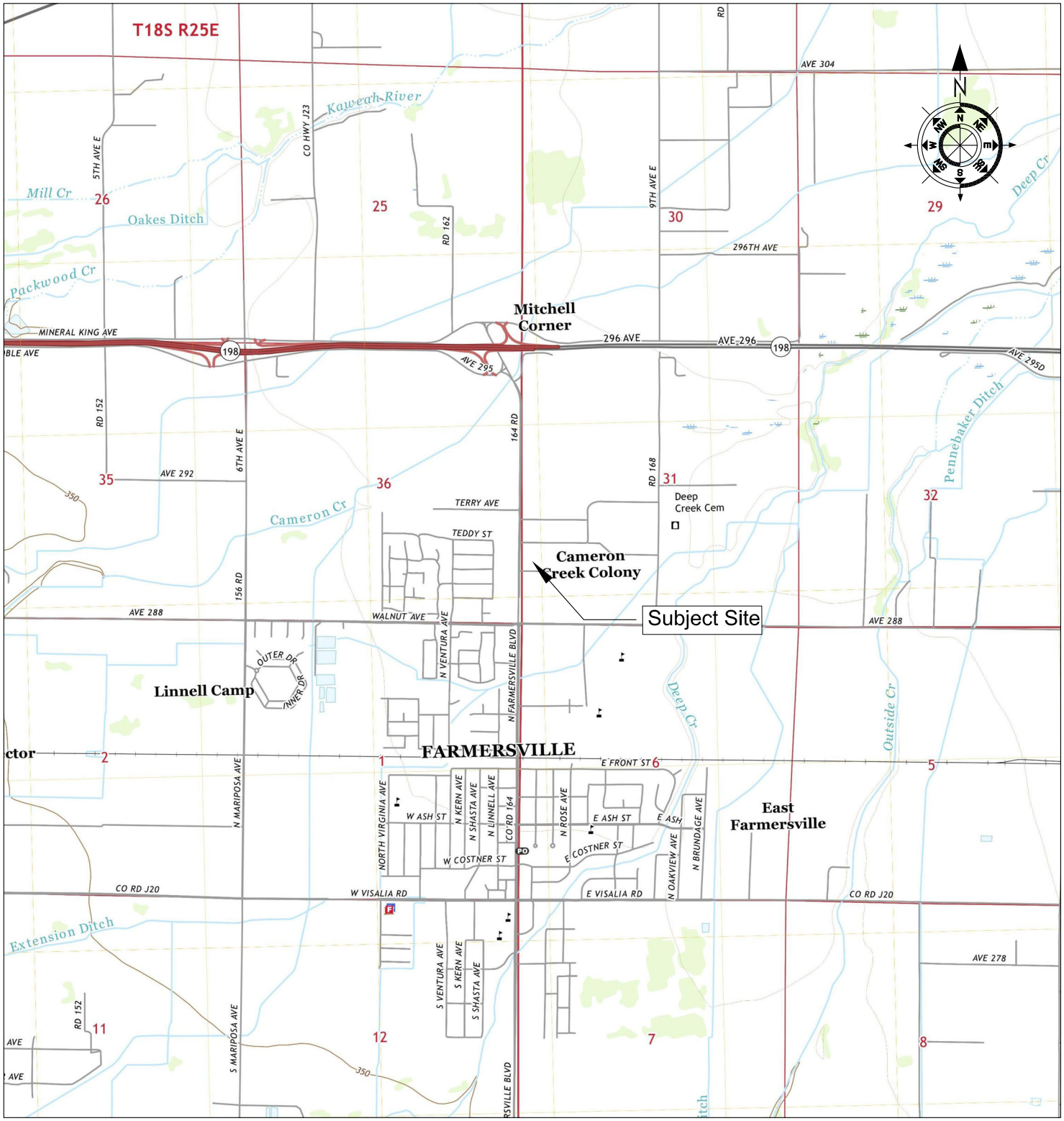
KCE Matrix declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 Code of Federal Regulations (CFR) 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Detailed information with regard to the qualifications of the personnel who have worked on this project is presented in Appendix H of this report.

REFERENCES

- USGS Topographic Map 2021 United States Geological Survey: Exeter quadrangle, California
- Regulatory Database Report dated December 1, 2025 from Environmental Data Resources
- Certified Sanborn® Map Report dated December 1, 2025 from Environmental Data Resources
- Aerial Photographs obtained on December 1, 2025 from Environmental Data Resources
- Historical Topographic Maps obtained on December 1, 2025 from Environmental Data Resources
- Historical City Directories obtained on December 3, 2025 from Environmental Data Resources
- Regional Water Quality Control Board (RWQCB), Central Valley Region – File Review Department
- State Water Resources Control Board (SWRCB) – Geotracker Database online
- California State Department of Toxic Substances Control (DTSC) – Sacramento Office
- California State DTSC - Envirostor Database online
- California State DTSC - Hazardous Waste Tracking System Database online
- Tulare County Environmental Health Services
- City of Farmersville Clerk's Office, Fire Department
- City of Farmersville Clerk's Office, Building Department
- California Environmental Protection Agency
- California Geologic Energy Management (CalGEM) Division (formerly known as the Division of Oil, Gas, and Geothermal Resources (DOGGR)) Database online
- National Wetlands Inventory (NWI) was established by the United States (U.S.) Fish and Wildlife Service (Service) in 1974
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map and National Flood Hazard Layer (NFHL) Viewer online
- Phase I – User Questionnaire, signed and dated November 24, 2025
- Preliminary Title Report as prepared by First American Title Company, dated November 20, 2025

APPENDIX A

(FIGURES 1 THROUGH 3)



Map Center: Latitude 36.3153, Longitude -119.2059
Subject site is located on the Exeter quadrangle (Map Source Year: 2021)

0 0.5 1.0
Approx. scale Mile

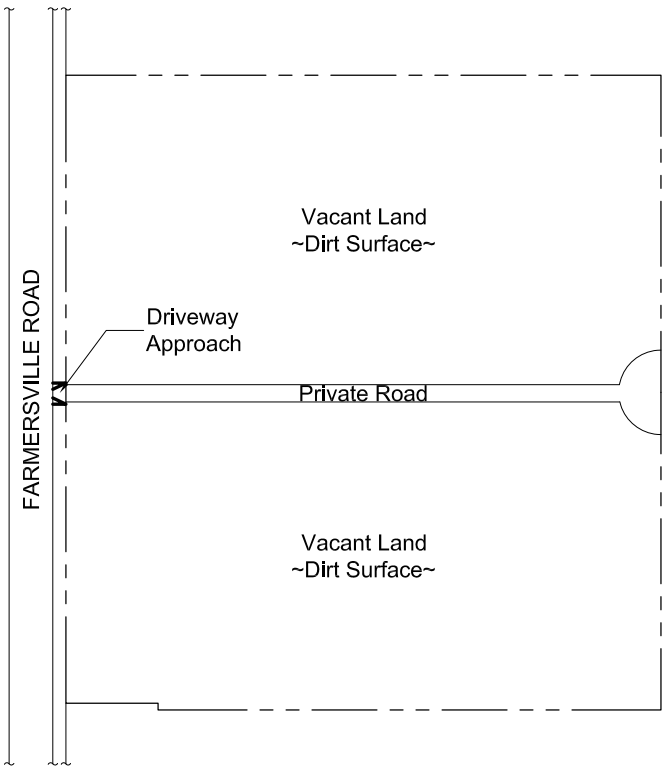
LOCATION MAP

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2025-348E

FIGURE 1



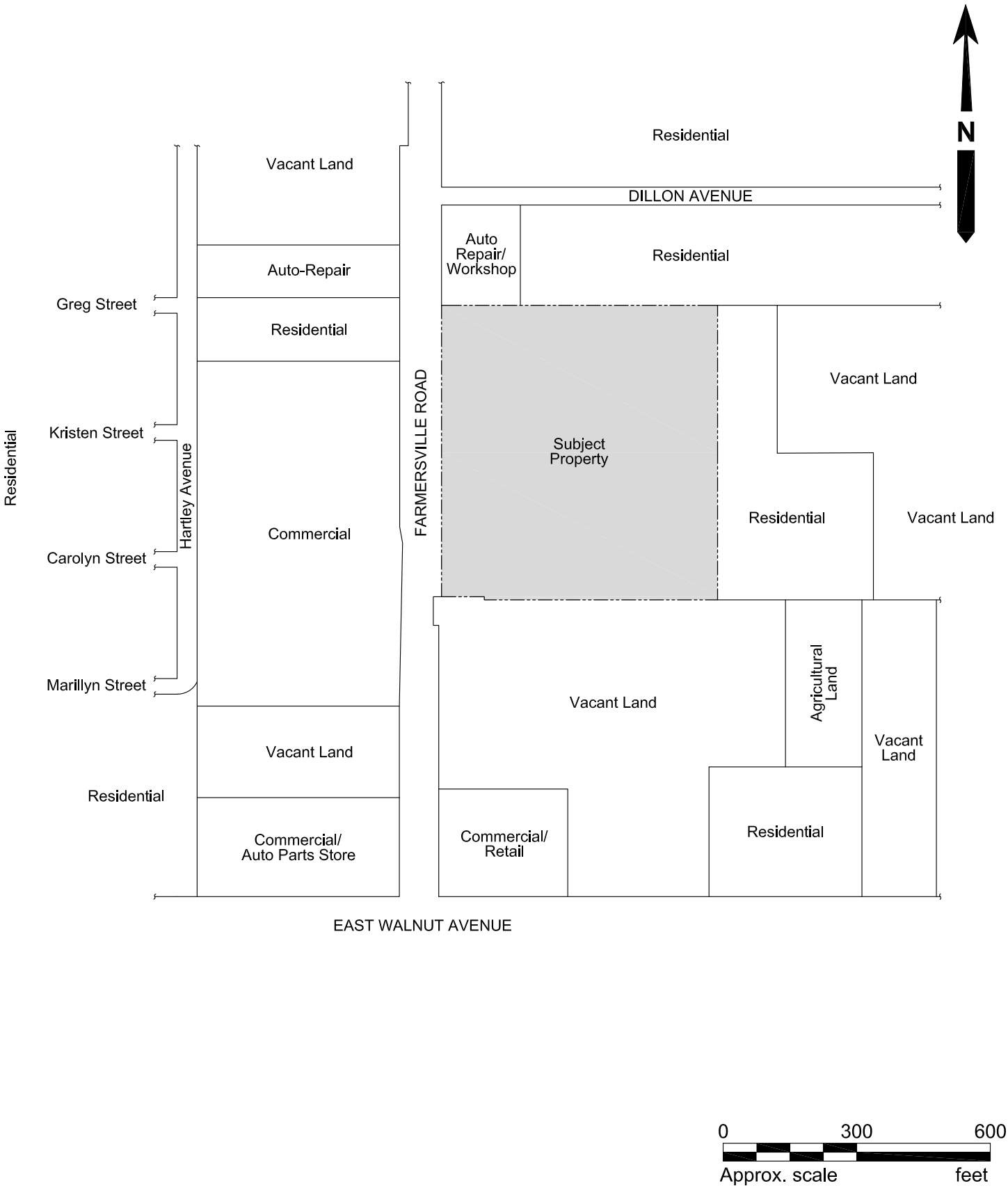
SITE PLAN

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2025-348E

FIGURE 2



SITE VICINITY MAP

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2025-348E

FIGURE 3

APPENDIX B

ENVIRONMENTAL DATA RESOURCES, INC. (EDR)
RADIUS MAP REPORT

Vacant Land
APN 111-290-015-000
Farmersville, CA 93292

Inquiry Number: 8187223.2s
December 01, 2025

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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LIGHTBOX LIVE

Open LightBox Live to access data, tools, and advanced analytics in one online platform.

http://www.web.edrnet.com/ordering/switchboard/login.aspx?s=goto_lightbox&pguid=644D0FB7-081E-47E3-BDDB-7BABCBC5E965

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 23), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

APN 111-290-015-000
FARMERSVILLE, CA 93292

COORDINATES

Latitude (North):	36.3149850 - 36° 18' 53.94''
Longitude (West):	119.2058130 - 119° 12' 20.92''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	301969.4
UTM Y (Meters):	4020942.8
Elevation:	365 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	50005762 EXETER, CA
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20220624
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
APN 111-290-015-000
FARMERSVILLE, CA 93292

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	RAL COPPING	28880 RD 164	HIST UST	Lower	4, 0.001,
A2	RALPH COPPING	28880 ROAD 164	HIST UST	Lower	4, 0.001,
3	T YOUNG DIESEL ELECT	29022 ROAD 164	RCRA NonGen / NLR	Higher	127, 0.024, NNW
B4	CLAUDES BUGGIES INC	28813 FARMERSVILLE B	SWEEPS UST, HIST UST	Lower	593, 0.112, SSW
B5	CB PERFORMANCE PRODU	1715 N FARMERSVILLE	CUPA Listings	Lower	652, 0.123, SW
C6	ROBLES AUTO REPAIR	16446 AVE 291	RCRA NonGen / NLR	Lower	731, 0.138, North
D7	RITE AID 6764	1710 1710 N. FARMERS	RCRA-SQG, E MANIFEST	Lower	772, 0.146, SSW
D8	RITE AID #6764 - HAZ	1710 N FARMERSVILLE	CUPA Listings, HWTS, HAZNET	Lower	772, 0.146, SSW
D9	RITE AID FARMERSVILL	1710 NORTH FARMERSVI	CERS HAZ WASTE, NPDES, CERS	Lower	772, 0.146, SSW
D10	JACK IN THE BOX #540	1662 N FARMERSVILLE	CUPA Listings, CERS	Lower	790, 0.150, SSW
C11	MARION D. PHILLIPS	16410 AVENUE 291	HIST UST	Lower	924, 0.175, North
C12	PHILLIPS PROPERTY	16410 AVENUE 291	SWEEPS UST, HIST UST, CA FID UST	Lower	924, 0.175, North
C13	16410 AVE. 291	16410 AVE. 291	RCRA NonGen / NLR, ECHO	Lower	924, 0.175, North
14	CURIEL AUTO REPAIR	16632 AVE 288 UNIT C	RCRA NonGen / NLR	Higher	1029, 0.195, SE
E15	AUTOZONE #3711	1555 N FARMERSVILLE	CUPA Listings	Lower	1112, 0.211, SSW
E16	AUTOZONE #3711	1555 FARMERSVILLE RO	E MANIFEST	Lower	1112, 0.211, SSW
E17	DOLLAR TREE #03493	1555 N FARMERSVILLE	RCRA-VSQG, E MANIFEST	Lower	1112, 0.211, SSW
E18	AUTOZONE #3711	1555 N FARMERSVILLE	CERS HAZ WASTE, CERS	Lower	1112, 0.211, SSW
E19	DOLLAR TREE #03493	1555 N FARMERSVILLE	CUPA Listings, HWTS, HAZNET	Lower	1112, 0.211, SSW
E20	AUTOZONE # 3711	1555 N. FARMERSVILLE	RCRA NonGen / NLR, E MANIFEST	Lower	1112, 0.211, SSW
E21	DOLLAR TREE #03493	1555 N FARMERSVILLE	CERS HAZ WASTE, HWTS, HAZNET, CERS	Lower	1112, 0.211, SSW
22	R GAS LLC TRUCK YARD	251 TERRY AVE	CUPA Listings	Lower	1292, 0.245, NW
F23	FARMERSVILLE MINI MA	1456 FARMERSVILLE BL	UST FINDER RELEASE	Lower	1416, 0.268, South
F24	FARMERSVILLE MINI MA	1456 FARMERSVILLE	LUST, Cortese, HIST CORTESE, CERS	Lower	1416, 0.268, South
25	PROPOSED MIDDLE SCHO	SOUTHEAST CORNER OF	ENVIROSTOR, SCH	Lower	2283, 0.432, SSE
26	NEW ELEMENTARY SCHOO	CITRUS DRIVE/FARMERS	ENVIROSTOR, SCH	Lower	2393, 0.453, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST Leaking Underground Storage Tanks on Indian Land
CPS-SLIC Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST Underground Storage Tank Listing
UST Active UST Facilities
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing
VCP Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
HIST Cal-Sites Historical Calsites Database
SCH School Property Evaluation Program
CDL Clandestine Drug Labs
Toxic Pits Toxic Pits Cleanup Act Sites
US CDL National Clandestine Laboratory Register

EXECUTIVE SUMMARY

Local Lists of Registered Storage Tanks

CERS TANKS ---- California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
MINES MRDS ---- Mineral Resources Data System
FINDS ---- Facility Index System/Facility Registry System

UXO ---- Unexploded Ordnance Sites
ECHO ---- Enforcement & Compliance History Information
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
PFAS NPL ---- Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES ---- Federal Sites PFAS Information
PFAS TSCA ---- PFAS Manufacture and Imports Information
PFAS TRIS ---- List of PFAS Added to the TRI
PFAS RCRA MANIFEST ---- PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR ---- PFAS Contamination Site Location Listing
PFAS WQP ---- Ambient Environmental Sampling for PFAS
PFAS PROJECT ---- NORTHEASTERN UNIVERSITY PFAS PROJECT
PFAS NPDES ---- Clean Water Act Discharge Monitoring Information
PFAS ECHO ---- Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAIN ---- Facilities in Industries that May Be Handling PFAS Listing
PFAS PT 139 AIRPORT ---- All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC ---- Aqueous Foam Related Incidents Listing
BIOSOLIDS ---- ICIS-NPDES Biosolids Facility Data
UST FINDER ---- UST Finder Database
PFAS ---- PFAS Investigation Site Location Listing
AQUEOUS FOAM ---- Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN ---- Bond Expenditure Plan
CHROME PLATING ---- Chrome Plating Facilities Listing
DRYCLEANERS ---- Cleaner Facilities
EMI ---- Emissions Inventory Data
ENF ---- Enforcement Action Listing
Financial Assurance ---- Financial Assurance Information Listing
ICE ---- Inspection, Compliance and Enforcement
HWP ---- EnviroStor Permitted Facilities Listing
HWT ---- Registered Hazardous Waste Transporter Database
HWTS ---- Hazardous Waste Tracking System
HAZNET ---- Facility and Manifest Data
MINES ---- Mines Site Location Listing
MWMP ---- Medical Waste Management Program Listing
NPDES ---- NPDES Permits Listing
PEST LIC ---- Pesticide Regulation Licenses Listing
PROC ---- Certified Processors Database
Notify 65 ---- Proposition 65 Records
HAZMAT ---- Hazardous Material Facilities
UIC ---- UIC Listing
UIC GEO ---- UIC GEO (GEOTRACKER)
WASTEWATER PITS ---- Oil Wastewater Pits Listing
WDS ---- Waste Discharge System
WIP ---- Well Investigation Program Case List
MILITARY PRIV SITES ---- MILITARY PRIV SITES (GEOTRACKER)
PROJECT ---- PROJECT (GEOTRACKER)
WDR ---- Waste Discharge Requirements Listing
CIWQS ---- California Integrated Water Quality System
CERS ---- CERS
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants

EDR Hist Auto---------- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner---------- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/02/2025 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RITE AID 6764 EPA ID:: CAR000270843	***1710 1710 N. FARMERS***	***SSW 1/8 - 1/4 (0.146 mi.)***	***D7***	***16***

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 06/02/2025 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DOLLAR TREE #03493	***1555 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.211 mi.)***	***E17***	***55***
EPA ID:: CAL000388066				

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/17/2025 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PROPOSED MIDDLE SCHO	***SOUTHEAST CORNER OF***	***SSE 1/4 - 1/2 (0.432 mi.)***	***25***	***211***
Facility Id: 60000793				
Status: No Further Action				
NEW ELEMENTARY SCHOO	***CITRUS DRIVE/FARMERS***	***S 1/4 - 1/2 (0.453 mi.)***	***26***	***215***
Facility Id: 54010011				
Status: No Further Action				

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FARMERSVILLE MINI MA	***1456 FARMERSVILLE***	***S 1/4 - 1/2 (0.268 mi.)***	***F24***	***208***
Database: LUST REG 5, Date of Government Version: 07/01/2008				
Database: LUST, Date of Government Version: 08/29/2025				
Status: Completed - Case Closed				
Status: Case Closed				
Global Id: T0610700393				

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 04/14/2025 has revealed that there are 3 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RITE AID FARMERSVILL	***1710 NORTH FARMERSVI***	***SSW 1/8 - 1/4 (0.146 mi.)***	***D9***	***40***
AUTOZONE #3711	***1555 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.211 mi.)***	***E18***	***69***
DOLLAR TREE #03493	***1555 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.211 mi.)***	***E21***	***152***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CLAUDES BUGGIES INC Status: A Tank Status: A Comp Number: 57012	***28813 FARMERSVILLE B***	***SSW 0 - 1/8 (0.112 mi.)***	***B4***	***12***
PHILLIPS PROPERTY Status: A Tank Status: A Comp Number: 418	***16410 AVENUE 291***	***N 1/8 - 1/4 (0.175 mi.)***	***C12***	***47***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 5 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RAL COPPING	28880 RD 164	0 - 1/8 (0.001 mi.)	A1	9
RALPH COPPING Facility Id: 00000045349	28880 ROAD 164	0 - 1/8 (0.001 mi.)	A2	9
CLAUDES BUGGIES INC Facility Id: 00000057012	***28813 FARMERSVILLE B***	***SSW 0 - 1/8 (0.112 mi.)***	***B4***	***12***
MARION D. PHILLIPS	16410 AVENUE 291	N 1/8 - 1/4 (0.175 mi.)	C11	46

Facility Id: 00000040397

PHILLIPS PROPERTY	***16410 AVENUE 291***	***N 1/8 - 1/4 (0.175 mi.)***	***C12***	***47***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PHILLIPS PROPERTY Facility Id: 54002171 Status: A	***16410 AVENUE 291***	***N 1/8 - 1/4 (0.175 mi.)***	***C12***	***47***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/02/2025 has revealed that there are 5 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
T YOUNG DIESEL ELECT EPA ID:: CAL000130104	29022 ROAD 164	NNW 0 - 1/8 (0.024 mi.)	3	10
CURIEL AUTO REPAIR EPA ID:: CAL000449585	16632 AVE 288 UNIT C	SE 1/8 - 1/4 (0.195 mi.)	14	51

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROBLES AUTO REPAIR EPA ID:: CAL000479592 EPA ID:: CAL000444001	16446 AVE 291	N 1/8 - 1/4 (0.138 mi.)	C6	14
16410 AVE. 291 EPA ID:: CAC003331840	***16410 AVE. 291***	***N 1/8 - 1/4 (0.175 mi.)***	***C13***	***48***
AUTOZONE # 3711 EPA ID:: CAL000315765	***1555 N. FARMERSVILLE***	***SSW 1/8 - 1/4 (0.211 mi.)***	***E20***	***141***

UST FINDER RELEASE: US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that

there is 1 UST FINDER RELEASE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FARMERSVILLE MINI MA	1456 FARMERSVILLE BL	S 1/4 - 1/2 (0.268 mi.)	F23	207

E MANIFEST: EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

A review of the E MANIFEST list, as provided by EDR, and dated 06/02/2025 has revealed that there are 4 E MANIFEST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RITE AID 6764	***1710 1710 N. FARMERS***	***SSW 1/8 - 1/4 (0.146 mi.)***	***D7***	***16***
AUTOZONE #3711	1555 FARMERSVILLE RO	SSW 1/8 - 1/4 (0.211 mi.)	E16	53
DOLLAR TREE #03493	***1555 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.211 mi.)***	***E17***	***55***
AUTOZONE # 3711	***1555 N. FARMERSVILLE***	***SSW 1/8 - 1/4 (0.211 mi.)***	***E20***	***141***

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 06/12/2025 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FARMERSVILLE MINI MA	***1456 FARMERSVILLE***	***S 1/4 - 1/2 (0.268 mi.)***	***F24***	***208***
Cleanup Status: COMPLETED - CASE CLOSED				

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 6 CUPA Listings sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CB PERFORMANCE PRODU	1715 N FARMERSVILLE	SW 0 - 1/8 (0.123 mi.)	B5	13
Database: CUPA TULARE, Date of Government Version: 10/07/2022				
RITE AID #6764 - HAZ	***1710 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.146 mi.)***	***D8***	***34***
Database: CUPA TULARE, Date of Government Version: 10/07/2022				
JACK IN THE BOX #540	***1662 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.150 mi.)***	***D10***	***43***
Database: CUPA TULARE, Date of Government Version: 10/07/2022				
AUTOZONE #3711	1555 N FARMERSVILLE	SSW 1/8 - 1/4 (0.211 mi.)	E15	53
Database: CUPA TULARE, Date of Government Version: 10/07/2022				
DOLLAR TREE #03493	***1555 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.211 mi.)***	***E19***	***73***
Database: CUPA TULARE, Date of Government Version: 10/07/2022				
R GAS LLC TRUCK YARD	251 TERRY AVE	NW 1/8 - 1/4 (0.245 mi.)	22	207
Database: CUPA TULARE, Date of Government Version: 10/07/2022				

EXECUTIVE SUMMARY

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

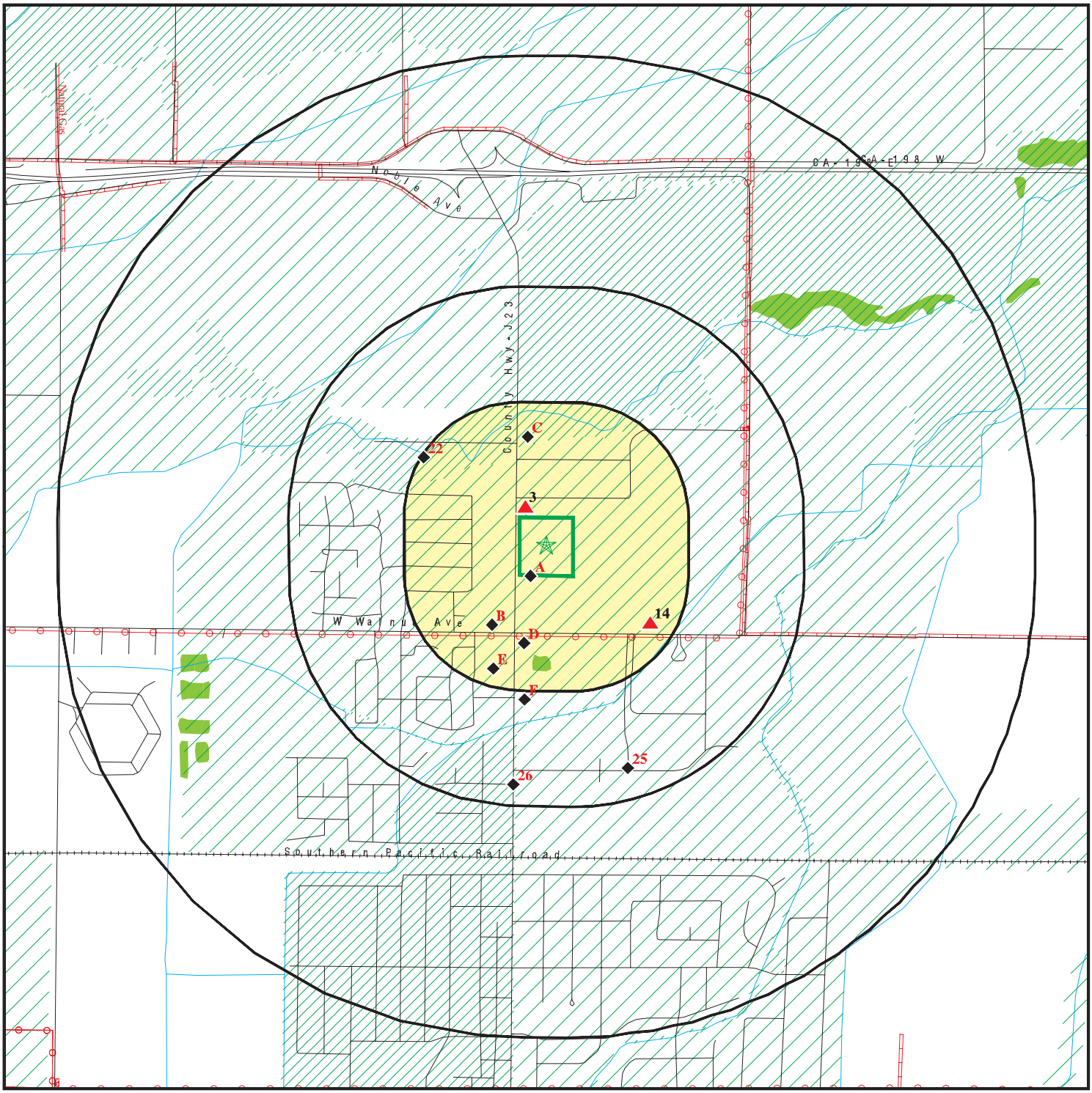
Lower Elevation	Address	Direction / Distance	Map ID	Page
FARMERSVILLE MINI MA Reg Id: 5T54000419	***1456 FARMERSVILLE***	***S 1/4 - 1/2 (0.268 mi.)***	***F24***	***208***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
CITY OF FARMERSVILLE SEWERAGE TRMT	ENVIROSTOR

OVERVIEW MAP - 8187223.2S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vacant Land	CLIENT: KCE Matrix
ADDRESS: APN 111-290-015-000 Farmersville CA 93292	CONTACT: Hagop T.
LAT/LONG: 36.314985 / 119.205813	INQUIRY #: 8187223.2s DATE: December 01, 2025 1:22 pm

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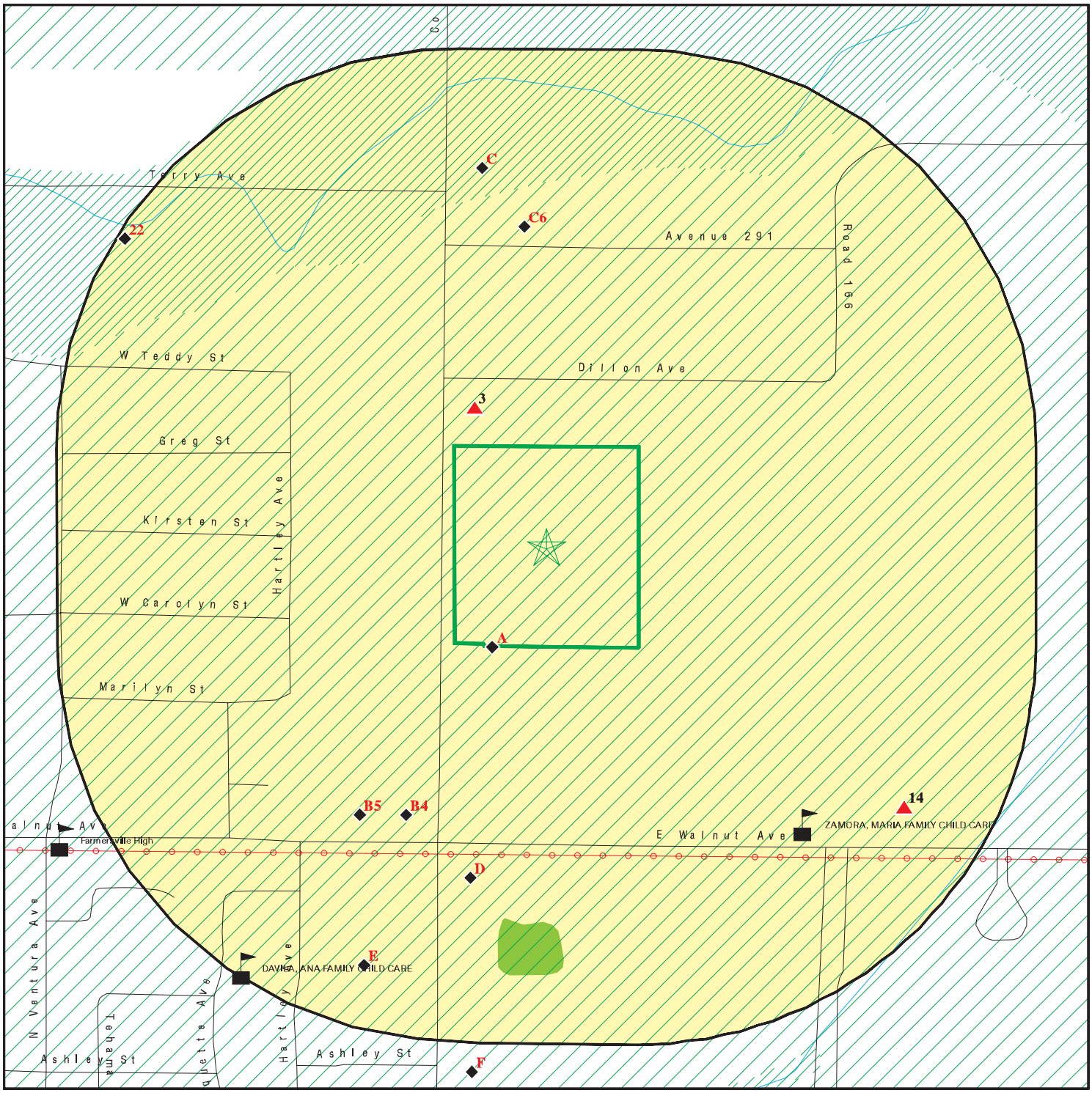
DETAIL MAP - 8187223.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

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LAT/LONG: 36.314985 / 119.205813	INQUIRY #: 8187223.2s DATE: December 01, 2025 1:23 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-VSQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	2	0	NR	2
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	1	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	3	NR	NR	NR	3
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	1	NR	NR	NR	2
HIST UST	0.250		3	2	NR	NR	NR	5
CA FID UST	0.250		0	1	NR	NR	NR	1
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	4	NR	NR	NR	5
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
UST FINDER	0.250		0	0	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	1	NR	NR	1
E MANIFEST	0.250		0	4	NR	NR	NR	4
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CHROME PLATING	0.500		0	0	0	NR	NR	0
Cortese	0.500		0	0	1	NR	NR	1
CUPA Listings	0.250		1	5	NR	NR	NR	6
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	6	22	6	0	0	34

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **RAL COPPING** **HIST UST** **S118414367**
28880 RD 164 **N/A**
< 1/8 **VISALIA, CA 93277**
0.001 mi.
4 ft. **Site 1 of 2 in cluster A**

Relative:
Lower

Actual:
364 ft.

HIST UST:

Name:	RAL COPPING
Address:	28880 RD 164
City,State,Zip:	VISALIA, CA 93277
File Number:	0002bcc2
URL:	
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

A2 **RALPH COPPING** **HIST UST** **U001583452**
28880 ROAD 164 **N/A**
< 1/8 **VISALIA, CA 93277**
0.001 mi.
4 ft. **Site 2 of 2 in cluster A**

Relative:
Lower

Actual:
364 ft.

HIST UST:

Name:	RALPH COPPING
Address:	28880 ROAD 164
City,State,Zip:	VISALIA, CA 93277
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000045349
Facility Type:	Other
Other Type:	PRIVATE
Contact Name:	Not reported
Telephone:	2097470070
Owner Name:	RALPH COPPING
Owner Address:	28880 RD. 164
Owner City,St,Zip:	VISALIA, CA 93277
Total Tanks:	0001
Tank Num:	001
Container Num:	1

RALPH COPPING (Continued) **U001583452**

Year Installed:	Not reported
Tank Capacity:	00000260
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

---

3 **T YOUNG DIESEL ELECTRIC** **RCRA NonGen / NLR** **1024793181**
NNW **29022 ROAD 164** **CAL000130104**
< 1/8 **VISALIA, CA 93292**
0.024 mi.
127 ft.

Relative: **Higher**

Actual: **365 ft.**

RCRA Listings:

Date Form Received by Agency:		19950111
Handler Name:		T Young Diesel Electric
Handler Address:		29022 Road 164
Handler City,State,Zip:		VISALIA, CA 93292-0000
EPA ID:		CAL000130104
Contact Name:		THAD YOUNG OWNER
Contact Address:		29022 ROAD 164
Contact City,State,Zip:		VISALIA, CA 93292
Contact Telephone:		559-747-5502
Contact Fax:		000-000-0000
Contact Email:		TYDEOFCA@YAHOO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		29022 ROAD 164
Mailing City,State,Zip:		VISALIA, CA 93292-9258
Owner Name:	Thad Young	
Owner Type:		Other
Operator Name:	Thad Young Owner	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported

T YOUNG DIESEL ELECTRIC (Continued) **1024793181**

2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: THAD YOUNG	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	29022 ROAD 164
Owner/Operator City,State,Zip:	VISALIA, CA 93292-9258
Owner/Operator Telephone:	559-747-5502
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: THAD YOUNG OWNER	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	29022 ROAD 164
Owner/Operator City,State,Zip:	VISALIA, CA 93292
Owner/Operator Telephone:	559-747-5502
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19950111
Handler Name: T YOUNG DIESEL ELECTRIC	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No

T YOUNG DIESEL ELECTRIC (Continued) **1024793181**

Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	811412
NAICS Description:	Appliance Repair And Maintenance

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

B4 **CLAUDES BUGGIES INC** **SWEEPS UST** **U001581412**
SSW **28813 FARMERSVILLE BLVD** **HIST UST** **N/A**
< 1/8 **FARMERSVILLE, CA 93223**
0.112 mi.
593 ft. **Site 1 of 2 in cluster B**

Relative:
Lower

Actual:
363 ft.

SWEEPS UST:

Name:	CLAUDES BUGGIES INC
Address:	28813 FARMERSVILLE
City:	FARMERSVILLE
Status:	Active
Comp Number:	57012
Number:	9
Board Of Equalization:	44-030297
Referral Date:	04-20-88
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1237-987
SWRCB Tank Id:	54-000-057012-000001
Tank Status:	A
Capacity:	1500
Active Date:	04-20-88
Tank Use:	M.V. FUEL
STG:	P
Content:	UNKNOWN
Number Of Tanks:	1

HIST UST:

Name:	CLAUDES BUGGIES INC
Address:	28813 FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
File Number:	0002377e

URL:

Region:	STATE
Facility ID:	00000057012
Facility Type:	Other

CLAUDES BUGGIES INC (Continued) **U001581412**

Other Type:	AUTO PARTS DIST.
Contact Name:	R. TOMLINSON
Telephone:	2097338222
Owner Name:	CLAUDES BUGGIES INC.
Owner Address:	28813 FARMERSVILLE BLVD.
Owner City,St,Zip:	FARMERSVILLE, CA 93223
Total Tanks:	0001
Tank Num:	001
Container Num:	001237-987
Year Installed:	1977
Tank Capacity:	00001500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

B5 **CB PERFORMANCE PRODUCTS INC** **CUPA Listings** **S120051214**
SW **1715 N FARMERSVILLE BLVD** **N/A**
< 1/8 **FARMERSVILLE, CA 93223**
0.123 mi.
652 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
363 ft.

CUPA TULARE:

Name:	CB PERFORMANCE PRODUCTS INC
Address:	1715 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	Not reported
Facility ID:	FA1349367
APN:	128-210-057
Latitude:	36.338668449
Longitude:	-119.37041146
PE:	2254
TB Fin Fees Description:	HW - SMALL GENERATOR
Current Status:	02
CD Fin billing Status Description:	Inactive, non-billable
Name:	CB PERFORMANCE PRODUCTS INC
Address:	1715 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	Not reported
Facility ID:	FA1349367
APN:	128-210-057
Latitude:	36.338668449
Longitude:	-119.37041146
PE:	2277
TB Fin Fees Description:	CUPA OVERSIGHT CA SURCHARGE
Current Status:	02
CD Fin billing Status Description:	Inactive, non-billable

C6 **ROBLES AUTO REPAIR** **RCRA NonGen / NLR** **1025870892**
North **16446 AVE 291** **CAL000479592**
1/8-1/4 **VISALIA, CA 93292**
0.138 mi.
731 ft. **Site 1 of 4 in cluster C**

Relative: **Lower**

Actual: **363 ft.**

RCRA Listings:

Date Form Received by Agency:		20230727
Handler Name:		Robles Auto Repair
Handler Address:		16446 Ave 291
Handler City,State,Zip:		VISALIA, CA 93292
EPA ID:		CAL000479592
Contact Name:		FRANCISCA RAMOS
Contact Address:		16446 AVE 291
Contact City,State,Zip:		VISALIA, CA 93292
Contact Telephone:		559-750-8676
Contact Fax:		Not reported
Contact Email:		FRRAMOSA@ICLOUD.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		16446 AVE 291
Mailing City,State,Zip:		VISALIA, CA 93292
Owner Name:	Francisca Ramos	
Owner Type:		Other
Operator Name:	Francisca Ramos	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
202 GPRA Corrective Action Baseline:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No

ROBLES AUTO REPAIR (Continued) **1025870892**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230728
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: FRANCISCA RAMOS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	16446 AVE 291
Owner/Operator City,State,Zip:	VISALIA, CA 93292
Owner/Operator Telephone:	559-750-8676
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: FRANCISCA RAMOS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	16446 AVE 291
Owner/Operator City,State,Zip:	VISALIA, CA 93292
Owner/Operator Telephone:	559-750-8676
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20230727
Handler Name: ROBLES AUTO REPAIR	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

ROBLES AUTO REPAIR (Continued) **1025870892**

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: General Automotive Repair

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

D7 **RITE AID 6764** **RCRA-SQG 1023675114**
SSW **1710 1710 N. FARMERSVILLE BLVD.** **E MANIFEST CAR000270843**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.146 mi.
772 ft. **Site 1 of 4 in cluster D**

Relative: **Lower**
Actual: **363 ft.**

RCRA Listings:

Date Form Received by Agency:	20241113
Handler Name:	Rite Aid #6764
Handler Address:	N Farmersville Blvd
Handler City,State,Zip:	FARMERSVILLE, CA 93223
EPA ID:	CAR000270843
Contact Name:	CHRIS HENNESSY
Contact Address:	PO BOX 3165
Contact City,State,Zip:	HARRISBURG, PA 17105
Contact Telephone:	717-975-8643
Contact Fax:	717-972-3989
Contact Email:	EHS@RITEAID.COM
Contact Title:	PROGRAM MANAGER, EH&S
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 3165
Mailing City,State,Zip:	HARRISBURG, PA 17105
Owner Name:	Dctn3 474 Farmersville Ca Llc
Owner Type:	Private
Operator Name:	Thrifty Payless Inc
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No

RITE AID 6764 (Continued) **1023675114**

Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20241115
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2021

Click Here for Biennial Reporting System Data:
Year: 2019

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D002
Waste Description:	Corrosive Waste
Waste Code:	D007
Waste Description:	Chromium
Waste Code:	D009
Waste Description:	Mercury
Waste Code:	D010
Waste Description:	Selenium
Waste Code:	D011
Waste Description:	Silver

RITE AID 6764 (Continued) **1023675114**

Waste Code: D022
Waste Description: Chloroform

Waste Code: D024
Waste Description: M-Cresol

Waste Code: D026
Waste Description: Cresol

Waste Code: P001
Waste Description: 2h-1-Benzopyran-2-One, 4-Hydroxy-3-(3-Oxo-1-Phenylbutyl)-, & Salts, When Present At Concentrations Greater Than 0.3% (Or) Warfarin, & Salts, When Present At Concentrations Greater Than 0.3%

Waste Code: P075
Waste Description: Nicotine, & Salts (Or) Pyridine, 3-(1-Methyl-2-Pyrrolidinyl)-,(S)-, & Salts

Waste Code: U044
Waste Description: Chloroform (Or) Methane, Trichloro-

Waste Code: U122
Waste Description: Formaldehyde

Waste Code: U165
Waste Description: Naphthalene

Waste Code: U188
Waste Description: Phenol

Waste Code: U201
Waste Description: 1,3-Benzenediol (Or) Resorcinol

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: EHS@RITEAID.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: EHS@RITEAID.COM

RITE AID 6764 (Continued) **1023675114**

Owner/Operator Indicator:	Operator
Owner/Operator Name: THRIFTY PAYLESS INC	
Legal Status:	Private
Date Became Current:	20161020
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 3165
Owner/Operator City,State,Zip:	HARRISBURG, PA 17105
Owner/Operator Telephone:	717-761-2633
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	EHS@RITEAID.COM

Owner/Operator Indicator:	Operator
Owner/Operator Name: THRIFTY PAYLESS INC	
Legal Status:	Private
Date Became Current:	20161020
Date Ended Current:	Not reported
Owner/Operator Address:	30 HUNTER LANE
Owner/Operator City,State,Zip:	CAMP HILL, PA 17011
Owner/Operator Telephone:	717-761-2633
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	EHS@RITEAID.COM

Owner/Operator Indicator:	Operator
Owner/Operator Name: THRIFTY PAYLESS INC	
Legal Status:	Private
Date Became Current:	20161020
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 3165
Owner/Operator City,State,Zip:	HARRISBURG, PA 17105
Owner/Operator Telephone:	717-761-2633
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	EHS@RITEAID.COM

Owner/Operator Indicator:	Operator
Owner/Operator Name: THRIFTY PAYLESS INC	
Legal Status:	Private
Date Became Current:	20161020
Date Ended Current:	Not reported
Owner/Operator Address:	30 HUNTER LANE
Owner/Operator City,State,Zip:	CAMP HILL, PA 17011
Owner/Operator Telephone:	717-761-2633
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	EHS@RITEAID.COM

Owner/Operator Indicator:	Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC	
Legal Status:	Private
Date Became Current:	20161020
Date Ended Current:	Not reported
Owner/Operator Address:	620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip:	SOUTHLAKE, TX 76092
Owner/Operator Telephone:	817-552-6796
Owner/Operator Telephone Ext:	Not reported

RITE AID 6764 (Continued) **1023675114**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: THRIFTY PAYLESS INC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: EHS@RITEAID.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: THRIFTY PAYLESS INC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: Not reported

RITE AID 6764 (Continued) **1023675114**

Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name: THRIFTY PAYLESS INC	
Legal Status:	Private
Date Became Current:	20161020
Date Ended Current:	Not reported
Owner/Operator Address:	30 HUNTER LANE
Owner/Operator City,State,Zip:	CAMP HILL, PA 17011
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC	
Legal Status:	Private
Date Became Current:	20161020
Date Ended Current:	Not reported
Owner/Operator Address:	620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip:	SOUTHLAKE, TX 76092
Owner/Operator Telephone:	817-552-6796
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	EHS@RITEAID.COM

Historic Generators:

Receive Date:	20200204
Handler Name: RITE AID # 6764	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No
Receive Date:	20220126
Handler Name: RITE AID # 6764	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

RITE AID 6764 (Continued) **1023675114**

Receive Date:		20170308
Handler Name:	RITE AID # 6764	
Federal Waste Generator Description:		Small Quantity Generator
State District Owner:		Not reported
Large Quantity Handler of Universal Waste:		No
Recognized Trader Importer:		No
Recognized Trader Exporter:		No
Spent Lead Acid Battery Importer:		No
Spent Lead Acid Battery Exporter:		No
Current Record:		No
Non Storage Recycler Activity:		Not reported
Electronic Manifest Broker:		Not reported

Receive Date:		20190429
Handler Name:	RITE AID # 6764	
Federal Waste Generator Description:		Small Quantity Generator
State District Owner:		Not reported
Large Quantity Handler of Universal Waste:		No
Recognized Trader Importer:		No
Recognized Trader Exporter:		No
Spent Lead Acid Battery Importer:		No
Spent Lead Acid Battery Exporter:		No
Current Record:		No
Non Storage Recycler Activity:		No
Electronic Manifest Broker:		No

Receive Date:		20220315
Handler Name:	RITE AID # 6764	
Federal Waste Generator Description:		Small Quantity Generator
State District Owner:		Not reported
Large Quantity Handler of Universal Waste:		No
Recognized Trader Importer:		No
Recognized Trader Exporter:		No
Spent Lead Acid Battery Importer:		No
Spent Lead Acid Battery Exporter:		No
Current Record:		No
Non Storage Recycler Activity:		No
Electronic Manifest Broker:		No

Receive Date:		20230111
Handler Name:	RITE AID # 6764	
Federal Waste Generator Description:		Small Quantity Generator
State District Owner:		Not reported
Large Quantity Handler of Universal Waste:		No
Recognized Trader Importer:		No
Recognized Trader Exporter:		No
Spent Lead Acid Battery Importer:		No
Spent Lead Acid Battery Exporter:		No
Current Record:		No
Non Storage Recycler Activity:		No
Electronic Manifest Broker:		No

Receive Date:		20241113
Handler Name:	RITE AID #6764	
Federal Waste Generator Description:		Small Quantity Generator
State District Owner:		Not reported
Large Quantity Handler of Universal Waste:		No

RITE AID 6764 (Continued) **1023675114**

Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	44611
NAICS Description:	Pharmacies And Drug Stores
NAICS Code:	446110
NAICS Description:	Pharmacies And Drug Stores
NAICS Code:	456110
NAICS Description:	Pharmacies And Drug Retailers

Has the Facility Received Notices of Violations:

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

RITE AID 6764 (Continued) **1023675114**

Evaluation Action Summary:

Evaluation Date:	20230720
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier:	CUPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

E MANIFEST:

Manifest Tracking Number:	017287225FLE
Last Updated Date:	20221003
Shipped Date:	20220908
Received Date:	20220912
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid 6764
Generator Location Street Number:	Not reported
Generator Location Street 1:	1710 N. FARMERSVILLE BLVD.
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1710 N. Farmersville Blvd.
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Rite Aid 6764
Designated Facility EPA ID:	CAD059494310
Designated Facility Name:	Clean Harbors San Jose Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	1021 Berryessa Road
Designated Facility Mail City:	San Jose
Designated Facility Mail Zip:	95133
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	1021 Berryessa Road
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	San Jose
Designated Facility Location Zip:	95133
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

RITE AID 6764 (Continued) **1023675114**

Manifest Tracking Number:	016387551FLE
Last Updated Date:	20220526
Shipped Date:	20220404
Received Date:	20220506
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid 6764
Generator Location Street Number:	Not reported
Generator Location Street 1:	1710 N. FARMERSVILLE BLVD.
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1710 N. Farmersville Blvd.
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Rite Aid 6764
Designated Facility EPA ID:	UTD981552177
Designated Facility Name:	Clean Harbors Aragonite Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	PO Box 1339
Designated Facility Mail City:	Grantsville
Designated Facility Mail Zip:	84029
Designated Facility Mail State:	UT
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	11600 North Aptus Road
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Grantsville
Designated Facility Location Zip:	84029
Designated Facility Location State:	UT
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	015507847FLE
Last Updated Date:	20220316
Shipped Date:	20220118
Received Date:	20220221
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid 6764
Generator Location Street Number:	Not reported
Generator Location Street 1:	1710 N. FARMERSVILLE BLVD.
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1710 N. Farmersville Blvd.

RITE AID 6764 (Continued) **1023675114**

Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Rite Aid 6764
Designated Facility EPA ID:	ARD069748192
Designated Facility Name:	Clean Harbors El Dorado Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	309 American Circle
Designated Facility Mail City:	El Dorado
Designated Facility Mail Zip:	71730
Designated Facility Mail State:	AR
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	309 American Circle
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	El Dorado
Designated Facility Location Zip:	71730
Designated Facility Location State:	AR
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	017170831FLE
Last Updated Date:	20220719
Shipped Date:	20220622
Received Date:	20220627
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid 6764
Generator Location Street Number:	Not reported
Generator Location Street 1:	1710 N. FARMERSVILLE BLVD.
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1710 N. Farmersville Blvd.
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Rite Aid 6764
Designated Facility EPA ID:	CAD059494310
Designated Facility Name:	Clean Harbors San Jose Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	1021 Berryessa Road
Designated Facility Mail City:	San Jose
Designated Facility Mail Zip:	95133
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	1021 Berryessa Road
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	San Jose

RITE AID 6764 (Continued) **1023675114**

Designated Facility Location Zip:	95133
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N
Manifest Tracking Number:	018583532FLE
Last Updated Date:	20240501
Shipped Date:	20240306
Received Date:	20240405
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid 6764
Generator Location Street Number:	1710
Generator Location Street 1:	1710 N. FARMERSVILLE BLVD.
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1710 N. Farmersville Blvd.
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Rite Aid 6764
Designated Facility EPA ID:	CAD044429835
Designated Facility Name:	Clean Harbors Wilmington Llc
Designated Facility Mail Street Number:	1737
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	East Denni Street
Designated Facility Mail City:	Wilmington
Designated Facility Mail Zip:	90744
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	1737
Designated Facility Location Street 1:	East Denni Street
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Wilmington
Designated Facility Location Zip:	90744
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N
Manifest Tracking Number:	020092938JJK
Last Updated Date:	20191105
Shipped Date:	20191016
Received Date:	20191022
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid # 6764
Generator Location Street Number:	Not reported
Generator Location Street 1:	1710 N FARMERSVILLE BLVD

RITE AID 6764 (Continued) **1023675114**

Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	30 HUNTER LANE
Generator Mail Street 2:	Not reported
Generator Mail City:	CAMP HILL
Generator Mail Zip:	17011
Generator Mail State:	PA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVT330010000
Designated Facility Name:	Us Ecology Nevada, Inc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	PO BOX 578
Designated Facility Mail City:	BEATTY
Designated Facility Mail Zip:	89003
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	HWY 95 11 MI S OF BEATTY
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	BEATTY
Designated Facility Location Zip:	89003
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	019623584JJK
Last Updated Date:	20190311
Shipped Date:	20190206
Received Date:	20190219
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid # 6764
Generator Location Street Number:	Not reported
Generator Location Street 1:	1710 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	30 HUNTER LANE
Generator Mail Street 2:	Not reported
Generator Mail City:	CAMP HILL
Generator Mail Zip:	17011
Generator Mail State:	PA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVT330010000
Designated Facility Name:	Us Ecology Nevada, Inc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	PO BOX 578
Designated Facility Mail City:	BEATTY

RITE AID 6764 (Continued) **1023675114**

Designated Facility Mail Zip:	89003
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	HWY 95 11 MI S OF BEATTY
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	BEATTY
Designated Facility Location Zip:	89003
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	020586530JJK
Last Updated Date:	20210312
Shipped Date:	20210224
Received Date:	20210305
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid #06764
Generator Location Street Number:	Not reported
Generator Location Street 1:	1710 N. FARMERSVILLE BLVD.
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	ATTN: STORE MANAGER
Generator Mail Street 2:	1710 N. FARMERSVILLE BLVD.
Generator Mail City:	FARMERSVILLE
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	IDD073114654
Designated Facility Name:	Us Ecology Idaho
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	20400 LEMLEY ROAD
Designated Facility Mail City:	GRAND VIEW
Designated Facility Mail Zip:	83624
Designated Facility Mail State:	ID
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	20400 LEMLEY ROAD
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	GRAND VIEW
Designated Facility Location Zip:	83624
Designated Facility Location State:	ID
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	020589308JJK
Last Updated Date:	20210907
Shipped Date:	20210803
Received Date:	20210819
Manifest Status:	Signed

RITE AID 6764 (Continued) **1023675114**

Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid #06764
Generator Location Street Number:	Not reported
Generator Location Street 1:	1710 N. FARMERSVILLE BLVD.
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	ATTN: STORE MANAGER
Generator Mail Street 2:	1710 N. FARMERSVILLE BLVD.
Generator Mail City:	FARMERSVILLE
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVT330010000
Designated Facility Name:	Us Ecology, Inc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	HIGHWAY 95, 11 MILES SOUTH OF BEATTY
Designated Facility Mail City:	BEATTY
Designated Facility Mail Zip:	89003
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	HIGHWAY 95, 11 MILES SOUTH OF BEATTY
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	BEATTY
Designated Facility Location Zip:	89003
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	020589791JJK
Last Updated Date:	20200727
Shipped Date:	20200623
Received Date:	20200706
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid # 6764
Generator Location Street Number:	1710
Generator Location Street 1:	1710 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	30
Generator Mail Street 1:	HUNTER LANE
Generator Mail Street 2:	Not reported
Generator Mail City:	CAMP HILL
Generator Mail Zip:	17011
Generator Mail State:	PA
Generator Contact Company Name:	Not reported

RITE AID 6764 (Continued) **1023675114**

Designated Facility EPA ID:	IDD073114654
Designated Facility Name:	Us Ecology Idaho Inc Site B
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	PO BOX 400
Designated Facility Mail City:	GRAND VIEW
Designated Facility Mail Zip:	83624
Designated Facility Mail State:	ID
Designated Facility Location Street Number:	20400
Designated Facility Location Street 1:	LEMLEY RD
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	GRAND VIEW
Designated Facility Location Zip:	83624
Designated Facility Location State:	ID
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	020592051JJK
Last Updated Date:	20200420
Shipped Date:	20200331
Received Date:	20200413
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAR000270843
Generator Name:	Rite Aid # 6764
Generator Location Street Number:	1710
Generator Location Street 1:	1710 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	30
Generator Mail Street 1:	HUNTER LANE
Generator Mail Street 2:	Not reported
Generator Mail City:	CAMP HILL
Generator Mail Zip:	17011
Generator Mail State:	PA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	IDD073114654
Designated Facility Name:	Us Ecology Idaho Inc Site B
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	PO BOX 400
Designated Facility Mail City:	GRAND VIEW
Designated Facility Mail Zip:	83624
Designated Facility Mail State:	ID
Designated Facility Location Street Number:	20400
Designated Facility Location Street 1:	LEMLEY RD
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	GRAND VIEW
Designated Facility Location Zip:	83624
Designated Facility Location State:	ID
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

RITE AID 6764 (Continued) **1023675114**

Transporter:
Manifest Tracking Number: 017655152FLE
Transporter Line Number: 1
Transporter EPA ID: MAD039322250
Transporter Name: Clean Harbors Environmental Services, Inc.

Manifest Tracking Number: 017655152FLE
Transporter Line Number: 2
Transporter EPA ID: MAD039322250
Transporter Name: Clean Harbors Environmental Services, Inc.

Waste Line:
Manifest Tracking Number: 017655152FLE
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: UN1993
U.S. DOT Description: Un1993, Waste Flammable Liquids, N.O.S. (Alcohol, Acetone), 3, Pg Ii
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: CF
Container Type Description: Fiber or plastic boxes, cartons, cases
Waste Quantity: 33
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.0165
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.0165
Waste Quantity, in Kilograms: 14.965996
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 14.965996
Management Method Code: H040
Management Method Description: INCINERATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D001, D005, D007, D011, D018, D035, U002, U154
Quantity Haz Kg: 14.965996
Quantity Haz Tons: 0.0165
Quantity Non Haz Kg: 0
Quantity Non Haz Tons: 0
State Waste Codes: CA-331

Manifest Tracking Number: 017655152FLE
Waste Line Number: 2
U.S. DOT Hazardous Indicator: Y

RITE AID 6764 (Continued) **1023675114**

U.S. DOT ID Number:	UN2810
U.S. DOT Description:	Un2810, Waste Toxic Liquids, Organic, N.O.S (2,4-D, Phenol), 6.1, Pg Ii
Non-Hazardous Waste Description:	Not reported
Number of Containers:	2
Container Type Code:	CF
Container Type Description:	Fiber or plastic boxes, cartons, cases
Waste Quantity:	124
Quantity Unit of Measure Code:	P
Quantity Unit of Measure Description:	Pounds
Waste Quantity, in Tons:	0.062
Acute Waste Quantity, in Tons:	0
Non-Acute Waste Quantity, in Tons:	0.062
Waste Quantity, in Kilograms:	56.235863
Acute Waste Quantity, in Kilograms:	0
Non-Acute Waste Quantity, in Kilorgrams:	56.235863
Management Method Code:	H040
Management Method Description:	INCINERATION
Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N
Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	Y
Federal Waste Codes:	D004, D005, D007, D010, D011, D016, D024, D026, U035, U044, U058, U072, U129, U150, U188, U200, U201, U279
Quantity Haz Kg:	56.235863
Quantity Haz Tons:	0.062
Quantity Non Haz Kg:	0
Quantity Non Haz Tons:	0
State Waste Codes:	CA-331
Manifest Tracking Number:	017655152FLE
Waste Line Number:	3
U.S. DOT Hazardous Indicator:	Y
U.S. DOT ID Number:	UN2024
U.S. DOT Description:	Un2024, Waste Mercury Compounds, Liquid, N.O.S. (Thimerosal), 6.1, Pg Iii
Non-Hazardous Waste Description:	Not reported
Number of Containers:	1
Container Type Code:	DF
Container Type Description:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	10
Quantity Unit of Measure Code:	P
Quantity Unit of Measure Description:	Pounds
Waste Quantity, in Tons:	0.005
Acute Waste Quantity, in Tons:	0
Non-Acute Waste Quantity, in Tons:	0.005
Waste Quantity, in Kilograms:	4.53515

RITE AID 6764 (Continued) **1023675114**

Acute Waste Quantity, in Kilograms:	0
Non-Acute Waste Quantity, in Kilorgrams:	4.53515
Management Method Code:	H040
Management Method Description:	INCINERATION
Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N
Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	Y
Federal Waste Codes:	D009
Quantity Haz Kg:	4.53515
Quantity Haz Tons:	0.005
Quantity Non Haz Kg:	0
Quantity Non Haz Tons:	0
State Waste Codes:	CA-132, CA-135

Click this hyperlink while viewing on your computer to access
20 additional US EManifest: record(s) in the EDR Site Report.

D8
SSW
1/8-1/4
0.146 mi.
772 ft.

RITE AID #6764 - HAZMAT
1710 N FARMERSVILLE BLVD
FARMERSVILLE, CA 93223

Site 2 of 4 in cluster D

CUPA Listings **S123634885**
HWTS **N/A**
HAZNET

Relative:
Lower

Actual:
363 ft.

CUPA TULARE:

Name:	RITE AID #6764 - HAZMAT
Address:	1710 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10710487
Facility ID:	FA1352581
APN:	111-290-013
Latitude:	36.312655
Longitude:	-119.206332
PE:	2254
TB Fin Fees Description:	HW - SMALL GENERATOR
Current Status:	02
CD Fin billing Status Description:	Inactive, non-billable

Name:	RITE AID #6764 - HAZMAT
Address:	1710 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10710487
Facility ID:	FA1352581
APN:	111-290-013
Latitude:	36.312655
Longitude:	-119.206332
PE:	2277
TB Fin Fees Description:	CUPA OVERSIGHT CA SURCHARGE

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Current Status: 01
CD Fin billing Status Description: Active, billable

Name: RITE AID #6764 - HAZMAT
Address: 1710 N FARMERSVILLE BLVD
City,State,Zip: FARMERSVILLE, CA 93223
CERS ID: 10710487
Facility ID: FA1352581
APN: 111-290-013
Latitude: 36.312655
Longitude: -119.206332
PE: 2223
TB Fin Fees Description: Haz Mat - < 6 Reportable Quantities of Chem
Current Status: 04
CD Fin billing Status Description: Active, exempt from billing

HWTS:
Name: RITE AID #6764
Address: 1710 N FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE, CA 93223
EPA ID: CAL000420736
Inactive Date: 05/05/2017
Create Date: 10/06/2016
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 30 HUNTER LN
Mailing Address 2: PA
Mailing City,State,Zip: CA 17011
Owner Name: THRIFTY PAYLESS INC
Owner Address: 30 HUNTER LN
Owner Address 2: Not reported
Owner City,State,Zip: CAMP HILL, PA 17011
Owner Phone: Not reported
Owner Fax: Not reported
Contact Name: DAVID CROZIER
Contact Address: 30 HUNTER LANE
Contact Address 2: Not reported
City,State,Zip: CAMP HILL, PA 17011
Contact Phone: Not reported
Contact Fax: Not reported
Facility Status: Inactive
Facility Type: PERMANENT
Category: STATE
Latitude: 36.31195916
Longitude: -119.2069632

NAICS:
EPA ID: CAL000420736
Create Date: 2016-10-06 16:25:40.963
NAICS Code: 44611
NAICS Description: Pharmacies and Drug Stores
Issued EPA ID Date: 2016-10-06 16:25:40.93700
Inactive Date: 2017-05-05 00:00:00
Facility Name: RITE AID #6764
Facility Address: 1710 N FARMERSVILLE BLVD
Facility Address 2: Not reported

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Facility City: FARMERSVILLE
Facility County: Not reported
Facility State: CA
Facility Zip: 93223

HAZNET:
Name: RITE AID #6764
Address: 1710 N FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE, CA 93223
Contact: DAVID CROZIER
Telephone: 7179758643
Mailing Name: Not reported
Mailing Address: 30 HUNTER LN

Year: 2017
Gepaid: CAL000420736
TSD EPA ID: CAD980884183
CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.001

Year: 2017
Gepaid: CAL000420736
TSD EPA ID: CAD980884183
CA Waste Code: 311 - Pharmaceutical waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.001

Year: 2017
Gepaid: CAL000420736
TSD EPA ID: CAD980884183
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0005

Year: 2016
Gepaid: CAL000420736
TSD EPA ID: CAD980884183
CA Waste Code: 343 - Unspecified organic liquid mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.001

Year: 2016
Gepaid: CAL000420736
TSD EPA ID: CAD980884183
CA Waste Code: 311 - Pharmaceutical waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0005

Year: 2016

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Gepaid: CAL000420736
TSD EPA ID: CAD980884183
CA Waste Code: 122 - Alkaline solution without metals pH >= 12.5
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0005

Year: 2016
Gepaid: CAL000420736
TSD EPA ID: CAD980884183
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0005

Additional Information:
Year: 2017
Gen EPA ID: CAL000420736

Shipment Date: 20170124
Creation Date: Not reported
Receipt Date: Not reported
Manifest ID: 009343623FLE
Trans EPA ID: MNS000110924
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID: CAR000210617
Trans 2 Name: 21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID: CAD980884183
Trans Name: GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 331 - Off-specification, aged, or surplus organics
RCRA Code: Not reported
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.0105
Waste Quantity: 21
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20170124
Creation Date: Not reported
Receipt Date: Not reported
Manifest ID: 009343623FLE
Trans EPA ID: MNS000110924
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID: CAR000210617
Trans 2 Name: 21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID: CAD980884183
Trans Name: GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170124
Creation Date:	3/23/2017 18:30:37
Receipt Date:	20170208
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	D010
Additional Code 2:	D007
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170124
Creation Date:	3/23/2017 18:30:37
Receipt Date:	20170208
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170124
Creation Date:	3/23/2017 18:30:37
Receipt Date:	20170208
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	P001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170124
Creation Date:	3/23/2017 18:30:37
Receipt Date:	20170208
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

D9 **RITE AID FARMERSVILLE** **CERS HAZ WASTE** **S120052172**
SSW **1710 NORTH FARMERSVILLE BOULEVARD** **NPDES** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223** **CERS**
0.146 mi.
772 ft. **Site 3 of 4 in cluster D**

Relative:
Lower

Actual:
363 ft.

CERS HAZ WASTE:

Name:	RITE AID #6764
Address:	1710 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	418891
CERS ID:	10710487
CERS Description:	Hazardous Waste Generator

NPDES:

Name:	RITE AID FARMERSVILLE
Address:	1710 NORTH FARMERSVILLE BOULEVARD
City,State,Zip:	FARMERSVILLE, CA 93223
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	5F54W002527
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Expired
Status Date:	09/02/2016
Operator Name:	DCTN3 474 Farmersville CA LLC
Operator Address:	620 Southlake Blvd
Operator City:	Southlake
Operator State:	Texas
Operator Zip:	76092

CERS:

Name:	RITE AID #6764
Address:	1710 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	418891
CERS ID:	10710487
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-31-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported

RITE AID FARMERSVILLE (Continued) **S120052172**

Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-25-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Daniel
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-25-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Daniel
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-20-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Aric Martin, Store Manager This facility is no longer a RCRCA- Large Quantity Generator.
Eval Division: Tulare County Environmental Health
Eval Program: HWLQG
Eval Source: CERS,

Coordinates:
Site ID: 418891
Facility Name: Rite Aid #6764
Env Int Type Code: HWG
Program ID: 10710487
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 36.311370
Longitude: -119.206970

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: P.O. Box 3165, Attn: EHS
Affiliation City: Harrisburg
Affiliation State: PA
Affiliation Country: Not reported
Affiliation Zip: 17105
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Rite Aid #6764
Entity Title: Not reported

RITE AID FARMERSVILLE (Continued) **S120052172**

Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(559) 594-5656,
Affiliation Type Desc:	CUPA District
Entity Name:	Tulare County Environmental Health
Entity Title:	Not reported
Affiliation Address:	5957 South Mooney Boulevard
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93277
Affiliation Phone:	(559) 624-7400,
Affiliation Type Desc:	Document Preparer
Entity Name:	Jordan Anderson
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Chris Hennessy
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3165
Affiliation City:	Harrisburg
Affiliation State:	PA
Affiliation Country:	Not reported
Affiliation Zip:	17105
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	RITE AID CORPORATION
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	DCTN3 474 Farmersville CA, LLC
Entity Title:	Not reported
Affiliation Address:	620 E. Southlake Blvd.
Affiliation City:	Southlake
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	76092
Affiliation Phone:	(717) 761-2633,

RITE AID FARMERSVILLE (Continued) **S120052172**

Affiliation Type Desc:	Identification Signer
Entity Name:	Chris Hennessy
Entity Title:	Program Manager, EH&S
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	THRIFTY PAYLESS INC.
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3165
Affiliation City:	Harrisburg
Affiliation State:	PA
Affiliation Country:	United States
Affiliation Zip:	17105
Affiliation Phone:	(717) 761-2633,

D10 **JACK IN THE BOX #5401** **CUPA Listings** **S123530938**
SSW **1662 N FARMERSVILLE BLVD** **CERS** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.150 mi.
790 ft. **Site 4 of 4 in cluster D**

Relative:
Lower

Actual:
363 ft.

CUPA TULARE:

Name:	JACK IN THE BOX #5401
Address:	1662 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10781323
Facility ID:	FA1354143
APN:	129-010-076
Latitude:	36.311892
Longitude:	-119.206723
PE:	2223
TB Fin Fees Description:	Haz Mat - < 6 Reportable Quantities of Chem
Current Status:	01
CD Fin billing Status Description:	Active, billable

Name:	JACK IN THE BOX #5401
Address:	1662 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10781323
Facility ID:	FA1354143
APN:	129-010-076
Latitude:	36.311892
Longitude:	-119.206723
PE:	2277
TB Fin Fees Description:	CUPA OVERSIGHT CA SURCHARGE
Current Status:	01
CD Fin billing Status Description:	Active, billable

CERS:

Name:	JACK IN THE BOX #5401
Address:	1662 N FARMERSVILLE BLVD

JACK IN THE BOX #5401 (Continued) **S123530938**

City,State,Zip: FARMERSVILLE, CA 93223
Site ID: 513985
CERS ID: 10781323
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 513985
Site Name: Jack in the Box #5401
Violation Date: 05-14-2019
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Did not observe annual employee training logs/records during the inspection. Provide and maintain annual hazardous material employee training records on site.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-14-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Blanka Avendano.
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 513985
Site Name: Jack in the Box #5401
Site Address: 1662 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 05-14-2019
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Coordinates:
Site ID: 513985
Facility Name: Jack in the Box #5401
Env Int Type Code: HMBP
Program ID: 10781323
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 36.311880
Longitude: -119.206610

JACK IN THE BOX #5401 (Continued) **S123530938**

Affiliation:

Affiliation Type Desc:	Identification Signer
Entity Name:	Brandon Davis
Entity Title:	Financial Analyst
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	YBR Enterprises
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(559) 625-4887,

Affiliation Type Desc:	Property Owner
Entity Name:	YBR Enterprises
Entity Title:	Not reported
Affiliation Address:	1660 N Farmersville Blvd
Affiliation City:	Farmersville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93223
Affiliation Phone:	(559) 625-4887,

Affiliation Type Desc:	CUPA District
Entity Name:	Tulare County Environmental Health
Entity Title:	Not reported
Affiliation Address:	5957 South Mooney Boulevard
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93277
Affiliation Phone:	(559) 624-7400,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Nicole Hinnawi
Entity Title:	Not reported
Affiliation Address:	1660 N Farmersville Blvd
Affiliation City:	Farmersville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93223
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	YBR Enterprises, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported

JACK IN THE BOX #5401 (Continued) **S123530938**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Document Preparer
Entity Name:	Steve Skanderson, Stantec
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1660 N Farmersville Blvd
Affiliation City:	Farmersville
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93223
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	YBR Enterprises
Entity Title:	Not reported
Affiliation Address:	1660 N Farmersville Blvd
Affiliation City:	Farmersville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93223
Affiliation Phone:	(559) 625-4887,

C11 **MARION D. PHILLIPS** **HIST UST** **U001583420**
North **16410 AVENUE 291** **N/A**
1/8-1/4 **VISALIA, CA 93277**
0.175 mi.
924 ft. **Site 2 of 4 in cluster C**

Relative: HIST UST:
Lower

Actual: Name:	MARION D. PHILLIPS
362 ft. Address:	16410 AVENUE 291
City,State,Zip:	VISALIA, CA 93277
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000040397
Facility Type:	Other
Other Type:	CONTRACTOR
Contact Name:	MARION D. PHILLIPS
Telephone:	2095944111
Owner Name:	MARION D. PHILLIPS
Owner Address:	16410 AVE. 291
Owner City,St,Zip:	VISALIA, CA 93277
Total Tanks:	0001

MARION D. PHILLIPS (Continued) **U001583420**

Tank Num:	001
Container Num:	001
Year Installed:	1969
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	None

C12 **PHILLIPS PROPERTY** **SWEEPS UST** **S101596144**
North **16410 AVENUE 291** **HIST UST** **N/A**
1/8-1/4 **VISALIA, CA 93277** **CA FID UST**
0.175 mi.
924 ft. **Site 3 of 4 in cluster C**

Relative:
Lower

Actual:
362 ft.

SWEEPS UST:

Name:	PHILLIPS PROPERTY
Address:	16410 AVENUE 291
City:	VISALIA
Status:	Active
Comp Number:	418
Number:	9
Board Of Equalization:	44-029727
Referral Date:	04-20-88
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	54-000-000418-000001
Tank Status:	A
Capacity:	2000
Active Date:	04-20-88
Tank Use:	CHEMICAL
STG:	P
Content:	Not reported
Number Of Tanks:	1

HIST UST:

Name:	MARION D PHILLIPS
Address:	16410 AVE 291
City,State,Zip:	VISALIA, CA 93277
File Number:	0002ba44

URL:

Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported

PHILLIPS PROPERTY (Continued) **S101596144**

Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

CA FID UST:
Facility ID: 54002171
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 2095944111
Mail To: Not reported
Mailing Address: 16410 AVENUE 291
Mailing Address 2: Not reported
Mailing City,St,Zip: VISALIA 93277
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

C13 **16410 AVE. 291** **RCRA NonGen / NLR** **1031771784**
North **16410 AVE. 291** **ECHO** **CAC003331840**
1/8-1/4 **VISALIA, CA 93292**
0.175 mi.
924 ft. **Site 4 of 4 in cluster C**

Relative: **Lower**
Actual: **362 ft.**

RCRA Listings:
Date Form Received by Agency: 20250326
Handler Name: 16410 Ave. 291
Handler Address: 16410 Ave. 291
Handler City,State,Zip: VISALIA, CA 93292
EPA ID: CAC003331840
Contact Name: ENCARNACION & SANDRA TRUJILLO
Contact Address: 16410 AVE. 291
Contact City,State,Zip: VISALIA, CA 93292
Contact Telephone: 559-471-5355
Contact Fax: Not reported
Contact Email: MATTF@SELFHELPENTERPRISES.ORG
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Not reported
State District Owner: Not reported
State District: Not reported
Mailing Address: 16410 AVE. 291
Mailing City,State,Zip: VISALIA, CA 93292

16410 AVE. 291 (Continued) **1031771784**

Owner Name:	Encarnacion & Sandra Trujillo	
Owner Type:		Other
Operator Name:	Encarnacion & Sandra Trujillo	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
202 GPRA Corrective Action Baseline:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No
Financial Assurance Required:		Not reported
Handler Date of Last Change:		20250329
Recognized Trader-Importer:		No
Recognized Trader-Exporter:		No
Importer of Spent Lead Acid Batteries:		No
Exporter of Spent Lead Acid Batteries:		No
Recycler Activity Without Storage:		No
Manifest Broker:		No
Sub-Part P Indicator:		No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ENCARNACION & SANDRA TRUJILLO
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	16410 AVE. 291
Owner/Operator City,State,Zip:	VISALIA, CA 93292
Owner/Operator Telephone:	559-471-5355
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported

16410 AVE. 291 (Continued) **1031771784**

Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: ENCARNACION & SANDRA TRUJILLO
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 16410 AVE. 291
Owner/Operator City,State,Zip: VISALIA, CA 93292
Owner/Operator Telephone: 559-471-5355
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20250326
Handler Name: 16410 AVE. 291
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: All Other Waste Management Services

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

ECHO:
Envid: 1031771784
Registry ID: Not reported

DFR URL:
Name: 16410 AVE. 291
Address: 16410 Ave. 291
City,State,Zip: VISALIA, CA 93292

14
SE
1/8-1/4
0.195 mi.
1029 ft.

CURIEL AUTO REPAIR
16632 AVE 288 UNIT C
EXETER, CA 93221

RCRA NonGen / NLR

1025876449
CAL000449585

Relative:
Higher

Actual:
366 ft.

RCRA Listings:

Date Form Received by Agency:		20191003
Handler Name:		Curiel Auto Repair
Handler Address:		16632 Ave 288 Unit C
Handler City,State,Zip:		EXETER, CA 93221
EPA ID:		CAL000449585
Contact Name:		CARLOS CURIEL
Contact Address:		16632 AVE 288 UNIT C
Contact City,State,Zip:		EXETER, CA 93221
Contact Telephone:		559-339-7731
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		16632 AVE 288 UNIT C
Mailing City,State,Zip:		EXETER, CA 93221
Owner Name:	Carlos Curiel	
Owner Type:		Other
Operator Name:	Carlos Curiel	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
202 GPRA Corrective Action Baseline:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No

CURIEL AUTO REPAIR (Continued) **1025876449**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20191004
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: CARLOS CURIEL	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	16632 AVE 288 UNIT C
Owner/Operator City,State,Zip:	EXETER, CA 93221
Owner/Operator Telephone:	559-339-7731
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: CARLOS CURIEL	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	16632 AVE 288 UNIT C
Owner/Operator City,State,Zip:	EXETER, CA 93221
Owner/Operator Telephone:	559-339-7731
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20191003
Handler Name: CURIEL AUTO REPAIR	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

CURIEL AUTO REPAIR (Continued) **1025876449**

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: General Automotive Repair

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E15 **AUTOZONE #3711** **CUPA Listings** **S120051010**
SSW **1555 N FARMERSVILLE BLVD 221** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.211 mi.
1112 ft. **Site 1 of 7 in cluster E**

Relative: **Lower**
Actual: **363 ft.**

CUPA TULARE:

Name:	AUTOZONE #3711
Address:	1555 N FARMERSVILLE BLVD 221
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10140137
Facility ID:	FA1348329
APN:	128-200-053
Latitude:	36.309669804
Longitude:	-119.20777868
PE:	2223
TB Fin Fees Description:	Haz Mat - < 6 Reportable Quantities of Chem
Current Status:	01
CD Fin billing Status Description:	Active, billable

Name:	AUTOZONE #3711
Address:	1555 N FARMERSVILLE BLVD 221
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10140137
Facility ID:	FA1348329
APN:	128-200-053
Latitude:	36.309669804
Longitude:	-119.20777868
PE:	2277
TB Fin Fees Description:	CUPA OVERSIGHT CA SURCHARGE
Current Status:	01
CD Fin billing Status Description:	Active, billable

E16 **AUTOZONE #3711** **E MANIFEST** **1031878176**
SSW **1555 FARMERSVILLE ROAD** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.211 mi.
1112 ft. **Site 2 of 7 in cluster E**

Relative: **Lower**
Actual: **363 ft.**

E MANIFEST:

Manifest Tracking Number:	024028902JJK
Last Updated Date:	20220503
Shipped Date:	20220330
Received Date:	20220411

AUTOZONE #3711 (Continued) **1031878176**

Manifest Status:	Corrected
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAD028277036
Generator Name:	Autozone #3711
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 FARMERSVILLE ROAD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	DEPT 8190 123 SOUTH FRONT STREET DEBORAH WILLIAMS
Generator Mail Street 2:	Not reported
Generator Mail City:	Memphis
Generator Mail Zip:	38103
Generator Mail State:	TN
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000521146
Designated Facility Name:	Yuma Yes 2 Waste Transfer Station
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2730 E 13TH ST
Designated Facility Mail City:	YUMA
Designated Facility Mail Zip:	85365
Designated Facility Mail State:	AZ
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	6500 S US HIGHWAY 95
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	YUMA
Designated Facility Location Zip:	85365
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Transporter:

Manifest Tracking Number:	024028902JJK
Transporter Line Number:	1
Transporter EPA ID:	CAD028277036
Transporter Name:	Asbury Environmental Services Dba World Oil Environmental Services
Manifest Tracking Number:	024028902JJK
Transporter Line Number:	2
Transporter EPA ID:	CAR000175422
Transporter Name:	Worldwide Recovery System Inc

Waste Line:

Manifest Tracking Number:	024028902JJK
Waste Line Number:	1
U.S. DOT Hazardous Indicator:	N
U.S. DOT ID Number:	Not reported
U.S. DOT Description:	Not reported
Non-Hazardous Waste Description:	Non Rcra Hazardous Waste Solid (Oily Debris)
Number of Containers:	1
Container Type Code:	DM

AUTOZONE #3711 (Continued) **1031878176**

Container Type Description:	Metal drums, barrels, kegs
Waste Quantity:	150
Quantity Unit of Measure Code:	P
Quantity Unit of Measure Description:	Pounds
Waste Quantity, in Tons:	0.075
Acute Waste Quantity, in Tons:	0
Non-Acute Waste Quantity, in Tons:	0.075
Waste Quantity, in Kilograms:	68.02725
Acute Waste Quantity, in Kilograms:	0
Non-Acute Waste Quantity, in Kilorgrams:	68.02725
Management Method Code:	H141
Management Method Description:	STORAGE, BULKING AND/OR TRANSFER OFF SITE
Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N
Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	N
Federal Waste Codes:	Not reported
Quantity Haz Kg:	0
Quantity Haz Tons:	0
Quantity Non Haz Kg:	68.02725
Quantity Non Haz Tons:	0.075
State Waste Codes:	CA-352

E17 **DOLLAR TREE #03493** **RCRA-VSQG** **1024839775**
SSW **1555 N FARMERSVILLE BLVD** **E MANIFEST** **CAL000388066**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.211 mi.
1112 ft. **Site 3 of 7 in cluster E**

Relative: **Lower**

Actual: **363 ft.**

RCRA Listings:

Date Form Received by Agency:	20250128
Handler Name:	Dollar Tree #03493
Handler Address:	N Farmersville Blvd
Handler City,State,Zip:	FARMERSVILLE, CA 93223
EPA ID:	CAL000388066
Contact Name:	JOSE FIGUEROA
Contact Address:	NOBLE AVENUE
Contact City,State,Zip:	VISALIA, CA 93277
Contact Telephone:	661-808-4202
Contact Fax:	Not reported
Contact Email:	JFIGUE79@DOLLARTREE.COM
Contact Title:	ENVIRONMENTAL HEALTH & SAFETY SPECIALISTV
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Conditionally Exempt Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported

DOLLAR TREE #03493 (Continued) **1024839775**

Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		VOLVO PKWY
Mailing City,State,Zip:		CHESAPEAKE, VA 23320-1604
Owner Name:	Farmersville Red Rock Plaza, Llc.	
Owner Type:		Private
Operator Name:	Dollar Tree Stores, Inc.	
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
202 GPRA Corrective Action Baseline:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Significant Non-Complier Universe:		No
Unaddressed Significant Non-Complier Universe:		No
Addressed Significant Non-Complier Universe:		No
Significant Non-Complier With a Compliance Schedule Universe:		No
Financial Assurance Required:		Not reported
Handler Date of Last Change:		20250131
Recognized Trader-Importer:		No
Recognized Trader-Exporter:		No
Importer of Spent Lead Acid Batteries:		No
Exporter of Spent Lead Acid Batteries:		No
Recycler Activity Without Storage:		No
Manifest Broker:		No
Sub-Part P Indicator:		No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste
Waste Code:	D002
Waste Description:	Corrosive Waste

DOLLAR TREE #03493 (Continued) **1024839775**

Waste Code:	D004
Waste Description:	Arsenic
Waste Code:	D005
Waste Description:	Barium
Waste Code:	D007
Waste Description:	Chromium
Waste Code:	D008
Waste Description:	Lead
Waste Code:	D009
Waste Description:	Mercury
Waste Code:	D010
Waste Description:	Selenium
Waste Code:	D011
Waste Description:	Silver
Waste Code:	D013
Waste Description:	Lindane (1,2,3,4,5,6-Hexa-Chlorocyclohexane, Gamma Isomer)
Waste Code:	D016
Waste Description:	2,4-D (2,4-Dichlorophenoxyacetic Acid)
Waste Code:	D018
Waste Description:	Benzene
Waste Code:	D022
Waste Description:	Chloroform
Waste Code:	D024
Waste Description:	M-Cresol
Waste Code:	D026
Waste Description:	Cresol
Waste Code:	D027
Waste Description:	1,4-Dichlorobenzene
Waste Code:	D035
Waste Description:	Methyl Ethyl Ketone
Waste Code:	D039
Waste Description:	Tetrachloroethylene
Waste Code:	U002
Waste Description:	2-Propanone (I) (Or) Acetone (I)
Waste Code:	U058
Waste Description:	2h-1,3,2-Oxazaphosphorin-2-Amine, N,N-Bis(2-Chloroethyl)Tetrahydro-, 2-Oxide (Or) Cyclophosphamide
Waste Code:	U154
Waste Description:	Methanol (I) (Or) Methyl Alcohol (I)

DOLLAR TREE #03493 (Continued) **1024839775**

Waste Code: U188
Waste Description: Phenol

Waste Code: U201
Waste Description: 1,3-Benzenediol (Or) Resorcinol

Waste Code: U279
Waste Description: U279

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: DOLLAR TREE STORES, INC.
Legal Status: Private
Date Became Current: 20070315
Date Ended Current: Not reported
Owner/Operator Address: 500 VOLVO PKWY
Owner/Operator City,State,Zip: CHESAPEAKE, VA 23320-1604
Owner/Operator Telephone: 661-808-4202
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: JFIGUE79@DOLLARTREE.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: FARMERSVILLE RED ROCK PLAZA, LLC.
Legal Status: Private
Date Became Current: 20070315
Date Ended Current: Not reported
Owner/Operator Address: 5743 WEST SUNNYVIEW AVENUE
Owner/Operator City,State,Zip: VISALIA, CA 93291
Owner/Operator Telephone: 661-808-4202
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: JFIGUE79@DOLLARTREE.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: DOLLAR TREE STORES, INC.
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 500 VOLVO PKWY
Owner/Operator City,State,Zip: CHESAPEAKE, VA 23320-1604
Owner/Operator Telephone: 757-321-5000
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: ANGELA JONES
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 500 VOLVO PKWY
Owner/Operator City,State,Zip: CHESAPEAKE, VA 23320-1604
Owner/Operator Telephone: 757-321-5761
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

DOLLAR TREE #03493 (Continued) **1024839775**

Historic Generators:

Receive Date:		20130805
Handler Name:	DOLLAR TREE #03493	
Federal Waste Generator Description:		Not a generator, verified
State District Owner:		Not reported
Large Quantity Handler of Universal Waste:		No
Recognized Trader Importer:		No
Recognized Trader Exporter:		No
Spent Lead Acid Battery Importer:		No
Spent Lead Acid Battery Exporter:		No
Current Record:		No
Non Storage Recycler Activity:		Not reported
Electronic Manifest Broker:		Not reported

Receive Date:		20250128
Handler Name:	DOLLAR TREE #03493	
Federal Waste Generator Description:		Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner:		Not reported
Large Quantity Handler of Universal Waste:		No
Recognized Trader Importer:		No
Recognized Trader Exporter:		No
Spent Lead Acid Battery Importer:		No
Spent Lead Acid Battery Exporter:		No
Current Record:		Yes
Non Storage Recycler Activity:		No
Electronic Manifest Broker:		No

List of NAICS Codes and Descriptions:

NAICS Code:	45299
NAICS Description:	All Other General Merchandise Stores

NAICS Code:	455219
NAICS Description:	All Other General Merchandise Retailers

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

E MANIFEST:

Manifest Tracking Number:	013036122FLE
Last Updated Date:	20231115
Shipped Date:	20200107
Received Date:	20200128
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported

DOLLAR TREE #03493 (Continued) **1024839775**

Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223-1175
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93223-1175
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD980884183
Designated Facility Name:	Gem Rancho Cordova Llc
Designated Facility Mail Street Number:	11855
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	White Rock Road
Designated Facility Mail City:	Rancho Cordova
Designated Facility Mail Zip:	95742
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	11855
Designated Facility Location Street 1:	White Rock Road
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Rancho Cordova
Designated Facility Location Zip:	95742
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	013036123FLE
Last Updated Date:	20200228
Shipped Date:	20200107
Received Date:	20200130
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree #03493
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD STE 201
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N FARMERSVILLE BLVD STE 201
Generator Mail Street 2:	Not reported
Generator Mail City:	FARMERSVILLE
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000515924
Designated Facility Name:	Yuma Yes Waste Transfer Facility
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2730 E 13TH ST
Designated Facility Mail City:	YUMA
Designated Facility Mail Zip:	85365-1901

DOLLAR TREE #03493 (Continued) **1024839775**

Designated Facility Mail State:	AZ
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	2730 E 13TH ST
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	YUMA
Designated Facility Location Zip:	85365-1901
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	010208443FLE
Last Updated Date:	20180925
Shipped Date:	20180706
Received Date:	20180724
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	Not reported
Generator Name:	Dollar Tree
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223-1175
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	500 Volvo Parkway
Generator Mail Street 2:	Not reported
Generator Mail City:	Chesapeake
Generator Mail Zip:	23320
Generator Mail State:	VA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD008364432
Designated Facility Name:	Rho Chem Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	425 Isis Ave.
Designated Facility Mail City:	Inglewood
Designated Facility Mail Zip:	90301
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	425 Isis Ave.
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Inglewood
Designated Facility Location Zip:	90301
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	010208444FLE
Last Updated Date:	20180904
Shipped Date:	20180706
Received Date:	20180807
Manifest Status:	Signed
Submission Type:	DataImage5Copy

DOLLAR TREE #03493 (Continued) **1024839775**

Origin Type:	Service
Generator EPA ID:	Not reported
Generator Name:	Dollar Tree
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223-1175
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	500 Volvo Parkway
Generator Mail Street 2:	Not reported
Generator Mail City:	Chesapeake
Generator Mail Zip:	23320
Generator Mail State:	VA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVD980895338
Designated Facility Name:	21st Century Environmental Management Of Nevada, Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2095 Newlands Drive East
Designated Facility Mail City:	Fernley
Designated Facility Mail Zip:	89408
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	2095 Newlands Drive East
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Fernley
Designated Facility Location Zip:	89408
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N
Manifest Tracking Number:	010208445FLE
Last Updated Date:	20191210
Shipped Date:	20180706
Received Date:	20180723
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Web
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree #03493
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD STE 201
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	500 VOLVO PKWY
Generator Mail Street 2:	Not reported
Generator Mail City:	CHESAPEAKE
Generator Mail Zip:	23320-1604
Generator Mail State:	VA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000515924

DOLLAR TREE #03493 (Continued) **1024839775**

Designated Facility Name:	Yuma Yes Waste Transfer Facility
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2730 E 13TH ST
Designated Facility Mail City:	YUMA
Designated Facility Mail Zip:	85365-1901
Designated Facility Mail State:	AZ
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	2730 E 13TH ST
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	YUMA
Designated Facility Location Zip:	85365-1901
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	011315179FLE
Last Updated Date:	20190110
Shipped Date:	20181207
Received Date:	20190104
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223-1175
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	500 Volvo Parkway
Generator Mail Street 2:	Not reported
Generator Mail City:	Chesapeake
Generator Mail Zip:	23320
Generator Mail State:	VA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD008364432
Designated Facility Name:	Rho Chem Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	425 Isis Ave.
Designated Facility Mail City:	Inglewood
Designated Facility Mail Zip:	90301
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	425 Isis Ave.
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Inglewood
Designated Facility Location Zip:	90301
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

DOLLAR TREE #03493 (Continued) **1024839775**

Manifest Tracking Number:	011315180FLE
Last Updated Date:	20190128
Shipped Date:	20181207
Received Date:	20190102
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223-1175
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	500 Volvo Parkway
Generator Mail Street 2:	Not reported
Generator Mail City:	Chesapeake
Generator Mail Zip:	23320
Generator Mail State:	VA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVD980895338
Designated Facility Name:	21st Century Environmental Management Of Nevada, Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2095 Newlands Drive East
Designated Facility Mail City:	Fernley
Designated Facility Mail Zip:	89408
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	2095 Newlands Drive East
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Fernley
Designated Facility Location Zip:	89408
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	011315181FLE
Last Updated Date:	20190123
Shipped Date:	20181207
Received Date:	20190109
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree #03493
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD STE 201
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N FARMERSVILLE BLVD

DOLLAR TREE #03493 (Continued) **1024839775**

Generator Mail Street 2:	Not reported
Generator Mail City:	FARMERSVILLE
Generator Mail Zip:	93223
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000515924
Designated Facility Name:	Yuma Yes Waste Transfer Facility
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2730 E 13TH ST
Designated Facility Mail City:	YUMA
Designated Facility Mail Zip:	85365-1901
Designated Facility Mail State:	AZ
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	2730 E 13TH ST
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	YUMA
Designated Facility Location Zip:	85365-1901
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	017814184FLE
Last Updated Date:	20230314
Shipped Date:	20230112
Received Date:	20230120
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Web
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree #03493
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD STE 201
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	500 VOLVO PKWY
Generator Mail Street 2:	Not reported
Generator Mail City:	CHESAPEAKE
Generator Mail Zip:	23320-1604
Generator Mail State:	VA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000520478
Designated Facility Name:	Environmental Waste Solutions, Inc.
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	PO BOX 626
Designated Facility Mail City:	LOMA LINDA
Designated Facility Mail Zip:	92354
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	31915 INDUSTRIAL LANE
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	PARKER

DOLLAR TREE #03493 (Continued) **1024839775**

Designated Facility Location Zip:	85344
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N
Manifest Tracking Number:	017814186FLE
Last Updated Date:	20230321
Shipped Date:	20230112
Received Date:	20230119
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree #03493
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD STE 201
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	500 VOLVO PKWY
Generator Mail Street 2:	Not reported
Generator Mail City:	CHESAPEAKE
Generator Mail Zip:	23320
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVT330010000
Designated Facility Name:	Us Ecology Nevada, Inc.
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	HWY 95 11 MILES S. OF BEATTY
Designated Facility Mail City:	BEATTY
Designated Facility Mail Zip:	89003
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	HWY 95 11 MILES S. OF BEATTY
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	BEATTY
Designated Facility Location Zip:	89003
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N
Manifest Tracking Number:	013433945FLE
Last Updated Date:	20200423
Shipped Date:	20190913
Received Date:	20191015
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000388066
Generator Name:	Dollar Tree
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD

DOLLAR TREE #03493 (Continued) **1024839775**

Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223-1175
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93223-1175
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD980884183
Designated Facility Name:	Gem Rancho Cordova Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	11855 White Rock Road
Designated Facility Mail City:	Rancho Cordova
Designated Facility Mail Zip:	95742
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	11855 White Rock Road
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Rancho Cordova
Designated Facility Location Zip:	95742
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Transporter:

Manifest Tracking Number:	018944763FLE
Transporter Line Number:	1
Transporter EPA ID:	CAR000241448
Transporter Name:	Environmental & Chemical Consulting Inc

Waste Line:

Manifest Tracking Number:	018944763FLE
Waste Line Number:	1
U.S. DOT Hazardous Indicator:	N
U.S. DOT ID Number:	Not reported
U.S. DOT Description:	Not reported
Non-Hazardous Waste Description:	Non Rcra Hazardous Waste Liquid
Number of Containers:	2
Container Type Code:	DF
Container Type Description:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	15
Quantity Unit of Measure Code:	G
Quantity Unit of Measure Description:	Gallons
Waste Quantity, in Tons:	0.062552124
Acute Waste Quantity, in Tons:	0
Non-Acute Waste Quantity, in Tons:	0.062552124
Waste Quantity, in Kilograms:	56.736656
Acute Waste Quantity, in Kilograms:	0
Non-Acute Waste Quantity, in Kilorgrams:	56.736656
Management Method Code:	H141
Management Method Description:	STORAGE, BULKING AND/OR TRANSFER OFF SITE

DOLLAR TREE #03493 (Continued) **1024839775**

Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N
Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	N
Federal Waste Codes:	Not reported
Quantity Haz Kg:	Not reported
Quantity Haz Tons:	Not reported
Quantity Non Haz Kg:	56.736656
Quantity Non Haz Tons:	0.062552124
State Waste Codes:	CA-141

Manifest Tracking Number:	018944763FLE
Waste Line Number:	2
U.S. DOT Hazardous Indicator:	N
U.S. DOT ID Number:	Not reported
U.S. DOT Description:	Not reported
Non-Hazardous Waste Description:	Non Rcra Hazardous Waste Liquid
Number of Containers:	1
Container Type Code:	DF
Container Type Description:	Fiberboard or plastic drums, barrels, kegs
Waste Quantity:	1
Quantity Unit of Measure Code:	G
Quantity Unit of Measure Description:	Gallons
Waste Quantity, in Tons:	0.0041701416
Acute Waste Quantity, in Tons:	0
Non-Acute Waste Quantity, in Tons:	0.0041701416
Waste Quantity, in Kilograms:	3.7824438
Acute Waste Quantity, in Kilograms:	0
Non-Acute Waste Quantity, in Kilorgrams:	3.7824438
Management Method Code:	H141
Management Method Description:	STORAGE, BULKING AND/OR TRANSFER OFF SITE
Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N
Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	N
Federal Waste Codes:	Not reported
Quantity Haz Kg:	Not reported

DOLLAR TREE #03493 (Continued) **1024839775**

Quantity Haz Tons:	Not reported
Quantity Non Haz Kg:	3.7824438
Quantity Non Haz Tons:	0.0041701416
State Waste Codes:	CA-141

Click this hyperlink while viewing on your computer to access
25 additional US EManifest: record(s) in the EDR Site Report.

E18 **AUTOZONE #3711** **CERS HAZ WASTE** **S121795385**
SSW **1555 N FARMERSVILLE BLVD** **CERS** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.211 mi.
1112 ft. **Site 4 of 7 in cluster E**

Relative:
Lower

Actual:
363 ft.

CERS HAZ WASTE:

Name:	AUTOZONE #3711
Address:	1555 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	9902
CERS ID:	10140137
CERS Description:	Hazardous Waste Generator

CERS:

Name:	AUTOZONE #3711
Address:	1555 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	9902
CERS ID:	10140137
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	9902
Site Name:	AutoZone #3711
Violation Date:	10-22-2013
Citation:	HSC 6.95 25504(b) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(b)
Violation Description:	Failure to include adequate emergency response procedures in the business plan for a release or threatened release.
Violation Notes:	Returned to compliance on 10/28/2013.
Violation Division:	Tulare County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	9902
Site Name:	AutoZone #3711
Violation Date:	10-26-2016
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 11/01/2016.
Violation Division:	Tulare County Environmental Health
Violation Program:	HW
Violation Source:	CERS,

AUTOZONE #3711 (Continued) **S121795385**

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-12-2023
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Isaac Cano - Part Sales Manager
Eval Division:	Tulare County Environmental Health
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-12-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Anthony
Eval Division:	Tulare County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-12-2023
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Isaac Cano - Part-Sales Manager
Eval Division:	Tulare County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-12-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Anthony
Eval Division:	Tulare County Environmental Health
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-22-2013
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	HWG inspection with Lisa Whitlow
Eval Division:	Tulare County Environmental Health
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-26-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Tulare County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-26-2016

AUTOZONE #3711 (Continued) **S121795385**

Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-22-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: HM inspection with Lisa Whitlow
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 9902
Site Name: AutoZone #3711
Site Address: 1555 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 10-22-2013
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 9902
Site Name: AutoZone #3711
Site Address: 1555 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 10-26-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Caleb Baker
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Caleb Baker

AUTOZONE #3711 (Continued) **S121795385**

Entity Title:	Environmental Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	Tulare County Environmental Health
Entity Title:	Not reported
Affiliation Address:	5957 South Mooney Boulevard
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93277
Affiliation Phone:	(559) 624-7400,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	123 South Front Street, Dept. 8190
Affiliation City:	Memphis
Affiliation State:	TN
Affiliation Country:	Not reported
Affiliation Zip:	38103
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	AutoZone Inc
Entity Title:	Not reported
Affiliation Address:	123 South Front Street
Affiliation City:	Memphis
Affiliation State:	TN
Affiliation Country:	United States
Affiliation Zip:	38103
Affiliation Phone:	(901) 495-6500,
Affiliation Type Desc:	Operator
Entity Name:	Autozone
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(559) 229-8076,
Affiliation Type Desc:	Environmental Contact
Entity Name:	AZ Environmental Team
Entity Title:	Not reported
Affiliation Address:	123 South Front Street, Dept. 8190
Affiliation City:	Memphis
Affiliation State:	TN
Affiliation Country:	Not reported
Affiliation Zip:	38103
Affiliation Phone:	,

AUTOZONE #3711 (Continued) **S121795385**

Affiliation Type Desc:	Parent Corporation
Entity Name:	Auto Zone
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Property Owner
Entity Name:	Farmersville Red Rock Plaza LLC
Entity Title:	Not reported
Affiliation Address:	PO Box 9440
Affiliation City:	Fresno
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93792-9440
Affiliation Phone:	(559) 256-4003,

E19 **DOLLAR TREE #03493** **CUPA Listings** **S113146066**
SSW **1555 N FARMERSVILLE BLVD 201** **HWTS** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223** **HAZNET**
0.211 mi.
1112 ft. **Site 5 of 7 in cluster E**

Relative: **Lower**

Actual: **363 ft.**

CUPA TULARE:

Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD 201
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10457425
Facility ID:	FA1351363
APN:	128-200-053
Latitude:	36.31119
Longitude:	-119.207745
PE:	2223
TB Fin Fees Description:	Haz Mat - < 6 Reportable Quantities of Chem
Current Status:	01
CD Fin billing Status Description:	Active, billable

Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD 201
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10457425
Facility ID:	FA1351363
APN:	128-200-053
Latitude:	36.31119
Longitude:	-119.207745
PE:	2277
TB Fin Fees Description:	CUPA OVERSIGHT CA SURCHARGE
Current Status:	01
CD Fin billing Status Description:	Active, billable

HWTS:

Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD

DOLLAR TREE #03493 (Continued) **S113146066**

Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
EPA ID:	CAL000315765
Inactive Date:	Not reported
Create Date:	01/26/2007
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	DEPT 8190, 123 SOUTH FRONT STREET
Mailing Address 2:	TN
Mailing City,State,Zip:	ME 38103
Owner Name:	AUTOZONE INC
Owner Address:	123 SOUTH FRONT ST
Owner Address 2:	Not reported
Owner City,State,Zip:	MEMPHIS, TN 381033607
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	BRYAN BLAIR
Contact Address:	DEPT 8190, 123 SOUTH FRONT STREET
Contact Address 2:	Not reported
City,State,Zip:	MEMPHIS, TN 38103
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Active
Facility Type:	PERMANENT
Category:	STATE
Latitude:	36.308571
Longitude:	-119.207076

NAICS:

EPA ID:	CAL000315765
Create Date:	2009-12-03 12:41:18.000
NAICS Code:	45299
NAICS Description:	All Other General Merchandise Stores
Issued EPA ID Date:	2007-01-26 09:43:54.73000
Inactive Date:	Not reported
Facility Name:	AUTO ZONE #3711
Facility Address:	1555 N FARMERSVILLE BLVD
Facility Address 2:	Not reported
Facility City:	FARMERSVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	932231029

HAZNET:

Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Contact:	BRYAN BLAIR
Telephone:	9014957217
Mailing Name:	Not reported
Mailing Address:	DEPT 8190 123 SOUTH FRONT STREET
Year:	2024
Gepaid:	CAL000315765
TSD EPA ID:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

CA Waste Code: -
Disposal Method: -
Tons: Not reported

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: AZR000515924
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.029

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: CAD008364432
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.002

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: NVD980895338
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0065

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: AZR000521146
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.175

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: NVD980895338
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.003

Year: 2020
Gepaid: CAL000315765
TSD EPA ID: NVD980895338
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0015

Year: 2020
Gepaid: CAL000315765
TSD EPA ID: CAD980884183
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

DOLLAR TREE #03493 (Continued) **S113146066**

	Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.007
Year:	2020
Gepaid:	CAL000315765
TSD EPA ID:	AZR000521146
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.175
Year:	2020
Gepaid:	CAL000315765
TSD EPA ID:	CAT080013352
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.019

Click this hyperlink while viewing on your computer to access
55 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Information:

Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	6/26/2024
Shipment Date:	6/26/2024
Receipt Date:	7/2/2024
Manifest Number:	200842622CLE
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Telephone:	Not reported
Contact:	AUTO ZONE #3711
Contact Telephone:	9014957217
Contact Email:	BRYAN.BLAIR@AUTOZONE.COM
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Transporter 1 Emergency Number:	6122859865
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Address 1:	2095 NEWLANDS DR E
TSDF Address 2:	Not reported
TSDF City,State,Zip:	FERNLEY, NV 894080000
TSDF Telephone:	0
TSDFA EPA ID:	Not reported
Waste Code Description:	214 - Not reported
RCRA Code:	D001
Meth Code:	H141 - Not reported
Quantity Tons:	0.006
Waste Quantity:	12

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Unit:	P
Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	6/26/2024
Shipment Date:	6/26/2024
Receipt Date:	7/2/2024
Manifest Number:	200842622CLE
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Telephone:	Not reported
Contact:	AUTO ZONE #3711
Contact Telephone:	9014957217
Contact Email:	BRYAN.BLAIR@AUTOZONE.COM
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Transporter 1 Emergency Number:	6122859865
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Address 1:	2095 NEWLANDS DR E
TSDF Address 2:	Not reported
TSDF City,State,Zip:	FERNLEY, NV 894080000
TSDF Telephone:	0
TSDFA EPA ID:	Not reported
Waste Code Description:	181 - Not reported
RCRA Code:	D008
Meth Code:	H141 - Not reported
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	6/26/2024
Shipment Date:	6/26/2024
Receipt Date:	7/3/2024
Manifest Number:	200842623CLE
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Telephone:	Not reported
Contact:	AUTO ZONE #3711
Contact Telephone:	9014957217
Contact Email:	BRYAN.BLAIR@AUTOZONE.COM
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Transporter 1 Emergency Number:	6122859865
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000527028
TSDF Name:	Not reported
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	331 - Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Not reported
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	4/5/2024
Shipment Date:	4/5/2024
Receipt Date:	4/12/2024
Manifest Number:	021519279JJK
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Telephone:	Not reported
Contact:	AUTO ZONE #3711
Contact Telephone:	9014957217
Contact Email:	BRYAN.BLAIR@AUTOZONE.COM
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	ASBURY ENVIRONMENTAL SERVICES DBA WORLD OIL ENVIROMENTAL SERVICES
Transporter 1 Emergency Number:	3108863400
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	WORLDWIDE RECOVERY SYSTEM INC
Transporter 2 Emergency Number:	9096438150
TSDF EPA ID:	AZR000521146
TSDF Name:	Not reported
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	352 - Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Not reported
Quantity Tons:	0.0525
Waste Quantity:	105
Quantity Unit:	P
Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	11/21/2024
Shipment Date:	11/21/2024
Receipt Date:	12/9/2024
Manifest Number:	200997589CLE
Generator EPA ID:	CAL000315765

DOLLAR TREE #03493 (Continued) **S113146066**

Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Telephone:	Not reported
Contact:	AUTO ZONE #3711
Contact Telephone:	9014957217
Contact Email:	BRYAN.BLAIR@AUTOZONE.COM
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Transporter 1 Emergency Number:	6122859865
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Address 1:	2095 NEWLANDS DR E
TSDF Address 2:	Not reported
TSDF City,State,Zip:	FERNLEY, NV 894080000
TSDF Telephone:	0
TSDFA EPA ID:	Not reported
Waste Code Description:	214 - Not reported
RCRA Code:	D001
Meth Code:	H061 - Not reported
Quantity Tons:	0.032
Waste Quantity:	64
Quantity Unit:	P

Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	10/3/2024
Shipment Date:	10/3/2024
Receipt Date:	10/8/2024
Manifest Number:	023282733JJK
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Telephone:	Not reported
Contact:	AUTO ZONE #3711
Contact Telephone:	9014957217
Contact Email:	BRYAN.BLAIR@AUTOZONE.COM
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	ASBURY ENVIRONMENTAL SERVICES DBA WORLD OIL ENVIROMENTAL SERVICES
Transporter 1 Emergency Number:	3108863400
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	WORLDWIDE RECOVERY SYSTEM INC
Transporter 2 Emergency Number:	9096438150
TSDF EPA ID:	AZR000521146
TSDF Name:	Not reported
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	352 - Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

RCRA Code:	Not reported
Meth Code:	H141 - Not reported
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	1/19/2024
Shipment Date:	1/19/2024
Receipt Date:	1/25/2024
Manifest Number:	200688312CLE
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Telephone:	Not reported
Contact:	AUTO ZONE #3711
Contact Telephone:	9014957217
Contact Email:	BRYAN.BLAIR@AUTOZONE.COM
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Transporter 1 Emergency Number:	6122859865
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000527028
TSDF Name:	Not reported
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	331 - Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Not reported
Quantity Tons:	0.006
Waste Quantity:	12
Quantity Unit:	P
Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	1/19/2024
Shipment Date:	1/19/2024
Receipt Date:	2/1/2024
Manifest Number:	200688311CLE
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 932231029
Telephone:	Not reported
Contact:	AUTO ZONE #3711
Contact Telephone:	9014957217
Contact Email:	BRYAN.BLAIR@AUTOZONE.COM
Transporter 1 EPA ID:	MNS000110924

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Transporter 1 Emergency Number:	6122859865
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Address 1:	2095 NEWLANDS DR E
TSDF Address 2:	Not reported
TSDF City,State,Zip:	FERNLEY, NV 894080000
TSDF Telephone:	0
TSDFA EPA ID:	Not reported
Waste Code Description:	214 - Not reported
RCRA Code:	D001
Meth Code:	H141 - Not reported
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P

Additional Information:

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	8/24/2020
Shipment Date:	8/24/2020
Receipt Date:	8/31/2020
Manifest Number:	021253777JJK
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000521146
TSDF Name:	YUMA YES 2 WASTE TRANSFER STATION
TSDF Address 1:	6500 S US HIGHWAY 95
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	7/28/2020
Shipment Date:	7/28/2020
Receipt Date:	8/13/2020
Manifest Number:	013669786FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	775-575-2760
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Fernley 89408
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	7/28/2020
Shipment Date:	7/28/2020
Receipt Date:	8/13/2020
Manifest Number:	013669786FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	775-575-2760
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Address 2:	Not reported
TSDF City,State,Zip:	Fernley 89408
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	7/28/2020
Shipment Date:	7/28/2020
Receipt Date:	8/10/2020
Manifest Number:	013669785FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	916-351-0980
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Rancho Cordova 95742
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	3/2/2020
Shipment Date:	3/2/2020
Receipt Date:	3/9/2020
Manifest Number:	020814690JJK
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223

DOLLAR TREE #03493 (Continued) **S113146066**

Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000521146
TSDF Name:	YUMA YES 2 WASTE TRANSFER STATION
TSDF Address 1:	6500 S US HIGHWAY 95
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	2/4/2020
Shipment Date:	2/4/2020
Receipt Date:	2/18/2020
Manifest Number:	021252906JJK
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1029
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAT080013352
TSDF Name:	WORLD OIL RECYCLING
TSDF Address 1:	N. ALAMEDA STREET
TSDF Address 2:	Not reported
TSDF City,State,Zip:	COMPTON 90222-0000
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Unit:	Not reported
Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	2/13/2020
Shipment Date:	2/13/2020
Receipt Date:	2/28/2020
Manifest Number:	013440877FLE
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	2/13/2020
Shipment Date:	2/13/2020
Receipt Date:	3/5/2020
Manifest Number:	013440876FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	775-575-2760
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Fernley 89408
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	2/13/2020
Shipment Date:	2/13/2020
Receipt Date:	3/6/2020
Manifest Number:	013440875FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	916-351-0980
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Rancho Cordova 95742
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	10/9/2020
Shipment Date:	10/9/2020
Receipt Date:	10/16/2020
Manifest Number:	022057872JJK
Generator EPA ID:	CAL000315765

DOLLAR TREE #03493 (Continued) **S113146066**

Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1029
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAT080013352
TSDF Name:	WORLD OIL RECYCLING
TSDF Address 1:	N. ALAMEDA STREET
TSDF Address 2:	Not reported
TSDF City,State,Zip:	COMPTON 90222-0000
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Additional Information:

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	8/24/2020
Shipment Date:	8/24/2020
Receipt Date:	8/31/2020
Manifest Number:	021253777JJK
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000521146
TSDF Name:	YUMA YES 2 WASTE TRANSFER STATION
TSDF Address 1:	6500 S US HIGHWAY 95
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	7/28/2020
Shipment Date:	7/28/2020
Receipt Date:	8/10/2020
Manifest Number:	013669785FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	916-351-0980
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Rancho Cordova 95742
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	7/28/2020
Shipment Date:	7/28/2020
Receipt Date:	8/13/2020
Manifest Number:	013669786FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	775-575-2760
Contact Email:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Fernley 89408
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	7/28/2020
Shipment Date:	7/28/2020
Receipt Date:	8/13/2020
Manifest Number:	013669786FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	775-575-2760
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Fernley 89408
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2020
EM Manifest ID:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	3/2/2020
Shipment Date:	3/2/2020
Receipt Date:	3/9/2020
Manifest Number:	020814690JJK
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000521146
TSDF Name:	YUMA YES 2 WASTE TRANSFER STATION
TSDF Address 1:	6500 S US HIGHWAY 95
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	2/4/2020
Shipment Date:	2/4/2020
Receipt Date:	2/18/2020
Manifest Number:	021252906JJK
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1029
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	CAD028277036
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAT080013352
TSDF Name:	WORLD OIL RECYCLING
TSDF Address 1:	N. ALAMEDA STREET

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Address 2:	Not reported
TSDF City,State,Zip:	COMPTON 90222-0000
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	2/13/2020
Shipment Date:	2/13/2020
Receipt Date:	3/6/2020
Manifest Number:	013440875FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	916-351-0980
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Rancho Cordova 95742
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	2/13/2020
Shipment Date:	2/13/2020
Receipt Date:	2/28/2020
Manifest Number:	013440877FLE
Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223

DOLLAR TREE #03493 (Continued) **S113146066**

Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	2/13/2020
Shipment Date:	2/13/2020
Receipt Date:	3/5/2020
Manifest Number:	013440876FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	775-575-2760
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Fernley 89408
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Unit: Not reported

Year: 2020
EM Manifest ID: Not reported
Shipment Date: 10/9/2020
Shipment Date: 10/9/2020
Receipt Date: 10/16/2020
Manifest Number: 022057872JJK
Generator EPA ID: CAL000315765
Name: AUTO ZONE #3711
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE 93223-1029
Telephone: Not reported
Contact: Not reported
Contact Telephone: 559-747-0472
Contact Email: Not reported
Transporter 1 EPA ID: CAD028277036
Transporter Name: Not reported
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: Not reported
Transporter Name 2: Not reported
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAT080013352
TSDF Name: WORLD OIL RECYCLING
TSDF Address 1: N. ALAMEDA STREET
TSDF Address 2: Not reported
TSDF City,State,Zip: COMPTON 90222-0000
TSDF Telephone: Not reported
TSDFA EPA ID: Not reported
Waste Code Description: - Not reported
RCRA Code: Not reported
Meth Code: - Not reported
Quantity Tons: Not reported
Waste Quantity: Not reported
Quantity Unit: Not reported

Additional Information:
Year: 2019
EM Manifest ID: 9e17dee4-ee6e-4345-854f-f8771bfb233b
Shipment Date: 9/13/2019
Shipment Date: 9/13/2019
Receipt Date: 9/18/2019
Manifest Number: 020387658JJK
Generator EPA ID: CAL000315765
Name: AUTOZONE #3711
Address: 1555 N. FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE 93223
Telephone: 800-424-9300
Contact: Not reported
Contact Telephone: 559-747-0472
Contact Email: Not reported
Transporter 1 EPA ID: CAD028277036
Transporter Name: Not reported
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: CAR000175422

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter Name 2: Not reported
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000521146
TSDF Name: YUMA YES 2 WASTE TRANSFER STATION
TSDF Address 1: 6500 S US HIGHWAY 95
TSDF Address 2: Not reported
TSDF City,State,Zip: YUMA 85365
TSDF Telephone: Not reported
TSDFA EPA ID: Not reported
Waste Code Description: - Not reported
RCRA Code: Not reported
Meth Code: - Not reported
Quantity Tons: Not reported
Waste Quantity: Not reported
Quantity Unit: Not reported

State:
Year: 2019
EM Manifest ID: 9e17dee4-ee6e-4345-854f-f8771bfb233b
Generator EPA ID: CAL000315765
Shipment Date: 2019-09-13
Manifest Number: 020387658JJK
Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2019
EM Manifest ID: 06f14ea3-5c47-4cae-83d3-70804fbc1f47
Shipment Date: 4/30/2019
Shipment Date: 4/30/2019
Receipt Date: 5/17/2019
Manifest Number: 007042259SKS
Generator EPA ID: CAL000315765
Name: AUTOZONE # 3711
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE 93223
Telephone: 800-483-3718
Contact: Bryan Blair
Contact Telephone: 559-747-0472
Contact Email: Not reported
Transporter 1 EPA ID: TXR000081205
Transporter Name: Not reported
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MAD039322250
Transporter Name 2: Not reported
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAD059494310
TSDF Name: Clean Harbors San Jose LLC
TSDF Address 1: 1021 Berryessa Road
TSDF Address 2: Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF City,State,Zip: San Jose 95133
TSDF Telephone: 800-483-3718
TSDFA EPA ID: Not reported
Waste Code Description: - Not reported
RCRA Code: Not reported
Meth Code: - Not reported
Quantity Tons: Not reported
Waste Quantity: Not reported
Quantity Unit: Not reported

State:
Year: 2019
EM Manifest ID: 06f14ea3-5c47-4cae-83d3-70804fbc1f47
Generator EPA ID: CAL000315765
Shipment Date: 2019-04-30
Manifest Number: 007042259SKS
Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2019
EM Manifest ID: 309452
Shipment Date: 3/11/2019
Shipment Date: 3/11/2019
Receipt Date: 3/21/2019
Manifest Number: 013127740FLE
Generator EPA ID: CAL000315765
Name: AUTOZONE
Address: 1555 N. FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE 93223
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 323-776-6233
Contact Email: Not reported
Transporter 1 EPA ID: MNS000110924
Transporter Name: Not reported
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MNS000110924
Transporter Name 2: Not reported
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAD008364432
TSDF Name: Rho Chem LLC
TSDF Address 1: 425 Isis Ave.
TSDF Address 2: Not reported
TSDF City,State,Zip: Inglewood 90301
TSDF Telephone: Not reported
TSDFA EPA ID: Not reported
Waste Code Description: - Not reported
RCRA Code: Not reported
Meth Code: - Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Tons: Not reported
Waste Quantity: Not reported
Quantity Unit: Not reported

Federal:
Year: 2019
EM Manifest ID: 309452
Generator EPA ID: CAL000315765
Shipment Date: 2019-03-11
Manifest Number: 013127740FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00450
Quantity Waste: 9.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D008

State:
Year: 2019
EM Manifest ID: 309452
Generator EPA ID: CAL000315765
Shipment Date: 2019-03-11
Manifest Number: 013127740FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00450
Quantity Waste: 9.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
State Code: 181

Year: 2019
EM Manifest ID: 309453
Shipment Date: 3/11/2019
Shipment Date: 3/11/2019
Receipt Date: 3/21/2019
Manifest Number: 013127741FLE
Generator EPA ID: CAL000315765
Name: AUTOZONE
Address: 1555 N. FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE 93223
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 775-575-2760
Contact Email: Not reported
Transporter 1 EPA ID: MNS000110924
Transporter Name: Not reported
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MNS000110924
Transporter Name 2: Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Fernley 89408
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Federal:

Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D001

Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D005

Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Type:	Pounds
Federal Code:	D007
Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D035
Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00450
Quantity Waste:	9.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D001
Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00450
Quantity Waste:	9.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D035

State:

Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	214
Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00450
Quantity Waste:	9.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331
Year:	2019
EM Manifest ID:	491830
Shipment Date:	1/8/2019
Shipment Date:	1/8/2019
Receipt Date:	1/31/2019
Manifest Number:	006721083SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	800-483-3718
Contact:	Bryan Blair
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NED981723513
TSDF Name:	Clean Harbors Environmental Services, Inc.
TSDF Address 1:	2247 South Highway 71
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Kimball 69145
TSDF Telephone:	800-483-3718
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Federal:

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D001

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D005

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D007

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1

DOLLAR TREE #03493 (Continued) **S113146066**

Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D008
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D018
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D035
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D039
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	F001
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	F002
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	F003
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	F005

State:

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	223

Year:	2019
EM Manifest ID:	4d267f8e-ee3e-4978-9dc4-c55517cfba14
Shipment Date:	1/8/2019
Shipment Date:	1/8/2019
Receipt Date:	1/21/2019
Manifest Number:	006721084SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	800-483-3718
Contact:	Bryan Blair
Contact Telephone:	559-747-0472
Contact Email:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	Clean Harbors San Jose LLC
TSDF Address 1:	1021 Berryessa Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	San Jose 95133
TSDF Telephone:	800-483-3718
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2019
EM Manifest ID:	4d267f8e-ee3e-4978-9dc4-c55517cfba14
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721084SKS
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P

DOLLAR TREE #03493 (Continued) **S113146066**

Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

Additional Information:

Year:	2018
EM Manifest ID:	006012322SKS20170801_D_1
Shipment Date:	8/1/2017
Shipment Date:	8/1/2017
Receipt Date:	8/25/2017
Manifest Number:	006012322SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2018
EM Manifest ID:	006012322SKS20170801_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-08-01
Manifest Number:	006012322SKS
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

DOLLAR TREE #03493 (Continued) **S113146066**

Year:	2018
EM Manifest ID:	006236242SKS20180501_D_1
Shipment Date:	5/1/2018
Shipment Date:	5/1/2018
Receipt Date:	5/25/2018
Manifest Number:	006236242SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2018
EM Manifest ID:	006236242SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236242SKS
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Shipment Date:	5/1/2018
Shipment Date:	5/1/2018
Receipt Date:	5/25/2018
Manifest Number:	006236243SKS

DOLLAR TREE #03493 (Continued) **S113146066**

Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NED981723513
TSDF Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES IN
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Federal:

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236243SKS
Line Number:	1
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236243SKS
Line Number:	1
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL

DOLLAR TREE #03493 (Continued) **S113146066**

Federal Code: F001

Year: 2018
EM Manifest ID: 006236243SKS20180501_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2018-05-01
Manifest Number: 006236243SKS
Line Number: 1
Method Code: H040
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: F002

Year: 2018
EM Manifest ID: 006236243SKS20180501_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2018-05-01
Manifest Number: 006236243SKS
Line Number: 1
Method Code: H040
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: F003

Year: 2018
EM Manifest ID: 006236243SKS20180501_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2018-05-01
Manifest Number: 006236243SKS
Line Number: 1
Method Code: H040
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: F005

State:
Year: 2018
EM Manifest ID: 006236243SKS20180501_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2018-05-01
Manifest Number: 006236243SKS
Line Number: 1
Method Code: H040
Quantity Tons: 0.10000
Quantity Waste: 200.000000

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	223

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Shipment Date:	4/24/2017
Shipment Date:	4/24/2017
Receipt Date:	5/9/2017
Manifest Number:	009343905FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000210617
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Federal:

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

DOLLAR TREE #03493 (Continued) **S113146066**

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D005

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D007

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Type:	NULL
Federal Code:	D001
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00100
Quantity Waste:	2.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00100
Quantity Waste:	2.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	4
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D008

State:
Year: 2018
EM Manifest ID: 009343905FLE20170424_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-04-24
Manifest Number: 009343905FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00200
Quantity Waste: 4.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 214

Year: 2018
EM Manifest ID: 009343905FLE20170424_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-04-24
Manifest Number: 009343905FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 331

Year: 2018
EM Manifest ID: 009343905FLE20170424_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-04-24
Manifest Number: 009343905FLE
Line Number: 3
Method Code: H141
Quantity Tons: 0.00100
Quantity Waste: 2.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 331

Year: 2018
EM Manifest ID: 009343905FLE20170424_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-04-24
Manifest Number: 009343905FLE

DOLLAR TREE #03493 (Continued) **S113146066**

Line Number:	4
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	181

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	5
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	6
Method Code:	H141
Quantity Tons:	0.00850
Quantity Waste:	17.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	005961783SKS20170317_D_1
Shipment Date:	3/17/2017
Shipment Date:	3/17/2017
Receipt Date:	4/3/2017
Manifest Number:	005961783SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	TXR000081205

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2018
EM Manifest ID:	005961783SKS20170317_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-03-17
Manifest Number:	005961783SKS
Line Number:	1
Method Code:	H141
Quantity Tons:	0.05000
Quantity Waste:	100.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Shipment Date:	2/27/2018
Shipment Date:	2/27/2018
Receipt Date:	3/29/2018
Manifest Number:	010209667FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Name:	RHO CHEM LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Federal:

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D005

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D007

DOLLAR TREE #03493 (Continued) **S113146066**

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00300
Quantity Waste:	6.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00300
Quantity Waste:	6.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Type: NULL
Federal Code: D008

State:
Year: 2018
EM Manifest ID: 010209667FLE20180227_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2018-02-27
Manifest Number: 010209667FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00350
Quantity Waste: 7.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 214

Year: 2018
EM Manifest ID: 010209667FLE20180227_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2018-02-27
Manifest Number: 010209667FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00300
Quantity Waste: 6.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 331

Year: 2018
EM Manifest ID: 010209667FLE20180227_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2018-02-27
Manifest Number: 010209667FLE
Line Number: 3
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 181

Year: 2018
EM Manifest ID: 010209667FLE20180227_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2018-02-27
Manifest Number: 010209667FLE
Line Number: 4
Method Code: H141
Quantity Tons: 0.00600

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Waste:	12.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	006323250SKS20171215_D_1
Shipment Date:	12/15/2017
Shipment Date:	12/15/2017
Receipt Date:	1/17/2018
Manifest Number:	006323250SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2018
EM Manifest ID:	006323250SKS20171215_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-12-15
Manifest Number:	006323250SKS
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

DOLLAR TREE #03493 (Continued) **S113146066**

Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Shipment Date:	10/9/2017
Shipment Date:	10/9/2017
Receipt Date:	10/30/2017
Manifest Number:	010159347FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	RHO CHEM LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Federal:

Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	1
Method Code:	H141

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D005
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D007
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest Number:	010159347FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D008

State:

Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	214
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

DOLLAR TREE #03493 (Continued) **S113146066**

Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	181

Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	4
Method Code:	H141
Quantity Tons:	0.01050
Quantity Waste:	21.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Additional Information:

Year:	2017
Gen EPA ID:	CAL000315765
Shipment Date:	20171215
Creation Date:	8/28/2018 18:30:25
Receipt Date:	20180117
Manifest ID:	006323250SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171009
Creation Date:	7/16/2018 18:30:36
Receipt Date:	20171030
Manifest ID:	010159347FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171009
Creation Date:	7/16/2018 18:30:36
Receipt Date:	20171030
Manifest ID:	010159347FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0105
Waste Quantity:	21
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171009
Creation Date:	7/16/2018 18:30:36
Receipt Date:	20171030
Manifest ID:	010159347FLE

DOLLAR TREE #03493 (Continued) **S113146066**

Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171009
Creation Date:	7/16/2018 18:30:36
Receipt Date:	20171030
Manifest ID:	010159347FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0055
Waste Quantity:	11
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170801
Creation Date:	6/13/2018 18:31:39
Receipt Date:	20170825
Manifest ID:	006012322SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SVC INC
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE
TSDF Alt EPA ID:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170424
Creation Date:	6/27/2018 18:30:27
Receipt Date:	20170509
Manifest ID:	009343905FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170424
Creation Date:	6/27/2018 18:30:27
Receipt Date:	20170509
Manifest ID:	009343905FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170424
Creation Date:	6/27/2018 18:30:27
Receipt Date:	20170509
Manifest ID:	009343905FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170424
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	009343905FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0085
Waste Quantity:	17
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Additional Information:

Year:	2016
Gen EPA ID:	CAL000315765
Shipment Date:	20151215
Creation Date:	6/8/2016 18:31:29
Receipt Date:	20151221
Manifest ID:	005101246SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151111
Creation Date:	1/11/2016 22:16:27
Receipt Date:	20151117
Manifest ID:	001143749PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151111
Creation Date:	1/11/2016 22:16:27
Receipt Date:	20151117

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest ID:	001143749PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150929
Creation Date:	12/22/2015 22:15:38
Receipt Date:	20151009
Manifest ID:	004784926SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150526
Creation Date:	1/19/2016 22:15:27
Receipt Date:	20150617
Manifest ID:	001020823PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150526
Creation Date:	1/19/2016 22:15:27
Receipt Date:	20150617
Manifest ID:	001020823PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.006
Waste Quantity:	12
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150526
Creation Date:	8/20/2015 22:15:27
Receipt Date:	20150609
Manifest ID:	004789966SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05

DOLLAR TREE #03493 (Continued) **S113146066**

Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Information:

Year:	2015
Gen EPA ID:	CAL000315765
Shipment Date:	20151215
Creation Date:	6/8/2016 18:31:29
Receipt Date:	20151221
Manifest ID:	005101246SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151111
Creation Date:	1/11/2016 22:16:27
Receipt Date:	20151117

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest ID:	001143749PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151111
Creation Date:	1/11/2016 22:16:27
Receipt Date:	20151117
Manifest ID:	001143749PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150929
Creation Date:	12/22/2015 22:15:38
Receipt Date:	20151009
Manifest ID:	004784926SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150526
Creation Date:	1/19/2016 22:15:27
Receipt Date:	20150617
Manifest ID:	001020823PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.006
Waste Quantity:	12
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150526
Creation Date:	8/20/2015 22:15:27
Receipt Date:	20150609
Manifest ID:	004789966SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05

DOLLAR TREE #03493 (Continued) **S113146066**

Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150526
Creation Date:	1/19/2016 22:15:27
Receipt Date:	20150617
Manifest ID:	001020823PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Information:

Year:	2014
Gen EPA ID:	CAL000315765

Shipment Date:	20141107
Creation Date:	3/27/2015 22:15:05
Receipt Date:	20141117

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest ID:	004524336SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140820
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000102201DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140820
Creation Date:	3/4/2015 8:54:13
Receipt Date:	20140902
Manifest ID:	000102201DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	791 - Liquids with pH < 2 792 Liquids with pH < 2 with metals
RCRA Code:	D002
Meth Code:	H121 - Neutralization Only
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140818
Creation Date:	10/31/2014 22:14:51
Receipt Date:	20140902
Manifest ID:	004397987SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.035
Waste Quantity:	70
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140326
Creation Date:	8/19/2014 22:15:10
Receipt Date:	20140402
Manifest ID:	000723090PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERVICE
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H121 - Neutralization Only
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P

DOLLAR TREE #03493 (Continued) **S113146066**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140326
Creation Date:	8/19/2014 22:15:10
Receipt Date:	20140402
Manifest ID:	000723090PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERVICE
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140326
Creation Date:	8/19/2014 22:15:10
Receipt Date:	20140402
Manifest ID:	000723090PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERVICE
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Additional Information:

Year:	2013
Gen EPA ID:	CAL000315765
Shipment Date:	20131120
Creation Date:	3/1/2014 22:15:07
Receipt Date:	20131221
Manifest ID:	003947440SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	AZR000508515
Trans 2 Name:	SLT
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03
Waste Quantity:	60
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131022
Creation Date:	3/12/2014 22:15:10
Receipt Date:	20131101
Manifest ID:	000626409PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131022
Creation Date:	3/12/2014 22:15:10
Receipt Date:	20131101

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest ID:	000626409PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	791 - Liquids with pH < 2 792 Liquids with pH < 2 with metals
RCRA Code:	D002
Meth Code:	H121 - Neutralization Only
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20131022
Creation Date:	3/12/2014 22:15:10
Receipt Date:	20131101
Manifest ID:	000626409PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20131022
Creation Date:	3/12/2014 22:15:10
Receipt Date:	20131101
Manifest ID:	000626409PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0055
Waste Quantity:	11
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130503
Creation Date:	9/28/2013 22:15:06
Receipt Date:	Not reported
Manifest ID:	003564311SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20130111
Creation Date:	6/29/2013 22:15:06
Receipt Date:	20130128
Manifest ID:	003478083SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.0275
Waste Quantity:	55

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

E20 **AUTOZONE # 3711** **RCRA NonGen / NLR 1024815951**
SSW **1555 N. FARMERSVILLE BLVD** **E MANIFEST CAL000315765**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.211 mi.
1112 ft. **Site 6 of 7 in cluster E**

Relative: **Lower**
Actual: **363 ft.**

RCRA Listings:

Date Form Received by Agency:		20070126
Handler Name:		Auto Zone #3711
Handler Address:		1555 N Farmersville Blvd
Handler City,State,Zip:		FARMERSVILLE, CA 93223-1029
EPA ID:		CAL000315765
Contact Name:		BRYAN BLAIR
Contact Address:		DEPT 8190, 123 SOUTH FRONT STREET
Contact City,State,Zip:		MEMPHIS, TN 38103
Contact Telephone:		901-495-7217
Contact Fax:		901-495-8399
Contact Email:		BRYAN.BLAIR@AUTOZONE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		DEPT 8190, 123 S FRONT ST
Mailing City,State,Zip:		MEMPHIS, TN 38103-3607
Owner Name:	Auto Zone Corportation	
Owner Type:		Other
Operator Name:	Bryan Blair	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported

AUTOZONE # 3711 (Continued) **1024815951**

2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: AUTO ZONE CORPORTATION	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	123 S FRONT ST
Owner/Operator City,State,Zip:	MEMPHIS, TN 38103-3607
Owner/Operator Telephone:	901-495-6500
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: BRYAN BLAIR	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	DEPT 8190, 123 SOUTH FRONT STREET
Owner/Operator City,State,Zip:	MEMPHIS, TN 38103
Owner/Operator Telephone:	901-495-7217
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20070126
Handler Name: AUTO ZONE #3711	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No

AUTOZONE # 3711 (Continued) **1024815951**

Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	45299
NAICS Description:	All Other General Merchandise Stores

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

E MANIFEST:

Manifest Tracking Number:	016254025FLE
Last Updated Date:	20211214
Shipped Date:	20211111
Received Date:	20211209
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N. FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N. Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93645
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD008364432
Designated Facility Name:	Rho Chem Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	425 Isis Ave.
Designated Facility Mail City:	Inglewood
Designated Facility Mail Zip:	90301
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	425 Isis Ave.
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Inglewood
Designated Facility Location Zip:	90301

AUTOZONE # 3711 (Continued) **1024815951**

Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N
Manifest Tracking Number:	016254026FLE
Last Updated Date:	20211129
Shipped Date:	20211111
Received Date:	20211118
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N. FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N. Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93645
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVD980895338
Designated Facility Name:	21st Century Environmental Management Of Nevada, Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2095 Newlands Drive East
Designated Facility Mail City:	Fernley
Designated Facility Mail Zip:	89408
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	2095 Newlands Drive East
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Fernley
Designated Facility Location Zip:	89408
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N
Manifest Tracking Number:	007042259SKS
Last Updated Date:	20190830
Shipped Date:	20190430
Received Date:	20190517
Manifest Status:	Corrected
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone # 3711
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported

AUTOZONE # 3711 (Continued) **1024815951**

Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	123 South Front Street
Generator Mail Street 2:	Not reported
Generator Mail City:	Memphis
Generator Mail Zip:	38103
Generator Mail State:	TN
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD059494310
Designated Facility Name:	Clean Harbors San Jose Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	1021 Berryessa Road
Designated Facility Mail City:	San Jose
Designated Facility Mail Zip:	95133
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	1021 Berryessa Road
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	San Jose
Designated Facility Location Zip:	95133
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	015097568FLE
Last Updated Date:	20210730
Shipped Date:	20210702
Received Date:	20210723
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N. FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N. Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93645
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD008364432
Designated Facility Name:	Rho Chem Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	425 Isis Ave.
Designated Facility Mail City:	Inglewood
Designated Facility Mail Zip:	90301

AUTOZONE # 3711 (Continued) **1024815951**

Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	425 Isis Ave.
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Inglewood
Designated Facility Location Zip:	90301
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	015097569FLE
Last Updated Date:	20210730
Shipped Date:	20210702
Received Date:	20210723
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N. FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N. Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93645
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD008364432
Designated Facility Name:	Rho Chem Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	425 Isis Ave.
Designated Facility Mail City:	Inglewood
Designated Facility Mail Zip:	90301
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	425 Isis Ave.
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Inglewood
Designated Facility Location Zip:	90301
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	015097570FLE
Last Updated Date:	20210816
Shipped Date:	20210702
Received Date:	20210719
Manifest Status:	Signed
Submission Type:	DataImage5Copy

AUTOZONE # 3711 (Continued) **1024815951**

Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Auto Zone #3711
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223-1029
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N FARMERSVILLE BLVD
Generator Mail Street 2:	Not reported
Generator Mail City:	FARMERSVILLE
Generator Mail Zip:	93223-1029
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000515924
Designated Facility Name:	Yuma Yes Waste Transfer Facility
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2730 E. 13TH ST.
Designated Facility Mail City:	YUMA
Designated Facility Mail Zip:	85365
Designated Facility Mail State:	AZ
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	2730 E 13TH ST
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	YUMA
Designated Facility Location Zip:	85365
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	013433933FLE
Last Updated Date:	20200316
Shipped Date:	20190912
Received Date:	20191014
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N. FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N. Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93645
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD980884183

AUTOZONE # 3711 (Continued) **1024815951**

Designated Facility Name:	Gem Rancho Cordova Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	11855 White Rock Road
Designated Facility Mail City:	Rancho Cordova
Designated Facility Mail Zip:	95742
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	11855 White Rock Road
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Rancho Cordova
Designated Facility Location Zip:	95742
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	013433934FLE
Last Updated Date:	20200103
Shipped Date:	20190912
Received Date:	20191010
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N. FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N. Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93645
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVD980895338
Designated Facility Name:	21st Century Environmental Management Of Nevada, Llc
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	2095 Newlands Drive East
Designated Facility Mail City:	Fernley
Designated Facility Mail Zip:	89408
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	2095 Newlands Drive East
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Fernley
Designated Facility Location Zip:	89408
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

AUTOZONE # 3711 (Continued) **1024815951**

Manifest Tracking Number:	200688311CLE
Last Updated Date:	20240206
Shipped Date:	20240119
Received Date:	20240201
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N. FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N. Farmersville Blvd
Generator Mail Street 2:	Not reported
Generator Mail City:	Farmersville
Generator Mail Zip:	93645
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	NVD980895338
Designated Facility Name:	21st Century Environmental Management Of Nevada, Llc
Designated Facility Mail Street Number:	2095
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	Newlands Drive East
Designated Facility Mail City:	Fernley
Designated Facility Mail Zip:	89408
Designated Facility Mail State:	NV
Designated Facility Location Street Number:	2095
Designated Facility Location Street 1:	Newlands Drive East
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	Fernley
Designated Facility Location Zip:	89408
Designated Facility Location State:	NV
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	200688312CLE
Last Updated Date:	20240715
Shipped Date:	20240119
Received Date:	20240125
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Autozone
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N. FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	1555 N. FARMERSVILLE BLVD

AUTOZONE # 3711 (Continued) **1024815951**

Generator Mail Street 2:	Not reported
Generator Mail City:	FARMERSVILLE
Generator Mail Zip:	93645
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000527028
Designated Facility Name:	Clean Earth Solutions, Inc.
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	19105 SOUTH AVENUE B
Designated Facility Mail City:	SOMERTON
Designated Facility Mail Zip:	85350
Designated Facility Mail State:	AZ
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	19105 SOUTH AVENUE B
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	SOMERTON
Designated Facility Location Zip:	85350
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

Manifest Tracking Number:	022793869JJK
Last Updated Date:	20210329
Shipped Date:	20210223
Received Date:	20210308
Manifest Status:	Signed
Submission Type:	DataImage5Copy
Origin Type:	Service
Generator EPA ID:	CAL000315765
Generator Name:	Auto Zone #3711
Generator Location Street Number:	Not reported
Generator Location Street 1:	1555 N FARMERSVILLE BLVD
Generator Location Street 2:	Not reported
Generator Location City:	FARMERSVILLE
Generator Location State:	CA
Generator Location Zip:	93223
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	DEPT 8190, 123 S FRONT STREET
Generator Mail Street 2:	Not reported
Generator Mail City:	MEMPHIS
Generator Mail Zip:	38103
Generator Mail State:	TN
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	AZR000521146
Designated Facility Name:	Yuma Yes 2 Waste Transfer Station
Designated Facility Mail Street Number:	Not reported
Designated Facility Mail Street 1:	STE 105
Designated Facility Mail Street 2:	2621 GREEN RIVER RD
Designated Facility Mail City:	CORONA
Designated Facility Mail Zip:	92882
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	6500 S US HIGHWAY 95
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	YUMA

AUTOZONE # 3711 (Continued) **1024815951**

Designated Facility Location Zip: 85365
Designated Facility Location State: AZ
Designated Facility Contact Company Name: Not reported
Manifest Residue Indicator: N
Rejection Indicator: N

Transporter:
Manifest Tracking Number: 200533619CLE
Transporter Line Number: 1
Transporter EPA ID: MNS000110924
Transporter Name: Clean Earth Specialty Waste Solutions

Waste Line:
Manifest Tracking Number: 200533619CLE
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: UN1950
U.S. DOT Description: Un1950, Waste Aerosols, [Flammable, (Each Not Exceeding 1 L Capacity)] 2.1, Erg#126
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: CF
Container Type Description: Fiber or plastic boxes, cartons, cases
Waste Quantity: 4
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.002
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.002
Waste Quantity, in Kilograms: 1.8140601
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 1.8140601
Management Method Code: H141
Management Method Description: STORAGE, BULKING AND/OR TRANSFER OFF SITE
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D001, D005, D007, D035
Quantity Haz Kg: 1.8140601
Quantity Haz Tons: 0.002
Quantity Non Haz Kg: Not reported
Quantity Non Haz Tons: Not reported
State Waste Codes: CA-214

Manifest Tracking Number: 200533619CLE

AUTOZONE # 3711 (Continued) **1024815951**

Waste Line Number:	2
U.S. DOT Hazardous Indicator:	Y
U.S. DOT ID Number:	UN1993
U.S. DOT Description:	Un1993, Waste Flammable Liquids, N.O.S. (Methyl Ethyl Ketone, Xylene), 3, Pg Ii, Erg#128
Non-Hazardous Waste Description:	Not reported
Number of Containers:	1
Container Type Code:	CF
Container Type Description:	Fiber or plastic boxes, cartons, cases
Waste Quantity:	3
Quantity Unit of Measure Code:	P
Quantity Unit of Measure Description:	Pounds
Waste Quantity, in Tons:	0.0015
Acute Waste Quantity, in Tons:	0
Non-Acute Waste Quantity, in Tons:	0.0015
Waste Quantity, in Kilograms:	1.360545
Acute Waste Quantity, in Kilograms:	0
Non-Acute Waste Quantity, in Kilorgrams:	1.360545
Management Method Code:	H141
Management Method Description:	STORAGE, BULKING AND/OR TRANSFER OFF SITE
Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N
Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	Y
Federal Waste Codes:	D001, D035
Quantity Haz Kg:	1.360545
Quantity Haz Tons:	0.0015
Quantity Non Haz Kg:	Not reported
Quantity Non Haz Tons:	Not reported
State Waste Codes:	CA-214

Click this hyperlink while viewing on your computer to access
40 additional US EManifest: record(s) in the EDR Site Report.

E21 **DOLLAR TREE #03493** **CERS HAZ WASTE** **S118233660**
SSW **1555 N FARMERSVILLE BLVD STE 201** **HWTS** **N/A**
1/8-1/4 **FARMERSVILLE, CA 23320** **HAZNET**
0.211 mi. **CERS**
1112 ft. **Site 7 of 7 in cluster E**

Relative: **Lower**
Actual: **363 ft.**

CERS HAZ WASTE:

Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	25852
CERS ID:	10457425
CERS Description:	Hazardous Waste Generator

DOLLAR TREE #03493 (Continued) **S118233660**

HWTS:

Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
EPA ID:	CAL000388066
Inactive Date:	Not reported
Create Date:	08/05/2013
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	500 VOLVO PKWY
Mailing Address 2:	VA
Mailing City,State,Zip:	CH 233201604
Owner Name:	DOLLAR TREE STORES, INC.
Owner Address:	500 VOLVO PKWY
Owner Address 2:	Not reported
Owner City,State,Zip:	CHESAPEAKE, VA 233201604
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	JESSICA DUBUQUE
Contact Address:	500 VOLVO PKWY
Contact Address 2:	Not reported
City,State,Zip:	CHESAPEAKE, VA 233201604
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Active
Facility Type:	PERMANENT
Category:	STATE
Latitude:	36.31118
Longitude:	-119.20773

NAICS:

EPA ID:	CAL000388066
Create Date:	2013-08-05 08:38:15.207
NAICS Code:	45299
NAICS Description:	All Other General Merchandise Stores
Issued EPA ID Date:	2013-08-05 08:38:15.20300
Inactive Date:	Not reported
Facility Name:	DOLLAR TREE #03493
Facility Address:	1555 N FARMERSVILLE BLVD STE 201
Facility Address 2:	Not reported
Facility City:	FARMERSVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	93223

HAZNET:

Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
Contact:	JOSE FIGUEROA
Telephone:	6618084202
Mailing Name:	Not reported
Mailing Address:	500 VOLVO PKWY

DOLLAR TREE #03493 (Continued) **S118233660**

Year: 2024
Gepaid: CAL000388066
TSD EPA ID: Not reported
CA Waste Code: -
Disposal Method: -
Tons: Not reported

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: NVD980895338
CA Waste Code: 122 - Alkaline solution without metals pH >= 12.5
Disposal Method: H121 - Neutralization Only
Tons: 0.021

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: CAD980884183
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.001

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: AZR000515924
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.16

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: NVD980895338
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.001

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: NVD980895338
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.005

Year: 2020
Gepaid: CAL000388066
TSD EPA ID: CAD008364432
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0035

Year: 2020
Gepaid: CAL000388066
TSD EPA ID: CAD008364432

DOLLAR TREE #03493 (Continued) **S118233660**

CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0035
Year:	2020
Gepaid:	CAL000388066
TSD EPA ID:	AZR000515924
CA Waste Code:	331 - Off-specification, aged or surplus organics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1285
Year:	2020
Gepaid:	CAL000388066
TSD EPA ID:	CAD008364432
CA Waste Code:	122 - Alkaline solution without metals pH >= 12.5
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0035

Click this hyperlink while viewing on your computer to access
37 additional CA HAZNET: record(s) in the EDR Site Report.

Additional Information:

Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	6/4/2024
Shipment Date:	6/4/2024
Receipt Date:	6/20/2024
Manifest Number:	019534286FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
Telephone:	Not reported
Contact:	DOLLAR TREE #03493
Contact Telephone:	6618084202
Contact Email:	JFIGUE79@DOLLARTREE.COM
Transporter 1 EPA ID:	MAD039322250
Transporter Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
Transporter 1 Emergency Number:	7817925000
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Address 1:	1021 BERRYESSA RD
TSDF Address 2:	Not reported
TSDF City,State,Zip:	SAN JOSE, CA 951330000
TSDF Telephone:	4084410962
TSDFA EPA ID:	Not reported
Waste Code Description:	331 - Not reported
RCRA Code:	D004
Meth Code:	H141 - Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Tons:	0.065
Waste Quantity:	130
Quantity Unit:	P
Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	6/4/2024
Shipment Date:	6/4/2024
Receipt Date:	6/20/2024
Manifest Number:	019534286FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
Telephone:	Not reported
Contact:	DOLLAR TREE #03493
Contact Telephone:	6618084202
Contact Email:	JFIGUE79@DOLLARTREE.COM
Transporter 1 EPA ID:	MAD039322250
Transporter Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
Transporter 1 Emergency Number:	7817925000
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Address 1:	1021 BERRYESSA RD
TSDF Address 2:	Not reported
TSDF City,State,Zip:	SAN JOSE, CA 951330000
TSDF Telephone:	4084410962
TSDFA EPA ID:	Not reported
Waste Code Description:	122 - Not reported
RCRA Code:	D002
Meth Code:	H141 - Not reported
Quantity Tons:	0.0175
Waste Quantity:	35
Quantity Unit:	P
Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	6/4/2024
Shipment Date:	6/4/2024
Receipt Date:	6/20/2024
Manifest Number:	019534286FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
Telephone:	Not reported
Contact:	DOLLAR TREE #03493
Contact Telephone:	6618084202
Contact Email:	JFIGUE79@DOLLARTREE.COM
Transporter 1 EPA ID:	MAD039322250
Transporter Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
Transporter 1 Emergency Number:	7817925000

DOLLAR TREE #03493 (Continued) **S118233660**

Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Address 1:	1021 BERRYESSA RD
TSDF Address 2:	Not reported
TSDF City,State,Zip:	SAN JOSE, CA 951330000
TSDF Telephone:	4084410962
TSDFA EPA ID:	Not reported
Waste Code Description:	331 - Not reported
RCRA Code:	D001
Meth Code:	H141 - Not reported
Quantity Tons:	0.0085
Waste Quantity:	17
Quantity Unit:	P

Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	11/19/2024
Shipment Date:	11/19/2024
Receipt Date:	12/5/2024
Manifest Number:	019805672FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
Telephone:	Not reported
Contact:	DOLLAR TREE #03493
Contact Telephone:	6618084202
Contact Email:	JFIGUE79@DOLLARTREE.COM
Transporter 1 EPA ID:	MAD039322250
Transporter Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
Transporter 1 Emergency Number:	7817925000
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD044429835
TSDF Name:	CLEAN HARBORS WILMINGTON LLC
TSDF Address 1:	1737 E DENNI ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	WILMINGTON, CA 907440000
TSDF Telephone:	3108359998
TSDFA EPA ID:	Not reported
Waste Code Description:	122 - Not reported
RCRA Code:	D002
Meth Code:	H141 - Not reported
Quantity Tons:	0.067
Waste Quantity:	134
Quantity Unit:	P

Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	11/19/2024
Shipment Date:	11/19/2024
Receipt Date:	12/5/2024

DOLLAR TREE #03493 (Continued) **S118233660**

Manifest Number:	019805672FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
Telephone:	Not reported
Contact:	DOLLAR TREE #03493
Contact Telephone:	6618084202
Contact Email:	JFIGUE79@DOLLARTREE.COM
Transporter 1 EPA ID:	MAD039322250
Transporter Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
Transporter 1 Emergency Number:	7817925000
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD044429835
TSDF Name:	CLEAN HARBORS WILMINGTON LLC
TSDF Address 1:	1737 E DENNI ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	WILMINGTON, CA 907440000
TSDF Telephone:	3108359998
TSDFA EPA ID:	Not reported
Waste Code Description:	331 - Not reported
RCRA Code:	D001
Meth Code:	H141 - Not reported
Quantity Tons:	0.012
Waste Quantity:	24
Quantity Unit:	P

Year:	2024
EM Manifest ID:	Not reported
Shipment Date:	11/19/2024
Shipment Date:	11/19/2024
Receipt Date:	12/5/2024
Manifest Number:	019805672FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
Telephone:	Not reported
Contact:	DOLLAR TREE #03493
Contact Telephone:	6618084202
Contact Email:	JFIGUE79@DOLLARTREE.COM
Transporter 1 EPA ID:	MAD039322250
Transporter Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC
Transporter 1 Emergency Number:	7817925000
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD044429835
TSDF Name:	CLEAN HARBORS WILMINGTON LLC
TSDF Address 1:	1737 E DENNI ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	WILMINGTON, CA 907440000
TSDF Telephone:	3108359998

DOLLAR TREE #03493 (Continued) **S118233660**

TSDFA EPA ID:	Not reported
Waste Code Description:	331 - Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Not reported
Quantity Tons:	0.0695
Waste Quantity:	139
Quantity Unit:	P

Additional Information:

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	9/1/2020
Shipment Date:	9/1/2020
Receipt Date:	9/24/2020
Manifest Number:	013669930FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	916-351-0980
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Rancho Cordova 95742
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	9/1/2020
Shipment Date:	9/1/2020
Receipt Date:	9/24/2020
Manifest Number:	013669930FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE
Telephone:	Not reported
Contact:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Contact Telephone:	916-351-0980
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Rancho Cordova 95742
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/27/2020
Manifest Number:	014359300FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	323-776-6233
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Inglewood 90301
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/22/2020
Manifest Number:	014359301FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-1065
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/27/2020
Manifest Number:	014359300FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	323-776-6233
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Inglewood 90301
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/27/2020
Manifest Number:	014359300FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	323-776-6233
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Inglewood 90301
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/22/2020
Manifest Number:	014359301FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD

DOLLAR TREE #03493 (Continued) **S118233660**

Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-1065
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2021
EM Manifest ID:	Not reported
Shipment Date:	1/7/2020
Shipment Date:	1/7/2020
Receipt Date:	1/30/2020
Manifest Number:	013036123FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-1065
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Additional Information:

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	9/1/2020
Shipment Date:	9/1/2020
Receipt Date:	9/24/2020
Manifest Number:	013669930FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	916-351-0980
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Rancho Cordova 95742
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	9/1/2020
Shipment Date:	9/1/2020
Receipt Date:	9/24/2020
Manifest Number:	013669930FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	916-351-0980
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	Not reported
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Rancho Cordova 95742
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/27/2020
Manifest Number:	014359300FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	323-776-6233
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Inglewood 90301
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020

DOLLAR TREE #03493 (Continued) **S118233660**

Receipt Date:	5/22/2020
Manifest Number:	014359301FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-1065
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/27/2020
Manifest Number:	014359300FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	323-776-6233
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Inglewood 90301

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/27/2020
Manifest Number:	014359300FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	323-776-6233
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Inglewood 90301
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	5/8/2020
Shipment Date:	5/8/2020
Receipt Date:	5/22/2020
Manifest Number:	014359301FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	Not reported
Contact:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Contact Telephone:	559-747-1065
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Year:	2020
EM Manifest ID:	Not reported
Shipment Date:	1/7/2020
Shipment Date:	1/7/2020
Receipt Date:	1/30/2020
Manifest Number:	013036123FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	559-747-1065
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Additional Information:

Year:	2019
EM Manifest ID:	745657
Shipment Date:	7/6/2018
Shipment Date:	7/6/2018
Receipt Date:	7/23/2018
Manifest Number:	010208445FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	757-321-5761
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MOD095038998
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2019
EM Manifest ID:	745657
Generator EPA ID:	CAL000388066
Shipment Date:	2018-07-06
Manifest Number:	010208445FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.07550
Quantity Waste:	151.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	331

Year:	2019
EM Manifest ID:	745657
Generator EPA ID:	CAL000388066
Shipment Date:	2018-07-06
Manifest Number:	010208445FLE

DOLLAR TREE #03493 (Continued) **S118233660**

Line Number:	2
Method Code:	H141
Quantity Tons:	0.04300
Quantity Waste:	86.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	331

Year:	2019
EM Manifest ID:	370758
Shipment Date:	4/13/2019
Shipment Date:	4/13/2019
Receipt Date:	5/6/2019
Manifest Number:	013056273FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	559-747-1065
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000217554
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2019
EM Manifest ID:	370758
Generator EPA ID:	CAL000388066
Shipment Date:	2019-04-13
Manifest Number:	013056273FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.08150
Quantity Waste:	163.000000
Quantity Unit:	P
Number of Containers:	1

DOLLAR TREE #03493 (Continued) **S118233660**

Type of Container: Fiberboard or plastic drums, barrels, kegs
Quantity Type: Pounds
State Code: 331

Year: 2019
EM Manifest ID: 370758
Generator EPA ID: CAL000388066
Shipment Date: 2019-04-13
Manifest Number: 013056273FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.05100
Quantity Waste: 102.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiberboard or plastic drums, barrels, kegs
Quantity Type: Pounds
State Code: 331

Year: 2019
EM Manifest ID: 370757
Shipment Date: 4/13/2019
Shipment Date: 4/13/2019
Receipt Date: 5/16/2019
Manifest Number: 013056271FLE
Generator EPA ID: CAL000388066
Name: DOLLAR TREE
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE 93223-1175
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 323-776-6233
Contact Email: Not reported
Transporter 1 EPA ID: MNS000110924
Transporter Name: Not reported
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MNS000110924
Transporter Name 2: Not reported
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAD008364432
TSDF Name: Rho Chem LLC
TSDF Address 1: 425 Isis Ave.
TSDF Address 2: Not reported
TSDF City,State,Zip: Inglewood 90301
TSDF Telephone: Not reported
TSDFA EPA ID: Not reported
Waste Code Description: - Not reported
RCRA Code: Not reported
Meth Code: - Not reported
Quantity Tons: Not reported
Waste Quantity: Not reported
Quantity Unit: Not reported

State:
Year: 2019
EM Manifest ID: 370757

DOLLAR TREE #03493 (Continued) **S118233660**

Generator EPA ID:	CAL000388066
Shipment Date:	2019-04-13
Manifest Number:	013056271FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.01250
Quantity Waste:	25.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	122

Year:	2019
EM Manifest ID:	239231
Shipment Date:	12/7/2018
Shipment Date:	12/7/2018
Receipt Date:	1/9/2019
Manifest Number:	011315181FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	559-747-1065
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MOD095038998
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City,State,Zip:	YUMA 85365-1901
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2019
EM Manifest ID:	239231
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315181FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.04050

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Waste:	81.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	331

Year:	2019
EM Manifest ID:	239231
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315181FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.05050
Quantity Waste:	101.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	331

Year:	2019
EM Manifest ID:	222526
Shipment Date:	12/7/2018
Shipment Date:	12/7/2018
Receipt Date:	1/4/2019
Manifest Number:	011315179FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Inglewood 90301
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Federal:

Year:	2019
EM Manifest ID:	222526
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315179FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D002

State:

Year:	2019
EM Manifest ID:	222526
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315179FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	791

Year:	2019
EM Manifest ID:	222526
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315179FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.09800
Quantity Waste:	196.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	122

Year:	2019
EM Manifest ID:	251983
Shipment Date:	12/7/2018
Shipment Date:	12/7/2018
Receipt Date:	1/2/2019
Manifest Number:	011315180FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE

DOLLAR TREE #03493 (Continued) **S118233660**

Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE 93223-1175
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	775-575-2760
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Fernley 89408
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Federal:

Year:	2019
EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
Federal Code:	D001

Year:	2019
EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
Federal Code:	D001

DOLLAR TREE #03493 (Continued) **S118233660**

Year:	2019
EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
Federal Code:	D035

State:

Year:	2019
EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
State Code:	331

Year:	2019
EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
State Code:	214

Additional Information:

Year:	2018
EM Manifest ID:	010077335FLE20180316_D_1
Shipment Date:	3/16/2018
Shipment Date:	3/16/2018
Receipt Date:	4/24/2018
Manifest Number:	010077335FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493

DOLLAR TREE #03493 (Continued) **S118233660**

Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	RHO CHEM LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Federal:

Year:	2018
EM Manifest ID:	010077335FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077335FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D002

State:

Year:	2018
EM Manifest ID:	010077335FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077335FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL

DOLLAR TREE #03493 (Continued) **S118233660**

State Code: 122

Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Shipment Date: 3/16/2018
Shipment Date: 3/16/2018
Receipt Date: 5/11/2018
Manifest Number: 010077336FLE
Generator EPA ID: CAL000388066
Name: DOLLAR TREE #3493
Address: Not reported
Address 2: Not reported
City,State,Zip: Not reported
Telephone: Not reported
Contact: Not reported
Contact Telephone: Not reported
Contact Email: Not reported
Transporter 1 EPA ID: MNS000110924
Transporter Name: Not reported
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: NED986382133
Transporter Name 2: Not reported
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: NVD980895338
TSDF Name: 21ST CENTURY EMN LLC
TSDF Address 1: Not reported
TSDF Address 2: Not reported
TSDF City,State,Zip: Not reported
TSDF Telephone: Not reported
TSDFA EPA ID: Not reported
Waste Code Description: - Not reported
RCRA Code: Not reported
Meth Code: - Not reported
Quantity Tons: Not reported
Waste Quantity: Not reported
Quantity Unit: Not reported

Federal:
Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16
Manifest Number: 010077336FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00350
Quantity Waste: 7.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16

DOLLAR TREE #03493 (Continued) **S118233660**

Manifest Number: 010077336FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16
Manifest Number: 010077336FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D035

State:
Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16
Manifest Number: 010077336FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00350
Quantity Waste: 7.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 331

Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16
Manifest Number: 010077336FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 214

DOLLAR TREE #03493 (Continued) **S118233660**

Year:	2018
EM Manifest ID:	010077337FLE20180316_D_1
Shipment Date:	3/16/2018
Shipment Date:	3/16/2018
Receipt Date:	5/16/2018
Manifest Number:	010077337FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2018
EM Manifest ID:	010077337FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077337FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.01150
Quantity Waste:	23.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	010077337FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077337FLE
Line Number:	2
Method Code:	H141

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Tons:	0.05050
Quantity Waste:	101.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Shipment Date:	12/18/2017
Shipment Date:	12/18/2017
Receipt Date:	1/25/2018
Manifest Number:	010209401FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	RHO CHEM LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

Federal:

Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00650
Quantity Waste:	13.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL

DOLLAR TREE #03493 (Continued) **S118233660**

Federal Code:	D001
Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001
Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.02000
Quantity Waste:	40.000000
Quantity Unit:	P
Number of Containers:	2
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D002
Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	4
Method Code:	H141
Quantity Tons:	0.00100
Quantity Waste:	2.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001
Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	4
Method Code:	H141
Quantity Tons:	0.00100
Quantity Waste:	2.000000
Quantity Unit:	P

DOLLAR TREE #03493 (Continued) **S118233660**

Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D035

State:
Year: 2018
EM Manifest ID: 010209401FLE20171218_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2017-12-18
Manifest Number: 010209401FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00650
Quantity Waste: 13.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 331

Year: 2018
EM Manifest ID: 010209401FLE20171218_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2017-12-18
Manifest Number: 010209401FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00050
Quantity Waste: 1.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 331

Year: 2018
EM Manifest ID: 010209401FLE20171218_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2017-12-18
Manifest Number: 010209401FLE
Line Number: 3
Method Code: H141
Quantity Tons: 0.02000
Quantity Waste: 40.000000
Quantity Unit: P
Number of Containers: 2
Type of Container: NULL
Quantity Type: NULL
State Code: 122

Year: 2018
EM Manifest ID: 010209401FLE20171218_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2017-12-18
Manifest Number: 010209401FLE
Line Number: 4

DOLLAR TREE #03493 (Continued) **S118233660**

Method Code:	H141
Quantity Tons:	0.00100
Quantity Waste:	2.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	214

Year:	2018
EM Manifest ID:	010209402FLE20171218_D_1
Shipment Date:	12/18/2017
Shipment Date:	12/18/2017
Receipt Date:	1/27/2018
Manifest Number:	010209402FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Contact Email:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter Name:	Not reported
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter Name 2:	Not reported
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City,State,Zip:	Not reported
TSDF Telephone:	Not reported
TSDFA EPA ID:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	- Not reported
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported

State:

Year:	2018
EM Manifest ID:	010209402FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209402FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.03800
Quantity Waste:	76.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Type:	NULL
State Code:	331
Year:	2018
EM Manifest ID:	010209402FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209402FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.02700
Quantity Waste:	54.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Additional Information:

Year:	2017
Gen EPA ID:	CAL000388066
Shipment Date:	20171218
Creation Date:	9/14/2018 18:31:06
Receipt Date:	20180125
Manifest ID:	010209401FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0065
Waste Quantity:	13
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171218
Creation Date:	9/14/2018 18:31:06
Receipt Date:	20180125
Manifest ID:	010209401FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	CAD008364432

DOLLAR TREE #03493 (Continued) **S118233660**

Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171218
Creation Date:	9/14/2018 18:31:06
Receipt Date:	20180125
Manifest ID:	010209401FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171218
Creation Date:	10/27/2018 18:30:26
Receipt Date:	20180127
Manifest ID:	010209402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	AZR000515924
Trans Name:	YUMA YES LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Tons:	0.027
Waste Quantity:	54
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171218
Creation Date:	10/27/2018 18:30:26
Receipt Date:	20180127
Manifest ID:	010209402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	AZR000515924
Trans Name:	YUMA YES LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.038
Waste Quantity:	76
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171218
Creation Date:	9/14/2018 18:31:06
Receipt Date:	20180125
Manifest ID:	010209401FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Additional Code 5:	Not reported
Shipment Date:	20170929
Creation Date:	7/17/2018 18:30:18
Receipt Date:	20171020
Manifest ID:	010159301FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0055
Waste Quantity:	11
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170929
Creation Date:	7/17/2018 18:30:18
Receipt Date:	20171020
Manifest ID:	010159301FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170929
Creation Date:	7/17/2018 18:30:18
Receipt Date:	20171020
Manifest ID:	010159301FLE
Trans EPA ID:	MNS000110924

DOLLAR TREE #03493 (Continued) **S118233660**

Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170929
Creation Date:	7/17/2018 18:30:18
Receipt Date:	20171020
Manifest ID:	010159301FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.012
Waste Quantity:	24
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Information:

Year:	2016
Gen EPA ID:	CAL000388066
Shipment Date:	20151124
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0145
Waste Quantity:	29
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No

DOLLAR TREE #03493 (Continued) **S118233660**

	Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0095
Waste Quantity:	19
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0365
Waste Quantity:	73
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0275
Waste Quantity:	55
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE

DOLLAR TREE #03493 (Continued) **S118233660**

Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.063
Waste Quantity:	126
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.004
Waste Quantity:	8
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Information:

Year:	2015
Gen EPA ID:	CAL000388066
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0145
Waste Quantity:	29
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0365
Waste Quantity:	73
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0095
Waste Quantity:	19
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	Not reported
Receipt Date:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0275
Waste Quantity:	55
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.004
Waste Quantity:	8
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.063
Waste Quantity:	126
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Information:

Year:	2014
Gen EPA ID:	CAL000388066
Shipment Date:	20141020
Creation Date:	1/15/2015 22:14:55
Receipt Date:	20141107
Manifest ID:	007226766FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	131 - Aqueous solution (2 < pH < 12.5) containing reactive anions

DOLLAR TREE #03493 (Continued) **S118233660**

(azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions
RCRA Code: D001
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.004
Waste Quantity: 8
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20141020
Creation Date: 1/15/2015 22:14:55
Receipt Date: 20141107
Manifest ID: 007226766FLE
Trans EPA ID: MNS000110924
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID: NED986382133
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID: CAD980884183
Trans Name: GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 214 - Unspecified solvent mixture
RCRA Code: D001
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.0015
Waste Quantity: 3
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20141020
Creation Date: 1/15/2015 22:14:55
Receipt Date: 20141107
Manifest ID: 007226766FLE
Trans EPA ID: MNS000110924
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID: NED986382133
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID: CAD980884183
Trans Name: GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 122 - Alkaline solution without metals (pH > 12.5
RCRA Code: D002
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.0155
Waste Quantity: 31

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141020
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007226766FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.088
Waste Quantity:	176
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141020
Creation Date:	1/15/2015 22:14:55
Receipt Date:	20141107
Manifest ID:	007226766FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Shipment Date:	20140625
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0475
Waste Quantity:	95
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20140625
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0285
Waste Quantity:	57
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20140625
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133

DOLLAR TREE #03493 (Continued) **S118233660**

Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140625
Creation Date:	12/16/2014 22:15:17
Receipt Date:	20140710
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140625
Creation Date:	12/16/2014 22:15:17
Receipt Date:	20140710
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002

DOLLAR TREE #03493 (Continued) **S118233660**

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.0125
Waste Quantity: 25
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

CERS:
Name: DOLLAR TREE #03493
Address: 1555 N FARMERSVILLE BLVD STE 201
City,State,Zip: FARMERSVILLE, CA 93223
Site ID: 25852
CERS ID: 10457425
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 25852
Site Name: Dollar Tree #03493
Violation Date: 08-07-2017
Citation: 22 CCR 15 66265.192(k) - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.192(k)
Violation Description: Failure to include all required information in the tank system assessment.
Violation Notes: Returned to compliance on 08/07/2017. Did not observe start date on hazardous waste container. Corrected onsite by Bryce.
Violation Division: Tulare County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 25852
Site Name: Dollar Tree #03493
Violation Date: 08-07-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 01/25/2018. Did not observe Helium on hazardous material inventory. Add Helium to hazardous material inventory and submit electronically.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-16-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

DOLLAR TREE #03493 (Continued) **S118233660**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-07-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Bryce
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-17-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Tina Soto - Store Manager
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-17-2023
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Tina Soto - Store Manager
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-16-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-07-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Bryce
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 25852
Site Name: Dollar Tree #03493
Site Address: 1555 N FARMERSVILLE BLVD STE 201
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 08-07-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HMRRP

DOLLAR TREE #03493 (Continued) **S118233660**

Enf Action Source: CERS,

Site ID: 25852
Site Name: Dollar Tree #03493
Site Address: 1555 N FARMERSVILLE BLVD STE 201
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 08-07-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 500 Volvo Pkwy
Affiliation City: Chesapeake
Affiliation State: VA
Affiliation Country: Not reported
Affiliation Zip: 23320
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Dollar Tree Stores, Inc.
Entity Title: Not reported
Affiliation Address: 500 Volvo Pkwy
Affiliation City: Chesapeake
Affiliation State: VA
Affiliation Country: United States
Affiliation Zip: 23320
Affiliation Phone: (757) 321-5000,

Affiliation Type Desc: CUPA District
Entity Name: Tulare County Environmental Health
Entity Title: Not reported
Affiliation Address: 5957 South Mooney Boulevard
Affiliation City: Visalia
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93277
Affiliation Phone: (559) 624-7400,

Affiliation Type Desc: Document Preparer
Entity Name: JOSE FIGUEROA
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact

DOLLAR TREE #03493 (Continued) **S118233660**

Entity Name:	Jose Figueroa
Entity Title:	Not reported
Affiliation Address:	3529 W Noble Avenue
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93277
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Jose Figueroa
Entity Title:	Environmental Compliance Specialist
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	Farmersville Red Rock Plaza, LLC
Entity Title:	Not reported
Affiliation Address:	5743 W. Sunnyview Avenue
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93291
Affiliation Phone:	(559) 435-1756,
Affiliation Type Desc:	Operator
Entity Name:	Dollar Tree Stores, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(757) 321-5000,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Dollar Tree Stores, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

22
NW
1/8-1/4
0.245 mi.
1292 ft.

R GAS LLC TRUCK YARD
251 TERRY AVE
FARMERSVILLE, CA 93223

CUPA Listings **S122517709**
N/A

Relative:
Lower

Actual:
358 ft.

CUPA TULARE:

Name:	R GAS LLC TRUCK YARD
Address:	251 TERRY AVE
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10773985
Facility ID:	FA1353692
APN:	128-280-007
Latitude:	36.317699
Longitude:	-119.21067
PE:	2223
TB Fin Fees Description:	Haz Mat - < 6 Reportable Quantities of Chem
Current Status:	01
CD Fin billing Status Description:	Active, billable

Name:	R GAS LLC TRUCK YARD
Address:	251 TERRY AVE
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10773985
Facility ID:	FA1353692
APN:	128-280-007
Latitude:	36.317699
Longitude:	-119.21067
PE:	2277
TB Fin Fees Description:	CUPA OVERSIGHT CA SURCHARGE
Current Status:	01
CD Fin billing Status Description:	Active, billable

F23
South
1/4-1/2
0.268 mi.
1416 ft.

FARMERSVILLE MINI MARKET
1456 FARMERSVILLE BLVD N
FARMERSVILLE, CA 93223

Site 1 of 2 in cluster F

UST FINDER RELEASE **1028956601**
N/A

Relative:
Lower

Actual:
363 ft.

UST FINDER RELEASE:

Object ID:	56767
Facility ID:	Not reported
Lust ID:	CAT0610700393
Name:	FARMERSVILLE MINI MARKET
Address:	1456 FARMERSVILLE BLVD N
City,State,Zip:	FARMERSVILLE, CA 93223
Address Match Type:	PointAddress
Reported Date:	Not reported
Status:	No Further Action
Substance:	Not reported
Population within 1500ft:	1021
Domestic Wells within 1500ft:	52
Land Use:	Developed, Medium Intensity
Within SPA:	No
SPA PWS Facility ID:	Not reported
SPA Water Type:	Not reported
SPA Facility Type:	Not reported
SPA HUC12:	Not reported
Within WHPA:	Yes
WHPA PWS Facility ID:	CA5400873_34647

FARMERSVILLE MINI MARKET (Continued) **1028956601**

WHPA Water Type:	GW - Ground water
WHPA Facility Type:	WL - Well
WHPA HUC12:	180300071402
Within 100yr Floodplain:	No
Tribe:	Not reported
EPA Region:	9
NFA Letter 1:	Not reported
NFA Letter 2:	Not reported
NFA Letter 3:	Not reported
NFA Letter 4:	Not reported
Closed With Residual Contaminate:	Not reported
Coordinate Source:	Geocode
X Coord:	-119.20701
Y Coord:	36.31014
Latitude:	36.3101399999999
Longitude:	-119.207009999999

F24 **FARMERSVILLE MINI MARKET** **LUST** **S104404674**
South **1456 FARMERSVILLE** **Cortese** **N/A**
1/4-1/2 **FARMERSVILLE, CA 93223** **HIST CORTESE**
0.268 mi. **CERS**
1416 ft. **Site 2 of 2 in cluster F**

Relative: **Lower**
Actual: **363 ft.**

LUST:

Name:	FARMERSVILLE MINI MARKET
Address:	1456 FARMERSVILLE BLVD N
City,State,Zip:	FARMERSVILLE, CA 93223
Lead Agency:	TULARE COUNTY
Case Type:	LUST Cleanup Site

Geo Track:

Global Id:	T0610700393
Latitude:	36.3100669
Longitude:	-119.206732
Status:	Completed - Case Closed
Status Date:	07/09/1998
Case Worker:	JOE
RB Case Number:	5T54000419
Local Agency:	TULARE COUNTY
File Location:	Not reported
Local Case Number:	743
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	Not reported
Quantity Released Gallons:	Not reported
Begin Date:	06/11/1997
Leak Reported Date:	09/05/1997
How Discovered:	Subsurface Monitoring
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	07/09/1998
CA Water Watershed Name:	South Valley Floor - Kaweah Delta (558.10)
Dwr Groundwater Subbasin Name:	San Joaquin Valley - Kaweah (5-022.11)

FARMERSVILLE MINI MARKET (Continued) **S104404674**

Disadvantaged Community: Not reported
CA Enviroscreen 3 Score: 91-95%
CA Enviroscreen 4 Score: 75-80%
Military DOD Site: No
Facility Project Subtype: Not reported
RWQCB Region: CENTRAL VALLEY RWQCB (REGION 5F)
Site History: Not reported

LUST:
Global Id: T0610700393
Contact Type: Local Agency Caseworker - Primary Caseworker
Contact Name: JOEL MARTENS
Organization Name: TULARE COUNTY
Address: 5957 So. Mooney Blvd
City: Visalia
Email: jmartens@tularehhsa.org
Phone Number: 5596247419

LUST:
Global Id: T0610700393
Action Type: Other
Date: 06/11/1997
Action: Leak Discovery

Global Id: T0610700393
Action Type: Other
Date: 09/05/1997
Action: Leak Reported

LUST:
Global Id: T0610700393
Status: Open - Case Begin Date
Status Date: 06/11/1997

Global Id: T0610700393
Status: Completed - Case Closed
Status Date: 07/09/1998

LUST REG 5:
Name: FARMERSVILLE MINI MARKET
Address: 1456 FARMERSVILLE BLVD N
City: FARMERSVILLE
Region: 5
Status: Case Closed
Case Number: 5T54000419
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: DAM
Lead Agency: Local
Program: LUST
MTBE Code: 1

CORTESE:
Name: FARMERSVILLE MINI MARKET
Address: 1456 FARMERSVILLE BLVD N

FARMERSVILLE MINI MARKET (Continued) **S104404674**

City,State,Zip:	FARMERSVILLE, CA 93223
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0610700393
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	FARMERSVILLE MINI MARKET
edr_fadd1:	1456 FARMERSVILLE
City,State,Zip:	FARMERSVILLE, CA 93223
Region:	CORTESE
Facility County Code:	54
Reg By:	LTNKA
Reg Id:	5T54000419

CERS:

Name:	FARMERSVILLE MINI MARKET
Address:	1456 FARMERSVILLE BLVD N
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	914540
CERS ID:	T0610700393
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JOEL MARTENS - TULARE COUNTY
Entity Title:	Not reported
Affiliation Address:	5957 So. Mooney Blvd
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	5596247419,

25
SSE
1/4-1/2
0.432 mi.
2283 ft.

PROPOSED MIDDLE SCHOOL
SOUTHEAST CORNER OF CITRUS DRIVE AND FREEDOM ROAD
FARMERSVILLE, CA 93223

ENVIROSTOR SCH
S109548216
N/A

Relative: Lower

Actual: 363 ft.

ENVIROSTOR:

Name:	PROPOSED MIDDLE SCHOOL
Address:	SOUTHEAST CORNER OF CITRUS DRIVE AND FREEDOM ROAD
City,State,Zip:	FARMERSVILLE, CA 93223
Facility ID:	60000793
Status:	No Further Action
Status Date:	12/10/2009
Site Code:	104616
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	20
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Mellan Songco
Supervisor:	* Mark Malinowski
Division Branch:	Santa Susana Field Laboratory Branch
Assembly:	33
Senate:	16
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	36.30661
Longitude:	-119.1990
APN:	129-010-053, 129-010-058, 129-010-059, 129-010-060, 129-010-061
Past Use:	NONE
Potential COC:	Arsenic Chlordane DDE DDT Naturally Occurring Asbestos (NOA
Confirmed COC:	30001-NO 30004-NO 40002-NO 30007-NO 30008-NO No Contaminants found
Potential Description:	NMA
Alias Name:	129-010-053
Alias Type:	APN
Alias Name:	129-010-058
Alias Type:	APN
Alias Name:	129-010-059
Alias Type:	APN
Alias Name:	129-010-060
Alias Type:	APN
Alias Name:	129-010-061
Alias Type:	APN
Alias Name:	104616
Alias Type:	Project Code (Site Code)
Alias Name:	60000793
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement Application
Completed Date:	09/03/2008
Comments:	EOA Application
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

PROPOSED MIDDLE SCHOOL (Continued) **S109548216**

Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/10/2009
Comments: DSTC approved the PEA with a no further action determination

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/26/2008
Comments: EOAs signed by PM

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/10/2009
Comments: Project Manager changed from Mike Hall to Mellan Songco

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 06/11/2008
Comments: DTSC issued a notice to the District that the project manager has been changed to Michael Hall. DA

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 01/26/2010
Comments: DTSC sent a CRU to the accounting unit to summarize costs associated with the PEA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/13/2008
Comments: Phase I provided as background - recommends PEA. E-mail contact made 2/13/08.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 12/11/2008
Comments: DTSC approved the PEA Workplan

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: PROPOSED MIDDLE SCHOOL
Address: SOUTHEAST CORNER OF CITRUS DRIVE AND FREEDOM ROAD

PROPOSED MIDDLE SCHOOL (Continued) **S109548216**

City,State,Zip:	FARMERSVILLE, CA 93223
Facility ID:	60000793
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	20
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Mellan Songco
Supervisor:	* Mark Malinowski
Division Branch:	Santa Susana Field Laboratory Branch
Site Code:	104616
Assembly:	33
Senate:	16
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	12/10/2009
Restricted Use:	NO
Funding:	School District
Latitude:	36.30661
Longitude:	-119.1990
APN:	129-010-053, 129-010-058, 129-010-059, 129-010-060, 129-010-061
Past Use:	NONE
Potential COC:	Arsenic, Arsenic, Chlordane, DDE, DDT, Naturally Occurring Asbestos (NOA
Confirmed COC:	30001-NO, 30004-NO, 40002-NO, 30007-NO, 30008-NO, No Contaminants found
Potential Description:	NMA
Alias Name:	129-010-053
Alias Type:	APN
Alias Name:	129-010-058
Alias Type:	APN
Alias Name:	129-010-059
Alias Type:	APN
Alias Name:	129-010-060
Alias Type:	APN
Alias Name:	129-010-061
Alias Type:	APN
Alias Name:	104616
Alias Type:	Project Code (Site Code)
Alias Name:	60000793
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement Application
Completed Date:	09/03/2008
Comments:	EOA Application
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	12/10/2009
Comments:	DSTC approved the PEA with a no further action determination

PROPOSED MIDDLE SCHOOL (Continued) **S109548216**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/26/2008
Comments: EOAs signed by PM

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/10/2009
Comments: Project Manager changed from Mike Hall to Mellan Songco

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 06/11/2008
Comments: DTSC issued a notice to the District that the project manager has been changed to Michael Hall. DA

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 01/26/2010
Comments: DTSC sent a CRU to the accounting unit to summarize costs associated with the PEA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/13/2008
Comments: Phase I provided as background - recommends PEA. E-mail contact made 2/13/08.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 12/11/2008
Comments: DTSC approved the PEA Workplan

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

26
South
1/4-1/2
0.453 mi.
2393 ft.

NEW ELEMENTARY SCHOOL
CITRUS DRIVE/FARMERSVILLE BOULEVARD
FARMERSVILLE, CA 93223

ENVIROSTOR SCH **S105629017 N/A**

Relative: Lower

Actual: 363 ft.

ENVIROSTOR:

Name:	NEW ELEMENTARY SCHOOL
Address:	CITRUS DRIVE/FARMERSVILLE BOULEVARD
City,State,Zip:	FARMERSVILLE, CA 93223
Facility ID:	54010011
Status:	No Further Action
Status Date:	11/07/2001
Site Code:	104165
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	12.4
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	* Kevin Shaddy
Division Branch:	Santa Susana Field Laboratory Branch
Assembly:	33
Senate:	16
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	36.30652
Longitude:	-119.2018
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic Chlordane DDD DDE DDT
Confirmed COC:	30001-NO 30004-NO 30006-NO 30007-NO 30008-NO No Contaminants found
Potential Description:	SOIL
Alias Name:	FARMERSVILLE USD-CITRUS DR/FARMERSVILLE
Alias Type:	Alternate Name
Alias Name:	NEW ELEMENTARY SCHOOL
Alias Type:	Alternate Name
Alias Name:	104165
Alias Type:	Project Code (Site Code)
Alias Name:	54010011
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	02/28/2001
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	11/07/2001
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

NEW ELEMENTARY SCHOOL (Continued) **S105629017**

Completed Document Type:	Environmental Oversight Agreement
Completed Date:	11/17/2000
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	11/06/2001
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	NEW ELEMENTARY SCHOOL
Address:	CITRUS DRIVE/FARMERSVILLE BOULEVARD
City,State,Zip:	FARMERSVILLE, CA 93223
Facility ID:	54010011
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	12.4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	* Kevin Shaddy
Division Branch:	Santa Susana Field Laboratory Branch
Site Code:	104165
Assembly:	33
Senate:	16
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	11/07/2001
Restricted Use:	NO
Funding:	School District
Latitude:	36.30652
Longitude:	-119.2018
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic, Arsenic, Chlordane, DDD, DDE, DDT
Confirmed COC:	30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, No Contaminants found
Potential Description:	SOIL
Alias Name:	FARMERSVILLE USD-CITRUS DR/FARMERSVILLE
Alias Type:	Alternate Name
Alias Name:	NEW ELEMENTARY SCHOOL
Alias Type:	Alternate Name

NEW ELEMENTARY SCHOOL (Continued) **S105629017**

Alias Name: 104165
Alias Type: Project Code (Site Code)
Alias Name: 54010011
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 02/28/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 11/07/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 11/17/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/06/2001
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FARMERSVILLE	S100186523	CITY OF FARMERSVILLE SEWERAGE TRMT	FARMERSVILLE & OUTSIDE CREEK R	93223	ENVIROSTOR

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 09/22/2025
Date Data Arrived at EDR: 09/23/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/23/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/03/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 13

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 03/11/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 83

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 10/28/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 11/11/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 11/11/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/10/2025
Date Data Arrived at EDR: 06/12/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 4

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/17/2025
Date Data Arrived at EDR: 07/17/2025
Date Made Active in Reports: 10/08/2025
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/20/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/17/2025
Date Data Arrived at EDR: 07/17/2025
Date Made Active in Reports: 10/08/2025
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/20/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 07/31/2025
Date Data Arrived at EDR: 07/31/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 82

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/22/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/27/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/22/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 06/06/2025
Date Data Arrived at EDR: 08/26/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 78

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 11/06/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 81

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Semi-Annually

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 08/25/2025
Date Data Arrived at EDR: 09/03/2025
Date Made Active in Reports: 11/19/2025
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 11/26/2025
Next Scheduled EDR Contact: 03/23/2026
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/22/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/22/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/21/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/27/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/09/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/17/2025
Date Data Arrived at EDR: 07/17/2025
Date Made Active in Reports: 10/08/2025
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/20/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/12/2025
Date Data Arrived at EDR: 06/12/2025
Date Made Active in Reports: 09/05/2025
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 12/26/2025
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/19/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 11/24/2025
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/22/2025
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/13/2025
Date Data Arrived at EDR: 11/17/2025
Date Made Active in Reports: 11/19/2025
Number of Days to Update: 2

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 10/28/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 6

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 10/23/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 04/04/2025
Date Data Arrived at EDR: 06/02/2025
Date Made Active in Reports: 08/12/2025
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/20/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/17/2025
Date Data Arrived at EDR: 07/17/2025
Date Made Active in Reports: 10/08/2025
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/20/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 03/21/2024
Date Made Active in Reports: 06/12/2024
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 11/20/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/14/2025
Date Data Arrived at EDR: 04/15/2025
Date Made Active in Reports: 07/07/2025
Number of Days to Update: 83

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/13/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 04/04/2025
Date Data Arrived at EDR: 06/02/2025
Date Made Active in Reports: 08/12/2025
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/20/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 07/28/2025
Date Data Arrived at EDR: 07/29/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 84

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/14/2025
Date Data Arrived at EDR: 07/15/2025
Date Made Active in Reports: 10/06/2025
Number of Days to Update: 83

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/13/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/27/2025
Date Data Arrived at EDR: 08/28/2025
Date Made Active in Reports: 11/14/2025
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/18/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 08/21/2025
Date Data Arrived at EDR: 08/21/2025
Date Made Active in Reports: 11/07/2025
Number of Days to Update: 78

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 11/19/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/11/2025
Date Data Arrived at EDR: 06/12/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 4

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/31/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/03/2025
Number of Days to Update: 85

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 07/23/2025
Date Data Arrived at EDR: 07/23/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 6

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/06/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/02/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/03/2025
Date Made Active in Reports: 06/16/2025
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 10/30/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/11/2025
Next Scheduled EDR Contact: 12/22/2025
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 08/11/2025
Date Made Active in Reports: 11/10/2025
Number of Days to Update: 91
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/10/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/14/2025
Date Data Arrived at EDR: 07/14/2025
Date Made Active in Reports: 10/13/2025
Number of Days to Update: 91
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/14/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 11/03/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 15

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 07/01/2025
Date Data Arrived at EDR: 07/29/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/08/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 28

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 08/12/2025
Date Data Arrived at EDR: 09/30/2025
Date Made Active in Reports: 11/24/2025
Number of Days to Update: 55

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 09/30/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 09/23/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/11/2025
Date Data Arrived at EDR: 08/12/2025
Date Made Active in Reports: 11/04/2025
Number of Days to Update: 84

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 10/23/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 11/19/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 11/18/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 10/30/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/17/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 06/30/2025
Date Data Arrived at EDR: 07/17/2025
Date Made Active in Reports: 10/13/2025
Number of Days to Update: 88
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/20/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2025
Date Data Arrived at EDR: 07/29/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 91

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 11/20/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/07/2025
Number of Days to Update: 16

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 09/29/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 05/15/2025
Date Data Arrived at EDR: 05/15/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 75

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/10/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 10/28/2025
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 07/01/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 09/24/2025
Number of Days to Update: 85

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/08/2025
Date Data Arrived at EDR: 08/18/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 86

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/20/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 04/08/2025
Date Data Arrived at EDR: 05/20/2025
Date Made Active in Reports: 08/12/2025
Number of Days to Update: 84

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/12/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/20/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 06/04/2024
Date Data Arrived at EDR: 11/22/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 88

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/20/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2025
Date Data Arrived at EDR: 09/10/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 63

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 09/04/2025
Date Data Arrived at EDR: 10/01/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 48

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 11/19/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2025
Date Data Arrived at EDR: 09/26/2025
Date Made Active in Reports: 11/24/2025
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 07/31/2025
Date Data Arrived at EDR: 08/14/2025
Date Made Active in Reports: 11/04/2025
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/29/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/07/2025
Date Data Arrived at EDR: 08/07/2025
Date Made Active in Reports: 11/04/2025
Number of Days to Update: 89

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/06/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 09/24/2025
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 11/12/2024
Date Data Arrived at EDR: 07/21/2025
Date Made Active in Reports: 10/13/2025
Number of Days to Update: 84

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/15/2024
Date Data Arrived at EDR: 03/06/2025
Date Made Active in Reports: 06/03/2025
Number of Days to Update: 89

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 06/23/2025
Date Data Arrived at EDR: 06/26/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 09/25/2025
Date Data Arrived at EDR: 09/26/2025
Date Made Active in Reports: 11/24/2025
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 09/26/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/24/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 09/24/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 07/06/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 11/06/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA’s UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA’s Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 11/06/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Semi-Annually

E MANIFEST: Hazardous Waste Electronic Manifest System

EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 08/13/2025
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

Date of Government Version: 09/02/2025
Date Data Arrived at EDR: 09/03/2025
Date Made Active in Reports: 11/19/2025
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 09/02/2025
Date Data Arrived at EDR: 09/02/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 09/02/2025
Date Data Arrived at EDR: 09/02/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/12/2025
Date Data Arrived at EDR: 06/12/2025
Date Made Active in Reports: 09/05/2025
Number of Days to Update: 85
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

CUPA LIV-PLE: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 09/19/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 87
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 11/06/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Varies

DRYCLEAN LAKE: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 02/15/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 76
Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQUIN: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 05/05/2025
Date Data Arrived at EDR: 05/07/2025
Date Made Active in Reports: 07/28/2025
Number of Days to Update: 82
Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69
Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 10/02/2024
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 78
Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN N COAST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468

Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 08/29/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDOCINO: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 71

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List

Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/26/2024
Date Made Active in Reports: 04/16/2024
Number of Days to Update: 81

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 10/23/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Varies

DRYCLEAN N SIERRA: Northern Sierra Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 05/05/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/21/2025
Date Data Arrived at EDR: 08/26/2025
Date Made Active in Reports: 11/14/2025
Number of Days to Update: 80

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 11/18/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 08/12/2025
Date Data Arrived at EDR: 08/26/2025
Date Made Active in Reports: 11/14/2025
Number of Days to Update: 80

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Varies

DRYCLEAN MOJAVE: Mojave Desert Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 05/02/2025
Date Data Arrived at EDR: 05/02/2025
Date Made Active in Reports: 07/18/2025
Number of Days to Update: 77

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/20/2025
Date Data Arrived at EDR: 08/20/2025
Date Made Active in Reports: 11/07/2025
Number of Days to Update: 79

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 11/17/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Varies

DRYCLEAN EAST KERN: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 04/03/2025
Date Data Arrived at EDR: 05/07/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 83

Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTERY BAY: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 04/15/2025
Date Data Arrived at EDR: 05/07/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 83

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 05/02/2025
Date Data Arrived at EDR: 05/07/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 83

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 05/05/2025
Date Data Arrived at EDR: 05/07/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 83

Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 05/15/2025
Date Data Arrived at EDR: 05/15/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 75

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GLENN: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77
Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RVR: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88
Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N SONOMA: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 08/23/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 71
Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 06/05/2025
Date Data Arrived at EDR: 06/11/2025
Date Made Active in Reports: 08/20/2025
Number of Days to Update: 70
Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 05/02/2025
Date Data Arrived at EDR: 05/08/2025
Date Made Active in Reports: 07/28/2025
Number of Days to Update: 81
Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 05/02/2025
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 03/11/2025
Date Made Active in Reports: 05/23/2025
Number of Days to Update: 73
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/11/2025
Next Scheduled EDR Contact: 12/22/2025
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/14/2025
Date Data Arrived at EDR: 07/14/2025
Date Made Active in Reports: 10/03/2025
Number of Days to Update: 81
Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/14/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

FIN ASSURANCE 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 07/08/2025
Date Data Arrived at EDR: 07/09/2025
Date Made Active in Reports: 10/03/2025
Number of Days to Update: 86

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

FIN ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/08/2025
Date Data Arrived at EDR: 08/25/2025
Date Made Active in Reports: 11/10/2025
Number of Days to Update: 77

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 10/28/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/07/2025
Date Data Arrived at EDR: 08/07/2025
Date Made Active in Reports: 10/31/2025
Number of Days to Update: 85

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/06/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/07/2025
Date Data Arrived at EDR: 08/07/2025
Date Made Active in Reports: 11/03/2025
Number of Days to Update: 88

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/06/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 06/25/2025
Date Data Arrived at EDR: 06/25/2025
Date Made Active in Reports: 09/18/2025
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 09/29/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/02/2025
Date Made Active in Reports: 08/18/2025
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 09/23/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2024
Date Data Arrived at EDR: 06/30/2025
Date Made Active in Reports: 08/18/2025
Number of Days to Update: 49

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 09/29/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/02/2025
Date Data Arrived at EDR: 09/03/2025
Date Made Active in Reports: 11/19/2025
Number of Days to Update: 77

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 08/05/2025
Date Data Arrived at EDR: 08/21/2025
Date Made Active in Reports: 11/10/2025
Number of Days to Update: 81

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 11/26/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/04/2025
Date Data Arrived at EDR: 08/05/2025
Date Made Active in Reports: 10/23/2025
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 08/21/2025
Date Data Arrived at EDR: 08/21/2025
Date Made Active in Reports: 11/10/2025
Number of Days to Update: 81

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 11/19/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 06/04/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 08/27/2025
Number of Days to Update: 84
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/03/2025
Next Scheduled EDR Contact: 12/22/2025
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Annually

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 81
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/02/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/09/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 11/25/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 08/21/2025
Date Data Arrived at EDR: 08/21/2025
Date Made Active in Reports: 11/07/2025
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 11/19/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/14/2025
Date Data Arrived at EDR: 07/14/2025
Date Made Active in Reports: 10/06/2025
Number of Days to Update: 84

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/13/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 08/29/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/17/2025
Number of Days to Update: 80

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/24/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/23/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 12/26/2023
Date Made Active in Reports: 03/19/2024
Number of Days to Update: 84

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/23/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 09/23/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 03/17/2025
Date Data Arrived at EDR: 03/19/2025
Date Made Active in Reports: 05/30/2025
Number of Days to Update: 72

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/09/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/15/2025
Date Data Arrived at EDR: 07/16/2025
Date Made Active in Reports: 10/08/2025
Number of Days to Update: 84

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/05/2025
Date Data Arrived at EDR: 02/12/2025
Date Made Active in Reports: 05/02/2025
Number of Days to Update: 79

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/08/2025
Date Data Arrived at EDR: 07/09/2025
Date Made Active in Reports: 10/03/2025
Number of Days to Update: 86

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/30/2025
Date Data Arrived at EDR: 07/30/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 83

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/30/2025
Date Data Arrived at EDR: 07/30/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 83

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 01/28/2025
Date Data Arrived at EDR: 01/29/2025
Date Made Active in Reports: 04/15/2025
Number of Days to Update: 76

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/09/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/03/2025
Next Scheduled EDR Contact: 12/22/2025
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/01/2025
Date Data Arrived at EDR: 07/09/2025
Date Made Active in Reports: 10/03/2025
Number of Days to Update: 86

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 09/23/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/03/2025
Date Data Arrived at EDR: 07/03/2025
Date Made Active in Reports: 09/26/2025
Number of Days to Update: 85

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/17/2024
Number of Days to Update: 75

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 09/30/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/09/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 07/09/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 80

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/09/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/03/2025
Date Data Arrived at EDR: 06/12/2025
Date Made Active in Reports: 09/05/2025
Number of Days to Update: 85

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/03/2025
Date Data Arrived at EDR: 06/12/2025
Date Made Active in Reports: 09/05/2025
Number of Days to Update: 85
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation LA County List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 04/29/2025
Date Data Arrived at EDR: 07/10/2025
Date Made Active in Reports: 10/03/2025
Number of Days to Update: 85
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/16/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/16/2025
Date Data Arrived at EDR: 07/17/2025
Date Made Active in Reports: 10/09/2025
Number of Days to Update: 84
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/08/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72
Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/11/2025
Date Data Arrived at EDR: 08/12/2025
Date Made Active in Reports: 11/04/2025
Number of Days to Update: 84

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/25/2025
Date Data Arrived at EDR: 09/26/2025
Date Made Active in Reports: 10/08/2025
Number of Days to Update: 12

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/25/2025
Date Data Arrived at EDR: 07/29/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 84

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Orange County
Petroleum and non-petroleum spills.

Date of Government Version: 07/30/2025
Date Data Arrived at EDR: 07/30/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/30/2025
Date Data Arrived at EDR: 07/30/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/29/2025
Date Data Arrived at EDR: 04/30/2025
Date Made Active in Reports: 07/17/2025
Number of Days to Update: 78

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: No Update Planned

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/19/2025
Date Data Arrived at EDR: 08/19/2025
Date Made Active in Reports: 11/06/2025
Number of Days to Update: 79

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 11/18/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/11/2024
Date Data Arrived at EDR: 06/12/2024
Date Made Active in Reports: 06/27/2024
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 11/26/2025
Next Scheduled EDR Contact: 03/23/2026
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 03/06/2025
Date Data Arrived at EDR: 03/07/2025
Date Made Active in Reports: 05/22/2025
Number of Days to Update: 76

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/03/2025
Next Scheduled EDR Contact: 12/22/2025
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 07/25/2025
Date Data Arrived at EDR: 07/29/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 84

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/20/2025
Date Data Arrived at EDR: 08/20/2025
Date Made Active in Reports: 11/10/2025
Number of Days to Update: 82

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/27/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/21/2025
Date Data Arrived at EDR: 08/21/2025
Date Made Active in Reports: 11/10/2025
Number of Days to Update: 81

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 11/19/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 01/15/2025
Date Made Active in Reports: 03/28/2025
Number of Days to Update: 72

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing
A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/18/2025
Next Scheduled EDR Contact: 03/09/2026
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 05/02/2025
Date Data Arrived at EDR: 05/07/2025
Date Made Active in Reports: 07/30/2025
Number of Days to Update: 84
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 07/10/2025
Date Data Arrived at EDR: 07/29/2025
Date Made Active in Reports: 10/20/2025
Number of Days to Update: 83
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
A listing of properties that fall within a Maher Ordinance, for all of San Francisco. The Maher Ordinance requires San Francisco Department of Public Health (DPH) oversight for the characterization and mitigation of hazardous substances found in soil, soil vapor, and groundwater in areas designated within the Maher map. The Maher map includes areas with current or historical industrial use or zoning; areas within 100 feet of current or historical underground tanks; filled former Bay, marsh, or creek areas; or areas within 150 feet of a current or former elevated highway. City of San Francisco Planning.

Date of Government Version: 07/13/2025
Date Data Arrived at EDR: 07/14/2025
Date Made Active in Reports: 10/06/2025
Number of Days to Update: 84
Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 10/14/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/03/2025
Next Scheduled EDR Contact: 12/22/2025
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/04/2025
Date Data Arrived at EDR: 11/05/2025
Date Made Active in Reports: 11/14/2025
Number of Days to Update: 9

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 11/21/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 11/21/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 08/08/2025
Date Data Arrived at EDR: 08/12/2025
Date Made Active in Reports: 11/03/2025
Number of Days to Update: 83
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90
Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

SITE MIT SANTA CRUZ: Site Mitigation Santa Cruz County List
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20
Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51
Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/09/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/09/2025
Next Scheduled EDR Contact: 12/29/2025
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 09/30/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/05/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 11/11/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 02/11/2025
Date Data Arrived at EDR: 02/12/2025
Date Made Active in Reports: 05/02/2025
Number of Days to Update: 79

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/04/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 04/09/2025
Date Data Arrived at EDR: 04/10/2025
Date Made Active in Reports: 06/27/2025
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/22/2025
Next Scheduled EDR Contact: 02/09/2026
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/07/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/21/2025
Date Made Active in Reports: 10/09/2025
Number of Days to Update: 80

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/13/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/28/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/17/2025
Date Made Active in Reports: 10/09/2025
Number of Days to Update: 84

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/13/2025
Next Scheduled EDR Contact: 01/26/2026
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/26/2025
Date Data Arrived at EDR: 08/29/2025
Date Made Active in Reports: 11/18/2025
Number of Days to Update: 81

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/29/2025
Next Scheduled EDR Contact: 12/15/2025
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/16/2025
Date Data Arrived at EDR: 09/17/2025
Date Made Active in Reports: 10/02/2025
Number of Days to Update: 15

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/16/2025
Next Scheduled EDR Contact: 01/05/2026
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 07/02/2025
Date Data Arrived at EDR: 07/29/2025
Date Made Active in Reports: 10/21/2025
Number of Days to Update: 84

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/15/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2025
Date Data Arrived at EDR: 07/31/2025
Date Made Active in Reports: 10/16/2025
Number of Days to Update: 77

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/03/2025
Next Scheduled EDR Contact: 02/16/2026
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 09/24/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/23/2025
Next Scheduled EDR Contact: 02/02/2026
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/01/2025
Next Scheduled EDR Contact: 01/19/2026
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/05/2025
Next Scheduled EDR Contact: 02/23/2026
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 11/21/2025
Next Scheduled EDR Contact: 03/16/2026
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

VACANT LAND
APN 111-290-015-000
FARMERSVILLE, CA 93292

TARGET PROPERTY COORDINATES

Latitude (North):	36.314985 - 36° 18' 53.95''
Longitude (West):	119.205813 - 119° 12' 20.93''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	301969.4
UTM Y (Meters):	4020942.8
Elevation:	365 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	50005762 EXETER, CA
Version Date:	2021

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

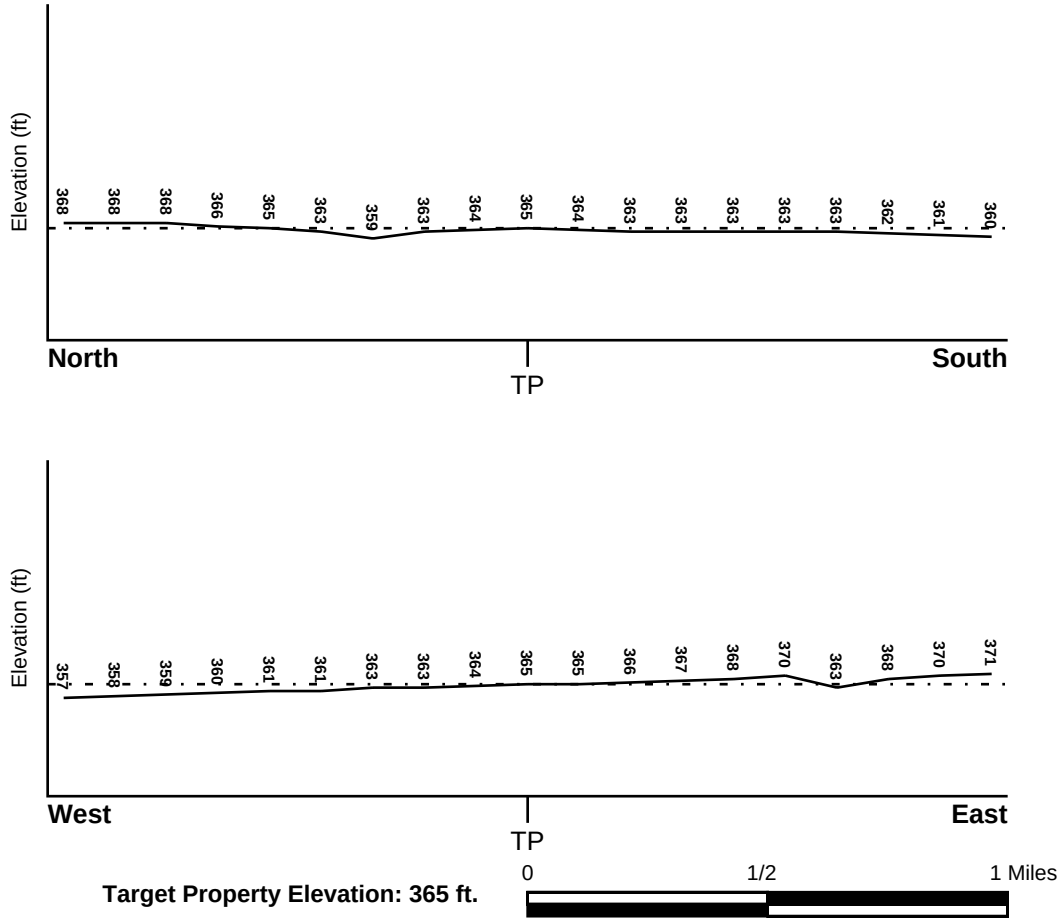
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06107C0954E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06107C0955E	FEMA FIRM Flood data
06107C0965E	FEMA FIRM Flood data
06107C0962E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
EXETER	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

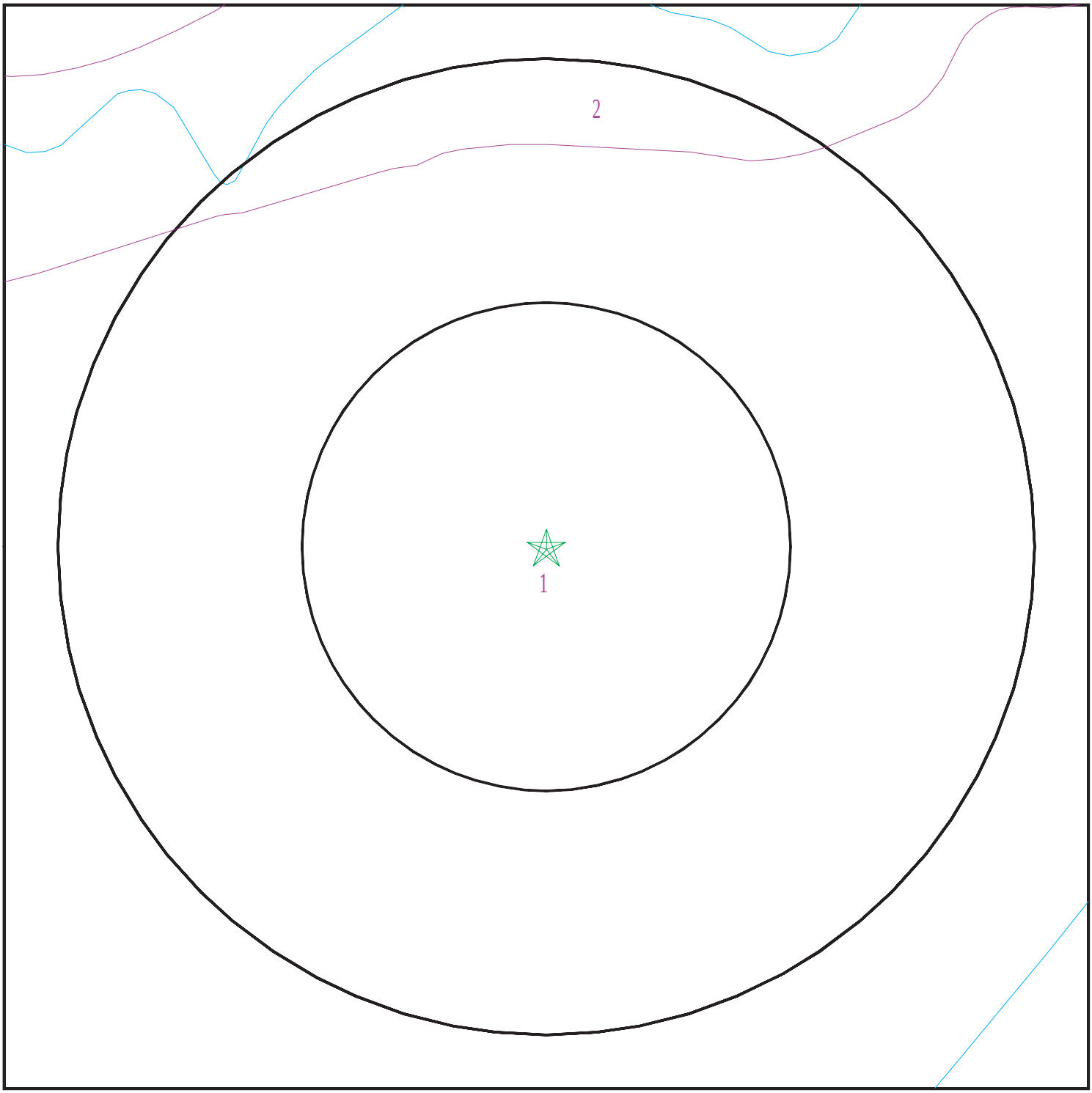
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 8187223.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Vacant Land	CLIENT:	KCE Matrix
ADDRESS:	APN 111-290-015-000 Farmersville CA 93292	CONTACT:	Hagop T.
		INQUIRY #:	8187223.2s
LAT/LONG:	36.314985 / 119.205813	DATE:	December 01, 2025 1:23 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Nord

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6
2	11 inches	38 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6
3	38 inches	50 inches	stratified loamy coarse sand to coarse sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	50 inches	72 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: Grangeville

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 8.4 Min: 6.6
2	16 inches	27 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 8.4 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	27 inches	66 inches	stratified loamy sand to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
9	USGS40000171974	1/2 - 1 Mile ESE
12	USGS40000171903	1/2 - 1 Mile SSE
C22	USGS40000171881	1/2 - 1 Mile South
24	USGS40000172174	1/2 - 1 Mile NNE
G36	USGS40000172224	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

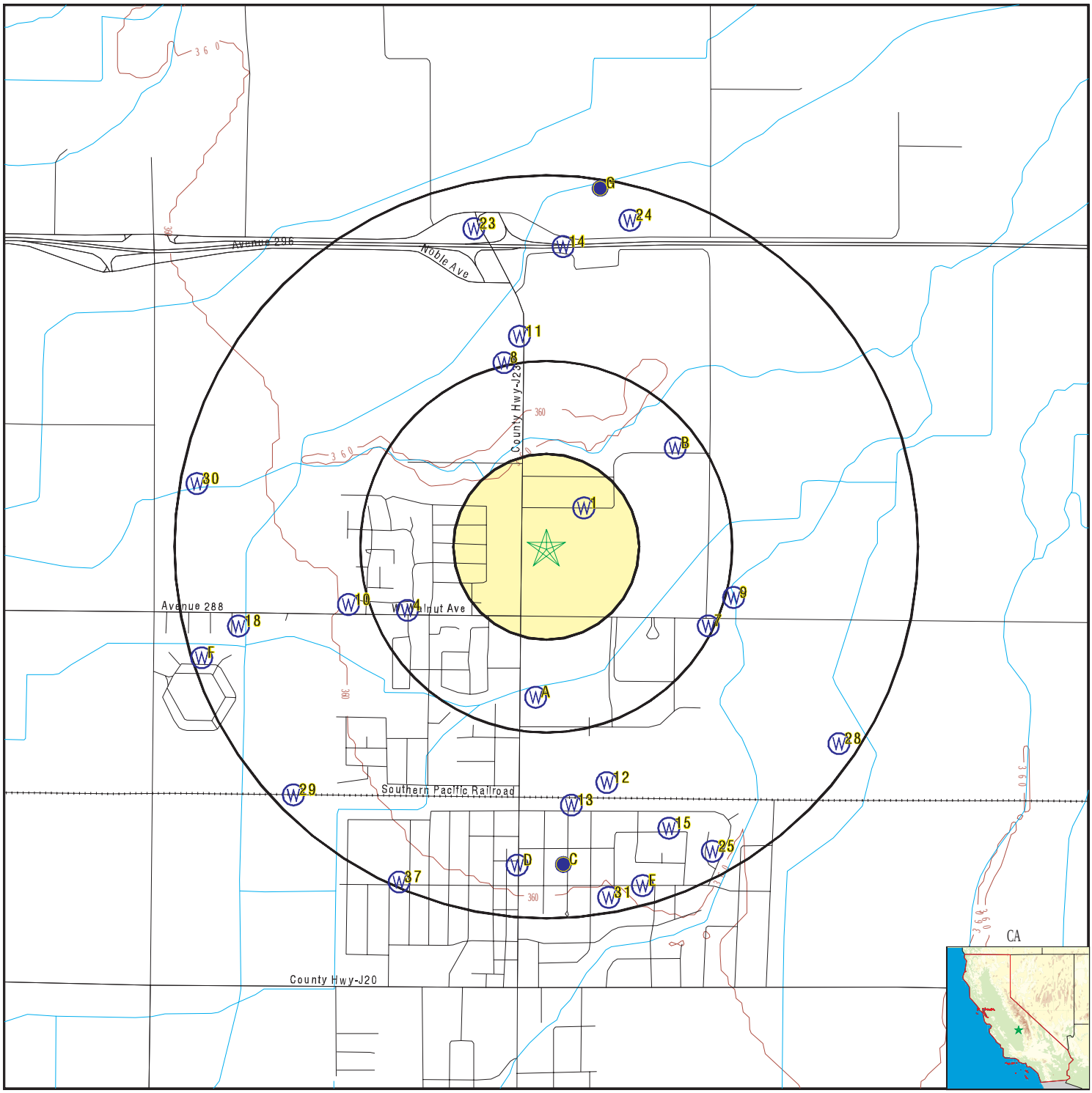
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAGAMA000000901	1/8 - 1/4 Mile NE
A2	14579	1/4 - 1/2 Mile South
A3	CADDW2000001163	1/4 - 1/2 Mile South
4	CADDW2000019236	1/4 - 1/2 Mile WSW
B5	13961	1/4 - 1/2 Mile NE
B6	13960	1/4 - 1/2 Mile NE
7	CADWR9000025215	1/4 - 1/2 Mile ESE
8	13953	1/2 - 1 Mile NNW
10	13962	1/2 - 1 Mile WSW
11	CADDW2000022284	1/2 - 1 Mile North
13	CADDW2000008945	1/2 - 1 Mile South
14	CADWR9000025368	1/2 - 1 Mile North
15	CADPR0000004107	1/2 - 1 Mile SSE
C16	14580	1/2 - 1 Mile South
D17	14552	1/2 - 1 Mile South
18	14551	1/2 - 1 Mile WSW
D19	CADWR0000025306	1/2 - 1 Mile South
D20	CADWR0000033428	1/2 - 1 Mile South
D21	CADWR0000011008	1/2 - 1 Mile South
23	CADDW2000007909	1/2 - 1 Mile NNW
25	CADPR0000004356	1/2 - 1 Mile SSE
E26	CADDW2000010062	1/2 - 1 Mile SSE
E27	14581	1/2 - 1 Mile SSE
28	CADPR0000000810	1/2 - 1 Mile SE
29	CADPR0000001487	1/2 - 1 Mile SW
30	13955	1/2 - 1 Mile West
31	CADDW2000005360	1/2 - 1 Mile South
F32	CADDW2000020807	1/2 - 1 Mile WSW
G33	CADWR0000022900	1/2 - 1 Mile North
G34	CADWR9000025437	1/2 - 1 Mile North
G35	CAUSGSN00001970	1/2 - 1 Mile North
37	CADDW2000001549	1/2 - 1 Mile SSW
F38	14550	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 8187223.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Vacant Land	CLIENT:	KCE Matrix
ADDRESS:	APN 111-290-015-000 Farmersville CA 93292	CONTACT:	Hagop T.
		INQUIRY #:	8187223.2s
LAT/LONG:	36.314985 / 119.205813	DATE:	December 01, 2025 1:23 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
NE
1/8 - 1/4 Mile
Higher

CA WELLS **CAGAMA000000901**

Well ID:	TUL1056	Well Type:	DOMESTIC
Source:	Groundwater Ambient Monitoring and Assessment Program		
Other Name:	TUL1056	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=GAMA&samp_date=&global_id=&assigned_name=TUL1056&store_num=		
GeoTracker Data:	Not Reported		

A2
South
1/4 - 1/2 Mile
Lower

CA WELLS **14579**

Seq:	14579	Prim sta c:	19S/26E-06E01 M
Frds no:	5410004004	County:	54
District:	12	User id:	CYA
System no:	5410004	Water type:	G
Source nam:	WELL 04A	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361833.0	Longitude:	1191218.0
Precision:	2	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5410004	System nam:	Farmersville, City Of
Hqname:	Not Reported	Address:	147 E. FRONT ST
City:	FARMERSVILLE	State:	CA
Zip:	93223	Zip ext:	Not Reported
Pop serv:	6981	Connection:	1851
Area serve:	FARMERSVILLE CITY		

Sample date:	08-JUN-17	Finding:	0.7
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		

Sample date:	08-JUN-17	Finding:	6.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		

Sample date:	08-JUN-17	Finding:	140.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		

Sample date:	08-JUN-17	Finding:	5.4
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	08-JUN-17	Finding:	2.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	1.
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported

Dlr:	0.		
Sample date:	08-JUN-17	Finding:	7.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	4.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	14.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	51.4
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	70.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	50.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	6.4
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	138.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	80.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	9.6
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-JUL-16	Finding:	0.542
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	10-DEC-15	Finding:	0.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-SEP-14	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		

Sample date:	23-SEP-14	Finding:	10.7
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	2.5
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	23-SEP-14	Finding:	2.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-SEP-14	Finding:	100.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	1.1
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	5.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	23-SEP-14	Finding:	70.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	23-SEP-14	Finding:	16.1
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	23-SEP-14	Finding:	5.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	23-SEP-14	Finding:	2.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	0.4
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	7.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	4.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	14.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	51.4
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L

Dlr:	0.		
Sample date:	23-SEP-14	Finding:	70.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	50.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	139.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	600.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-NOV-13	Finding:	2.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	2.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

A3
South **CA WELLS** **CADDW2000001163**
1/4 - 1/2 Mile
Lower

GAMA:

Well ID:	CA5410004_004_004	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5410004-004
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5410004_004_004&store_num=		
GeoTracker Data:	Not Reported		

4
WSW **CA WELLS** **CADDW2000019236**
1/4 - 1/2 Mile
Lower

GAMA:

Well ID:	CA5410004_014_014	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5410004-014
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5410004_014_014&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B5
NE
1/4 - 1/2 Mile
Higher

CA WELLS **13961**

Seq:	13961	Prim sta c:	18S/26E-31L02 M
Frds no:	5400635002	County:	54
District:	84	User id:	54C
System no:	5400635	Water type:	G
Source nam:	WELL 02	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361908.0	Longitude:	1191157.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5400635	System nam:	Martin Water System
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

B6
NE
1/4 - 1/2 Mile
Higher

CA WELLS **13960**

Seq:	13960	Prim sta c:	18S/26E-31L01 M
Frds no:	5400635001	County:	54
District:	84	User id:	54C
System no:	5400635	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361908.0	Longitude:	1191153.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5400635	System nam:	Martin Water System
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

7
ESE
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR9000025215**

State Well #:	19S26E06C001M	Station ID:	35229
Well Name:	Not Reported	Basin Name:	Kaweah
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

8
NNW
1/2 - 1 Mile
Lower | **CA WELLS** | **13953**

Seq:	13953	Prim sta c:	18S/25E-36A01 M
Frds no:	5410004007	County:	54
District:	12	User id:	CYA
System no:	5410004	Water type:	G
Source nam:	WELL 07A - TREATED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361920.0	Longitude:	1191225.0
Precision:	3	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5410004	System nam:	Farmersville, City Of
Hqname:	Not Reported	Address:	147 E. FRONT ST
City:	FARMERSVILLE	State:	CA
Zip:	93223	Zip ext:	Not Reported
Pop serv:	6981	Connection:	1851
Area serve:	FARMERSVILLE CITY		

Sample date:	08-JUN-17	Finding:	1.6
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	08-JUN-17	Finding:	4.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		

Sample date:	08-JUN-17	Finding:	31.2
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	08-JUN-17	Finding:	6.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	1.
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	13.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	6.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	29.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	97.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-JUN-17	Finding:	110.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	90.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	6.4
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	270.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	170.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	10.2
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	0.3
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	05-JUL-16	Finding:	1.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-JUL-16	Finding:	4.8e-002
Chemical:	RADIUM 228	Report units:	PCI/L
Dlr:	1.		
Sample date:	05-JUL-16	Finding:	0.545
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	10-DEC-15	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-SEP-14	Finding:	2500.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-SEP-14	Finding:	1.25
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L

Dlr:	0.		
Sample date:	24-SEP-14	Finding:	0.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	24-SEP-14	Finding:	2.e-002
Chemical:	MERCURY	Report units:	UG/L
Dlr:	1.		
Sample date:	24-SEP-14	Finding:	220.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	1.27
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	40.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	9.e-002
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	24-SEP-14	Finding:	51.8
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	42.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	24-SEP-14	Finding:	7.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	0.9
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	6.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	34.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	110.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	24-SEP-14	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	7.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	323.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	24-SEP-14	Finding:	11.1
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-NOV-13	Finding:	4.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	2.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

9
ESE **FED USGS** **USGS40000171974**
1/2 - 1 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	019S026E06C001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1949	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1962-01-16
Feet below surface:	48.80	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

10
WSW
1/2 - 1 Mile
Lower

CA WELLS **13962**

Seq:	13962	Prim sta c:	18S/26E-31N01 M
Frds no:	5400643001	County:	54
District:	84	User id:	54C
System no:	5400643	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361846.0	Longitude:	1191252.0
Precision:	3	Status:	AR
Comment 1:	28880 RD 164 FARMERSVILLE	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5400643	System nam:	Copping Water System
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

11
North
1/2 - 1 Mile
Higher

CA WELLS **CADDW2000022284**

GAMA:

Well ID:	CA5410004_007_007	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5410004-007
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5410004_007_007&store_num=		
GeoTracker Data:	Not Reported		

12
SSE
1/2 - 1 Mile
Lower

FED USGS **USGS40000171903**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	019S026E06M003M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	160
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1961-05-22
Feet below surface:	50.00	Feet to sea level:	Not Reported

Note: Not Reported

13
South
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000008945**

GAMA:

Well ID:	CA5410004_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5410004-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5410004_001_001&store_num=		
GeoTracker Data:	Not Reported		

14
North
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000025368**

State Well #:	18S26E31D001M	Station ID:	35153
Well Name:	Not Reported	Basin Name:	Kaweah
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

15
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADPR0000004107**

Well ID:	96473	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	96473	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96473&store_num=		
GeoTracker Data:	Not Reported		

C16
South
1/2 - 1 Mile
Lower

CA WELLS **14580**

Seq:	14580	Prim sta c:	19S/26E-06L01 M
Frds no:	5410004005	County:	54
District:	12	User id:	CYA
System no:	5410004	Water type:	G
Source nam:	WELL 05A - TREATED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361810.0	Longitude:	1191215.0
Precision:	2	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5410004	System nam:	Farmersville, City Of

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Hqname:	Not Reported	Address:	147 E. FRONT ST
City:	FARMERSVILLE	State:	CA
Zip:	93223	Zip ext:	Not Reported
Pop serv:	6981	Connection:	1851
Area serve:	FARMERSVILLE CITY		

Sample date:	08-JUN-17	Finding:	400.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		

Sample date:	08-JUN-17	Finding:	0.6
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	08-JUN-17	Finding:	4.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	08-JUN-17	Finding:	2.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	1.
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	6.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	4.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	13.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	48.9
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	0.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	08-JUN-17	Finding:	70.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	50.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	7.6
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	134.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	9.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	08-JUN-17	Finding:	70.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	1.4
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	08-JUN-17	Finding:	10.8
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-JUL-16	Finding:	0.483
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	15-DEC-15	Finding:	2.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-14	Finding:	11.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	1.6
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	24-SEP-14	Finding:	3.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-14	Finding:	130.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	8.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	24-SEP-14	Finding:	110.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	24.3
Chemical:	BARIUM	Report units:	UG/L

Dlr:	100.		
Sample date:	24-SEP-14	Finding:	7.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	24-SEP-14	Finding:	3.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	0.3
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	6.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	5.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	16.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	60.5
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	70.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	60.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	7.6
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	153.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	700.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-DEC-13	Finding:	2.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	0.939
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		

Sample date:	07-JUN-12	Finding:	4.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	1.07
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

D17
South
1/2 - 1 Mile
Lower

CA WELLS 14552

Seq:	14552	Prim sta c:	19S/25E-01K01 M
Frds no:	5410004006	County:	54
District:	12	User id:	CYA
System no:	5410004	Water type:	G
Source nam:	WELL 06A - TREATED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361810.0	Longitude:	1191225.0
Precision:	2	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5410004	System nam:	Farmersville, City Of
Hqname:	Not Reported	Address:	147 E. FRONT ST
City:	FARMERSVILLE	State:	CA
Zip:	93223	Zip ext:	Not Reported
Pop serv:	6981	Connection:	1851
Area serve:	FARMERSVILLE CITY		
Sample date:	07-JUN-17	Finding:	6.2
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	07-JUN-17	Finding:	60.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	1.
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	9.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	5.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	17.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	63.

Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	1.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUN-17	Finding:	80.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	70.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	169.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	3.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	0.4
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	07-JUN-17	Finding:	6.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	07-JUN-17	Finding:	1.1
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUN-17	Finding:	11.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-JUL-16	Finding:	0.505
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	10-DEC-15	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-SEP-14	Finding:	1900.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	24-SEP-14	Finding:	3.
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	24-SEP-14	Finding:	2.e-002
Chemical:	MERCURY	Report units:	UG/L
Dlr:	1.		
Sample date:	24-SEP-14	Finding:	8.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-14	Finding:	160.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	5.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	24-SEP-14	Finding:	220.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	30.7
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	8.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	24-SEP-14	Finding:	3.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	0.5
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	10.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	6.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	22.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	79.6
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	100.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L

Dlr:	0.		
Sample date:	24-SEP-14	Finding:	80.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	208.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	11.1
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-NOV-13	Finding:	2.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	1.26
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-JUN-12	Finding:	7.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	1.45
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

18
WSW
1/2 - 1 Mile
Lower

CA WELLS 14551

Seq:	14551	Prim sta c:	19S/25E-01D02 M
Frds no:	5400631002	County:	54
District:	84	User id:	54C
System no:	5400631	Water type:	G
Source nam:	STANDBY WELL NORTH EAST	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361843.0	Longitude:	1191311.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5400631	System nam:	Linnell Farm Labor Camp
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		
Sample date:	24-JAN-18	Finding:	0.69
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	30-OCT-17	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	0.77
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	30-OCT-17	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	0.365
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	4.03
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	30-OCT-17	Finding:	180.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	30-OCT-17	Finding:	25.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	30-OCT-17	Finding:	10.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	12.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	7.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	35.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	120.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	2.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	130.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	110.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported

Dlr:	0.		
Sample date:	30-OCT-17	Finding:	320.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	1.06
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	2.1
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	31-JAN-17	Finding:	280.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	19-JAN-17	Finding:	2.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	19-MAY-16	Finding:	300.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	25-JAN-16	Finding:	2.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	27-JAN-15	Finding:	7.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-OCT-14	Finding:	1.7
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-OCT-14	Finding:	0.48
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-OCT-14	Finding:	0.292
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.45
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.381
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	6.07
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		

Sample date:	29-MAY-14	Finding:	21.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	29-MAY-14	Finding:	7.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	12.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	42.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	8.2
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	310.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.414
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.214
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	7.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-MAY-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	9.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	28-JAN-13	Finding:	9.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr: 2.

D19
South **CA WELLS** **CADWR0000025306**
1/2 - 1 Mile
Lower

Well ID:	19S26E06M003M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	19S26E06M003M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=19S26E06M003M&store_num=		
GeoTracker Data:	Not Reported		

D20
South **CA WELLS** **CADWR0000033428**
1/2 - 1 Mile
Lower

Well ID:	19S26E06M002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	19S26E06M002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=19S26E06M002M&store_num=		
GeoTracker Data:	Not Reported		

D21
South **CA WELLS** **CADWR0000011008**
1/2 - 1 Mile
Lower

Well ID:	19S26E06M004M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	19S26E06M004M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=19S26E06M004M&store_num=		
GeoTracker Data:	Not Reported		

C22
South **FED USGS** **USGS40000171881**
1/2 - 1 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	019S026E06M001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1956	Well Depth:	150
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1961-02-09
Feet below surface:	40.90	Feet to sea level:	Not Reported
Note:	Not Reported		

23
NNW **CA WELLS** **CADDW2000007909**
1/2 - 1 Mile
Higher

GAMA:

Well ID:	CA5403141_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5403141-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5403141_001_001&store_num=		
GeoTracker Data:	Not Reported		

24
NNE **FED USGS** **USGS40000172174**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	018S026E31D001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1962-01-12
Feet below surface:	36.10	Feet to sea level:	Not Reported
Note:	Not Reported		

25
SSE **CA WELLS** **CADPR0000004356**
1/2 - 1 Mile
Lower

Well ID:	96477	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	96477	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96477&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E26
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000010062**

GAMA:

Well ID:	CA5410004_005_005	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5410004-005
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5410004_005_005&store_num=		
GeoTracker Data:	Not Reported		

E27
SSE
1/2 - 1 Mile
Lower

CA WELLS **14581**

Seq:	14581	Prim sta c:	19S/26E-06L02 M
Frds no:	5400657001	County:	54
District:	84	User id:	54C
System no:	5400657	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361806.0	Longitude:	1191203.0
Precision:	3	Status:	AR
Comment 1:	477 E ASH FARMERSVILLE	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5400657	System nam:	Hester School
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

28
SE
1/2 - 1 Mile
Higher

CA WELLS **CADPR0000000810**

Well ID:	96475	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	96475	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96475&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

29
SW
1/2 - 1 Mile
Lower

CA WELLS **CADPR0000001487**

Well ID:	96419	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	96419	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96419&store_num=		
GeoTracker Data:	Not Reported		

30
West
1/2 - 1 Mile
Lower

CA WELLS **13955**

Seq:	13955	Prim sta c:	18S/25E-36D02 M
Frds no:	5400649001	County:	54
District:	84	User id:	54C
System no:	5400649	Water type:	G
Source nam:	NORTHEAST WELL	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361903.0	Longitude:	1191318.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5400649	System nam:	Oke Water Company
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

31
South
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000005360**

GAMA:

Well ID:	CA5400657_001_001	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5400657-001
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5400657_001_001&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F32
WSW
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000020807**

GAMA:

Well ID:	CA5400631_002_002	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5400631-002
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5400631_002_002&store_num=		
GeoTracker Data:	Not Reported		

G33
North
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000022900**

Well ID:	18S26E30N001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	18S26E30N001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=18S26E30N001M&store_num=		
GeoTracker Data:	Not Reported		

G34
North
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000025437**

State Well #:	18S26E30N001M	Station ID:	40078
Well Name:	18S26E30N001M	Basin Name:	Kaweah
Well Use:	Observation	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

G35
North
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00001970**

Well ID:	USGS-361945119120901	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-361945119120901	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-361945119120901&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G36
North
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000172224**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	018S026E30N001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium of the Sierra Nevada, Younger (Pleistocene-Holocene)		
Aquifer Type:	Not Reported	Construction Date:	195106
Well Depth:	700	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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37
SSW
1/2 - 1 Mile
Lower | **CA WELLS** | **CADDW2000001549**

GAMA:

Well ID:	CA5410004_006_006	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	5410004-006
GAMA Pfas testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=CA5410004_006_006&store_num=		
GeoTracker Data:	Not Reported		

F38
WSW
1/2 - 1 Mile
Lower | **CA WELLS** | **14550**

Seq:	14550	Prim sta c:	19S/25E-01D01 M
Frds no:	5400631001	County:	54
District:	84	User id:	54C
System no:	5400631	Water type:	G
Source nam:	MAIN WELL	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361838.0	Longitude:	1191318.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5400631	System nam:	Linnell Farm Labor Camp
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		
Sample date:	24-JAN-18	Finding:	2.3
Chemical:	NITRATE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	13.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	1.06
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	1.3
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	290.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	110.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	130.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	1.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	110.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	33.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	7.4
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	6.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	18.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	30-OCT-17	Finding:	4.53
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		

Sample date:	30-OCT-17	Finding:	0.381
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	180.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	31-JAN-17	Finding:	310.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	19-JAN-17	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	19-MAY-16	Finding:	320.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	25-JAN-16	Finding:	1.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-JAN-15	Finding:	9.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-OCT-14	Finding:	2.25
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-OCT-14	Finding:	5.21
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	29-OCT-14	Finding:	0.411
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-OCT-14	Finding:	0.309
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	150.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	43.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	9.1
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	15.
Chemical:	SODIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	29-MAY-14	Finding:	7.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	25.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	29-MAY-14	Finding:	6.62
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	29-MAY-14	Finding:	0.397
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	220.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.35
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	330.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.321
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.306
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93292	73	22

Federal EPA Radon Zone for TULARE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for TULARE COUNTY, CA

Number of sites tested: 59

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.846 pCi/L	97%	3%	0%
Living Area - 2nd Floor	0.600 pCi/L	100%	0%	0%
Basement	3.100 pCi/L	50%	50%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

Geothermal Wells Listing
Department of Conservation
Telephone: 916-445-9686
Geothermal well means a well constructed to extract or return water to the ground after it has been used for heating or cooling purposes. Geothermal wells in California (except for wells on federal leases which are administered by the Bureau of Land Management) are permitted, drilled, operated, and permanently sealed and closed (plugged and abandoned) under requirements and procedures administered by the Geothermal Section of the Department of Conservations Geologic Energy Management Division (CalGEM, formerly DOGGR).

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C

REGULATORY RECORDS SEARCH

APPENDIX C-1

REGULATORY RECORDS SEARCH

CALIFORNIA STATE
REGIONAL WATER QUALITY CONTROL BOARD

Hagop Tatian

From: Hagop Tatian
Sent: Monday, December 1, 2025 9:20 AM
To: r5f-pra@waterboards.ca.gov
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: Location Map.jpg

To: RWQCB – Central Valley Office

KCE Matrix would like to inquire if the RWQCB agency maintains any records and/or documentation with regard to Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation documentation for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

If the waterboard does maintain such records, please advise as to the necessary procedure to obtain such records from your office.

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

Project Environmental Engineer

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Hagop Tatian

From: WB-RB5F-Records <RB5F-Records@Waterboards.ca.gov>
Sent: Thursday, December 11, 2025 9:30 AM
To: Hagop Tatian
Subject: Public Records Request Response - Central Valley Water Board; (APN: 111-290-015-000), Farmersville, CA 93292

Hello,

In response to your Public Records Request of 1 December 2025, no records were found on the following property(s):
APN: 111-290-015-000
Farmersville, CA 93292

The search was conducted with the GeoTracker database, available for public access at https://geotracker.waterboards.ca.gov/.
In addition to GeoTracker, the California Integrated Water Quality Systems (CIWQS) database was also used in the search, and is available for public access at http://www.waterboards.ca.gov/centralvalley/resources/data_databases/.
The California Storm Water Multiple Applications and Report Tracking System (Smarts) was also used in the search and is available for public access at http://smarts.waterboards.ca.gov.
If you have reason to believe that the Central Valley Water Board may have responsive records (contrary to this response), please let me know.

Thank you,

CALIFORNIA Water Boards

Kathryn Smith
Staff Services Analyst

R5 CENTRAL VALLEY - FRESNO
R5 Operational Support - Fresno

Email: Kathryn.Smith@Waterboards.ca.gov
Phone: +1 (559) 445-6086

Regional Water Quality Control Boards
1685 E Street, Fresno CA 93706-2007
Website: www.waterboards.ca.gov

Follow: X | YouTube | Facebook | LinkedIn

APPENDIX C-2

REGULATORY RECORDS SEARCH

CALIFORNIA STATE
DEPARTMENT OF TOXIC SUBSTANCE CONTROL

Hagop Tatian

From: Hagop Tatian
Sent: Monday, December 1, 2025 9:22 AM
To: PubReqAct@DTSC
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: Location Map.jpg

To: DTSC – Sacramento Office/File Room

KCE Matrix would like to inquire if the DTSC maintains any records and/or documentation with regard to Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation documentation for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

If the DTSC does maintain such records, please advise as to the necessary procedure to obtain such records from your office.

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

Project Environmental Engineer

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Katherine M. Butler, MPH, Director
8800 Cal Center Drive
Sacramento, California 95826-3200
https://dtsc.ca.gov/

Gavin Newsom
Governor

December 1, 2025

Hagop Tatian
KCE Matrix, Inc.
hagop@kcematrixinc.com

Public Records Request Number: 1-120125-03
Location(s): APN: 111-290-015-000, Farmersville, California 93292

Dear Requestor:

On December 1, 2025, the Department of Toxic Substances Control (DTSC) received your email of December 1, 2025 requesting records under the Public Records Act. We were unable to locate an address in the county database using the APNs provided and we are unable to search our records using APNs as our databases do not include this information. If you have a specific address or cross streets, please let us know.

A large number of our records are available on EnviroStor, an online database that provides non-confidential, public access to DTSCs data management system. It tracks our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues. EnviroStor is available 24/7, 365 days a year. The data reflects the latest updates as they are entered in the system. Access it from your computer or smartphone, the local library – anywhere Internet access is available. Just go to www.envirostor.dtsc.ca.gov. You'll find a step-by-step tour of EnviroStor under the "How to Use EnviroStor" menu on the website.

If you have any questions or would like further information regarding your request, please contact me at 916-255-3611 or via email at PubReqAct@dtsc.ca.gov.

Respectfully,

Nancy Fang

Nancy Fang
Regional Records Coordinator

APPENDIX C-3

REGULATORY RECORDS SEARCH

TULARE COUNTY
HEALTH AND HUMAN SERVICES AGENCY

Hagop Tatian

From: Tulare County CA Public Records <messages@nextrequest.com>
Sent: Monday, December 1, 2025 9:29 AM
To: Hagop Tatian
Subject: Your Tulare County, CA public records request #25-376 has been submitted.

-- Attach a non-image file and/or reply ABOVE THIS LINE with a message, and it will be sent to staff on this request. --

Tulare County, CA Public Records

Your record request #25-376 has been submitted successfully.

Thank you for submitting your Public Records Act request to Tulare County. The request has been received and will be processed upon receipt during normal business hours.

View Request 25-376

https://countyoftulareca.nextrequest.com/requests/25-376

As the requester, you can always see the status of your request by signing into the Tulare County, CA portal.

If you haven't already signed in, you may need to activate or setup your account to get started. Once your account is activated, you can communicate directly with the Tulare County, CA through NextRequest.

Hagop Tatian

From: Tulare County CA Public Records <messages@nextrequest.com>
Sent: Tuesday, December 9, 2025 7:48 AM
To: Hagop Tatian
Subject: Your Tulare County, CA public records request #25-376 has been closed.

-- Attach a non-image file and/or reply ABOVE THIS LINE with a message, and it will be sent to staff on this request. --

Tulare County, CA Public Records

Record request #25-376 has been closed. The closure reason supplied was:

No records were found, responsive to this request.

View Request 25-376

https://countyoftulareca.nextrequest.com/requests/25-376

Questions about your request? Reply to this email or sign in to contact staff at Tulare County, CA.

Technical support: See our help page

APPENDIX C-4

REGULATORY RECORDS SEARCH

CITY OF FARMERSVILLE CLERK'S OFFICE
(FIRE DEPARTMENT AND BUILDING DEPARTMENT)

Hagop Tatian

From: noreply@civicplus.com
Sent: Monday, December 1, 2025 9:48 AM
To: Hagop Tatian
Subject: Online Form Submittal: Public Records Request Form

Public Records Request Form

Public Records Request Form	*Field not completed.*
Requester Information	Public Records Request:
First Name	Hagop
Last Name	T.
Email Address	hagop@kcematrixinc.com
Request Summary	We would like to request copies of any records and/or documentation the City may maintain, as follows: 1) Fire Department: Records related to Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation documentation 2) Building Department: Records related to historic and current permit applications (building, electrical, sewer, etc.), certificates of occupancy and violations for the following property: APN: 111-290-015-000, Farmersville, CA 93292.
Date	12/1/2025

Hagop Tatian

From: Hagop Tatian
Sent: Monday, March 4, 2024 11:34 AM
To: Rgiovani@cityoffarmersville-ca.gov
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: Location Map.pdf; Public Records Request_KCE Matrix (3-4-24).pdf

To: City of Farmersville, Clerk's Office – Public Records

Please find attached public record request for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

The City of Farmersville
Office of the City Clerk
909 W. Visalia Rd.
Farmersville, Ca. 93223

Phone: (559)747-0458 ex:1003 Email: Rgiovani@cityoffarmersville-ca.gov

Requests for public records are received by the City Clerk's Office. Please provide sufficient identifying information for the record (s) you are seeking in order for the City Clerk to conduct an accurate and thorough search. Although a written request is not required, this process helps to ensure that City Clerk is searching and providing exactly what you are requesting.

Requester Information

Name: Hagop T.

Email Address: hagop@kcematrixinc.com // Phone: (818) 559 5500

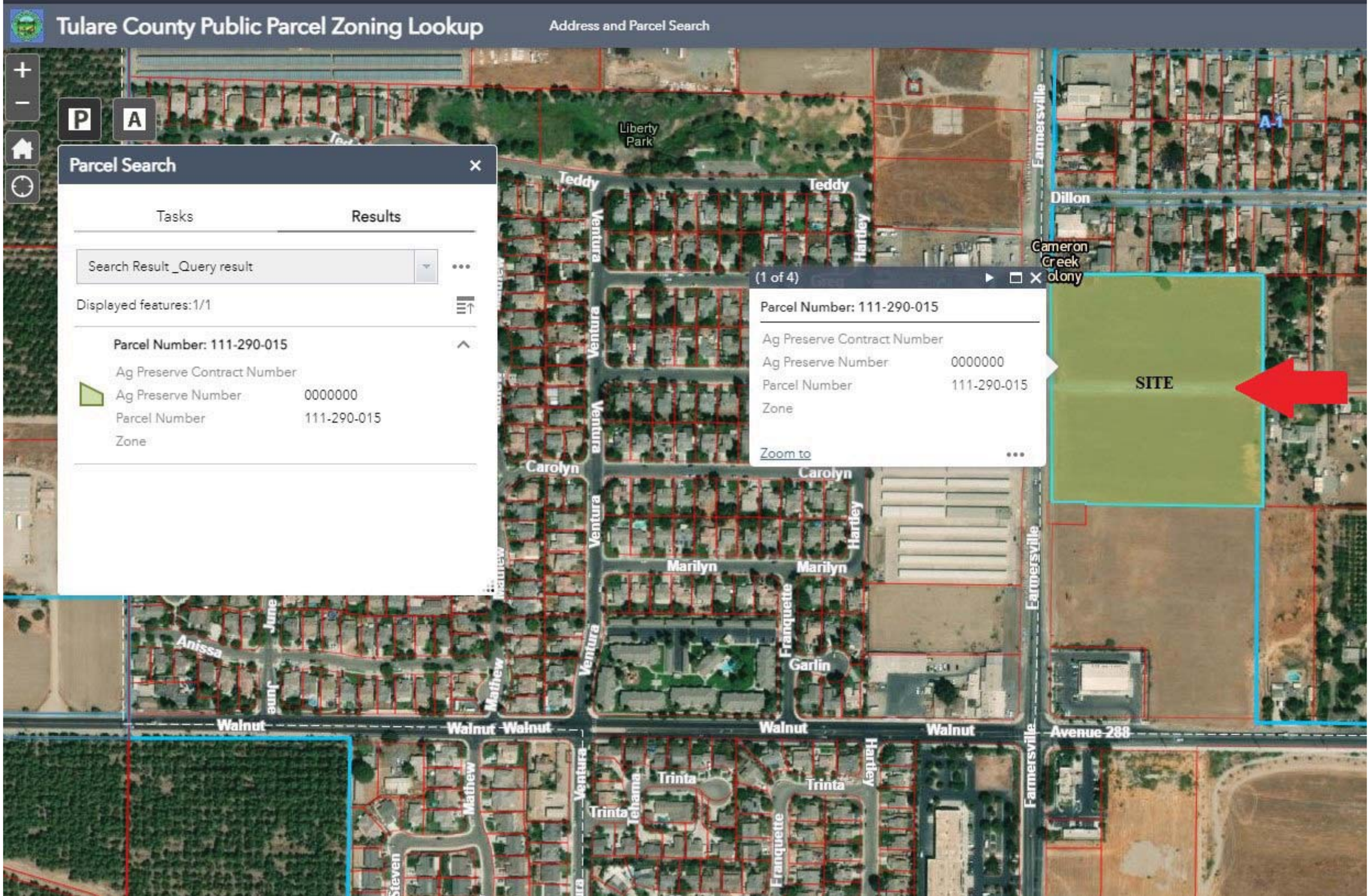
Request Summary

Records related to the following:

1) Building Records: historic and current permit applications, certificates of occupancies and violations, and

2) Fire Department Records: records related to Underground Storage Tanks (USTs) and/or Hazardous Materials (HAZMAT)
for the following property: *(APN: 111-290-015-000), Farmersville, CA 93292*

Today's Date: 03/04/2024


Tulare County Public Parcel Zoning Lookup
Address and Parcel Search
P
A
Parcel Search
Tasks
Results
Search Result _Query result
Displayed features:1/1
Parcel Number: 111-290-015
Ag Preserve Contract Number
Ag Preserve Number 0000000
Parcel Number 111-290-015
Zone
(1 of 4)
Parcel Number: 111-290-015
Ag Preserve Contract Number
Ag Preserve Number 0000000
Parcel Number 111-290-015
Zone
Zoom to
SITE
Liberty Park
Teddy
Ventura
Hartley
Carolyn
Marilyn
Franquette
Garlin
Farmersville
Dillon
Cameron Creek olony
A-1
Walnut
Avenue 288
Trinta
Tehama
Mathew
June
Anissa
Steven

Hagop Tatian

From: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Sent: Monday, March 4, 2024 3:36 PM
To: Hagop Tatian
Subject: RE: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: AMG Master Plan application.pdf; Farmersville Environmental Questionnaire.pdf; Farmersville GPA&Zone Change.pdf; Farmersville SPR.pdf; Admin draft Gardenia IS-compressed.pdf

Good Afternoon,

This is in response to your Public Records Request. You requested: Building records, historic and current permit applications, certificates of occupancies and violations, records related to Underground Storage Tanks and Hazardous Materials.

See attached information. You should also check with Tulare County Environmental Health Department. Let me know if there is anything else you need.

Thank you

Rochelle Giovani
City Clerk/Administrative Analyst
Phone: 559-747-0458 ex 1003
909 W. Visalia Rd. Farmersville, CA. 93223
Web: www.cityoffarmersville-ca.gov

From: Hagop Tatian <hagop@kcematrixinc.com>
Sent: Monday, March 4, 2024 11:34 AM
To: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Subject: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

To: City of Farmersville, Clerk's Office – Public Records

Please find attached public record request for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Initial Study/Mitigated Negative Declaration

Gardenia Courtyards Development Project

Prepared for:

City of Farmersville
909 W. Visalia Road
Farmersville, California 93223
(559) 734-8737
Contact: Karl Schoettler

Prepared by:

Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291
(559) 840-4414
Contact: Emily Bowen, LEED AP

October 2023

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PROJECT INFORMATION

This document is the Initial Study/Mitigated Negative Declaration on the potential environmental effects of the City of Farmersville (City) Gardenia Courtyards Development Project (Project). The City of Farmersville will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines. Copies of all materials referenced in this report are available for review in the project file during regular business hours at 909 W. Visalia Road, Farmersville, CA 93223.

Project title

Gardenia Courtyards Development Project

Lead agency name and address

City of Farmersville
909 W. Visalia Road
Farmersville, California 93223

Contact person and phone number

Karl Schoettler, City Planner
City of Farmersville: (559) 734-8737 ext. 8032

Project location

The City of Farmersville is located in Tulare County in the northern part of the San Joaquin Valley, east of the City of Visalia (see Figure 1). The approximately 9.4-acre Project site is located northeast of the intersection of Farmersville Road and East Walnut Avenue (see Figure 2) and the site would occupy Assessor's Parcel Numbers (APN) 111-290-015. State Route 198 runs east-west through Farmersville, approximately 0.75 miles north of the proposed Project site.

Figure 1 – Location Map

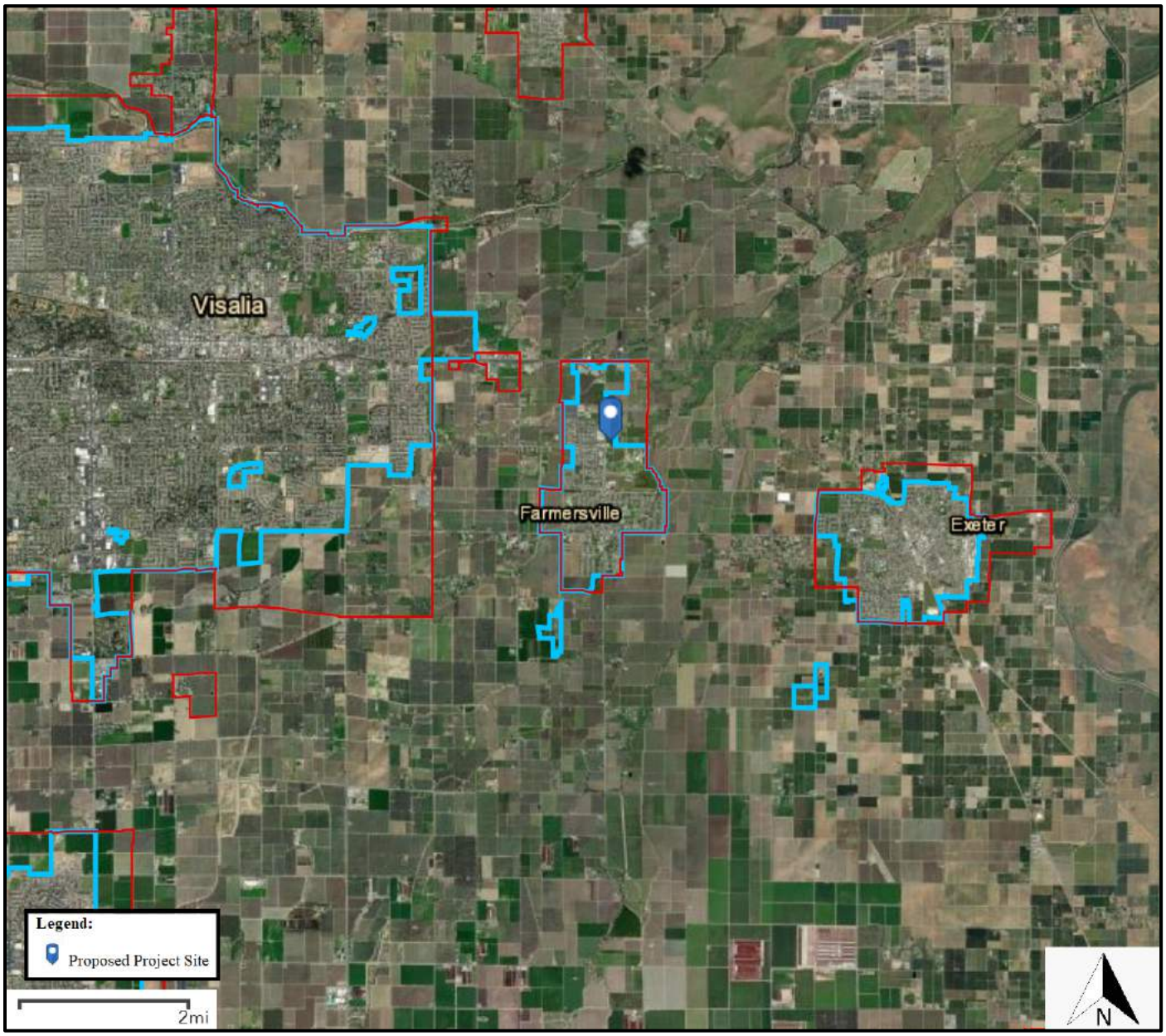
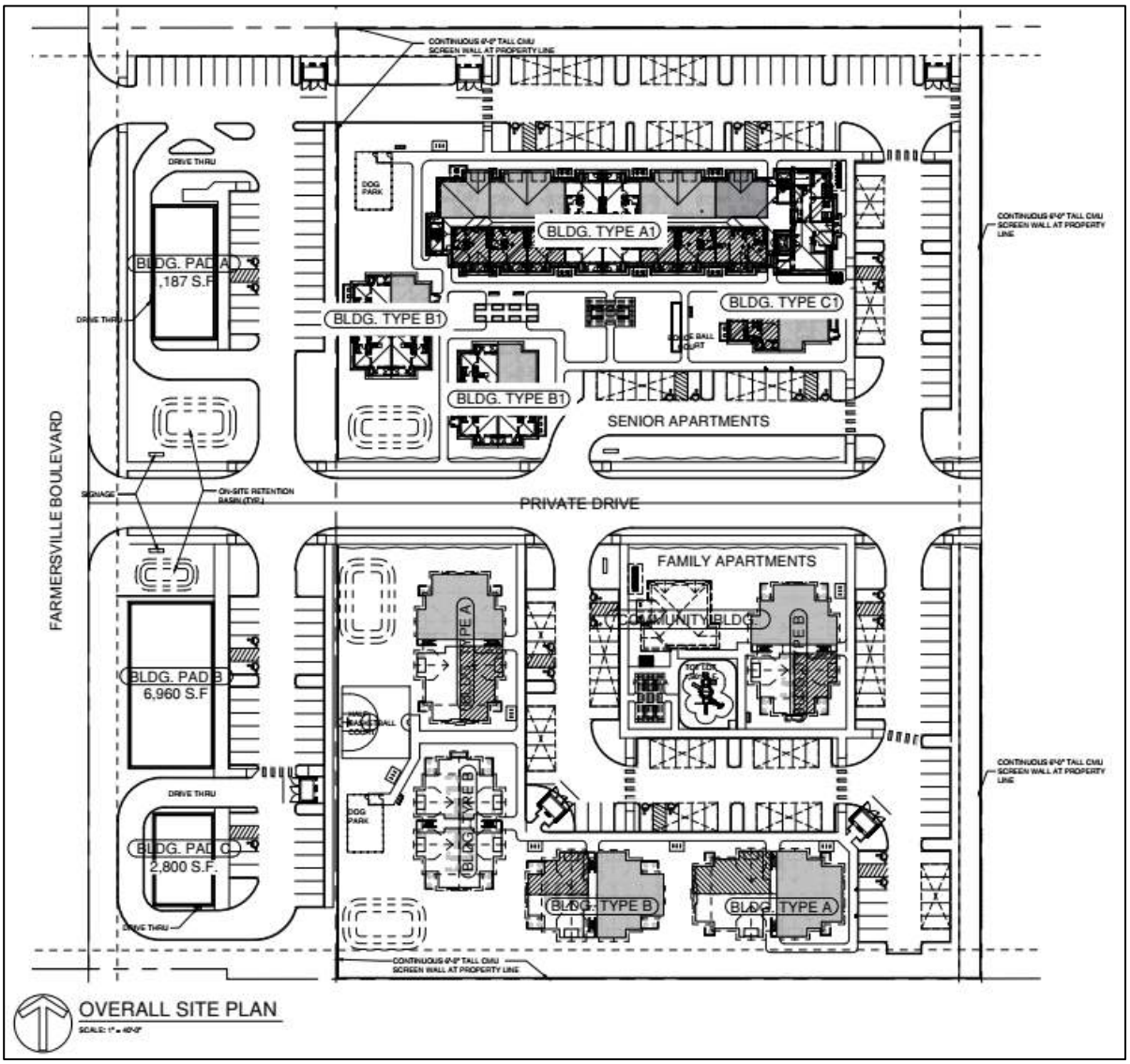


Figure 2 – Site Aerial

Figure 3 – Site Plan



Project sponsor's name/address

AMG & Associates, LLC
PO Box 260770
Encino, CA 91426

General plan designation

General Commercial

Zoning

C-G (General Commercial)

Project Description

The proposed Project would include the development of two fully affordable multi-family projects for a total of 82 residential units and up to 13,950 square feet of commercial space. The northern portion of the Project site would consist of four buildings of senior housing developments with a total of 42 units, a commercial pad, community area, fenced dog park, bocce ball court, community garden, retention basins, and 97 parking spaces. The southern portion of the Project site would consist of an apartment complex with five residential buildings consisting of a total of 40 units, a community building, two commercial/retail pads, dog park, basketball court, retention basins, and 92 parking spaces. This apartment complex would include residential units, tot lot, half-basketball court, fenced dog park, on-site laundry facility, and outdoor picnic-barbeque area. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements.

Specifically, the proposed Project includes:

- General Commercial:
    - Commercial Pads total – 13,950 sq. ft.
- Multi-family Residential:
    - Units – 40
    - Buildings - 5
- Senior Community
    - Units – 42
    - Buildings - 4

- Community Building
- Parking Spaces total – 92
- Retention Basins
- Facilities – Dog parks, basketball court, bocce ball court, on-site laundry, outdoor picnic-barbeque area
- Approve a General Plan Amendment for the General Commercial portions of the site to "Multi-Family Residential" on the Farmersville General Plan land use map.
- Approve a Zone Change from the General Commercial (C-G) portions of the site to "Multi-Family Residential (R-M)".
- Approval of a Site Plan Review

Surrounding Land Uses/Existing Conditions

The proposed Project site currently consists of vacant land with minimal vegetation. The site is highly disturbed.

Lands surrounding the proposed Project are described as follows:

- North: Residential housing.
- South: Vacant land, general commercial.
- East: Rural residences.
- West: Existing general commercial.

Other Public Agencies Involved

- The adoption of a Mitigated Negative Declaration by the City of Farmersville
- Approval of a General Plan Amendment by the City of Farmersville
- Approval of a Zone Change by the City of Farmersville
- Approval of a Site Plan Review by the City of Farmersville
- Approval of Building Permits by the City of Farmersville
- Approval of a Stormwater Pollution Prevention Plan by the Central Valley Regional Water Quality Control Board
- Dust Control Plan Approval letter from the San Joaquin Valley Air Pollution Control District

- Compliance with other federal, state and local requirements.

Tribal Consultation

The California Native American Tribes were contacted pursuant to AB 52 (Public Resources Code Section 21080.3.1, et seq.) and SB 18 on behalf of the City of Farmersville on May 30, 2023.

- Big Sandy Rancheria of Western Mono Indians
- Santa Rosa Indian Community of the Santa Rosa Rancheria
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley band
- Tubatulabals of Kern Valley
- North Fork Mono Tribe
- Big Sandy Rancheria of Western Mono Indians
- Kern Valley Indian Community

Tribes were provided 90 days, to request consultation pursuant to those statutes.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Karl Schoettler

City Planner

City of Farmersville

Date

ENVIRONMENTAL CHECKLIST

I. AESTHETICS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

RESPONSES

a. Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The proposed Project would include the development of a 9.4-acre parcel for two fully affordable multi-family projects for a total of 82 units, three commercial/retail pads and community areas. The site construction will also include parking spaces, internal access roads, lighting, site landscaping and additional related improvements.

The structures will conform to design standards set forth by the City's General Plan and Zoning Ordinance. The proposed Project site is located in an area that is largely surrounded by urban uses such as commercial and residential and will not result in a use that is visually incompatible with the surrounding area.

The City of Farmersville General Plan does not identify any scenic vistas within the Project area. A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area.

Construction activities will be visible from the adjacent roadsides; however, the construction activities will be temporary in nature and will not affect a scenic vista. The impact will be ***less than significant***.

Mitigation Measures: None are required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. There are no state designated scenic highways within the immediate proximity to the Project site. California Department of Transportation Scenic Highway Mapping System identifies SR 198 east of SR 99 as an Eligible State Scenic Highway. This is the closest highway, located approximately 0.75 miles north of the Project site; however, the Project site is both physically and visually separated from SR 198 by intervening land uses. In addition, no scenic highways or roadways are listed within the Project area in the City of Farmersville's General Plan or Tulare County's General Plan. Based on the National Register of Historic Places (NRHP) and the City's General Plan, no historic buildings exist on the Project site. The proposed Project would not damage any trees, rock outcroppings or historic buildings within a State scenic highway corridor. Any impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?

Less Than Significant Impact. Site construction will include multifamily housing consisting of 82 units and three general commercial pads, along with a community building, basketball court, bocce ball court,

dog parks, retention basins, and parking spaces. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements. The residences will be multi-family and will conform to design standards set forth by the City's General Plan and Zoning Ordinance. The proposed Project site is located in an area that is substantially surrounded by urban uses, including commercial and residential, and as such, will not result in a use that is visually incompatible with the surrounding area. The proposed Project will not substantially degrade the existing visual character or quality of the area or its surroundings. The impact will be ***less than significant***.

Mitigation Measures: None are required.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare and waste energy, and if designed incorrectly, could be considered unattractive. Light that falls beyond the intended area is referred to as "light trespass". Types of light trespass include spillover light and glare. Minimizing all these forms of obtrusive light is an important environmental consideration. A less obtrusive and well-designed energy efficient fixture would face downward, emit the correct intensity of light for the use, and incorporate energy timers.

Spillover light is light emitted by a lighting installation that falls outside the boundaries of the property on which the installation is sited. Spillover light can adversely affect light-sensitive uses, such as residential neighborhoods at nighttime. Because light dissipates as it travels from the source, the intensity of a light fixture is often increased at the source to compensate for the dissipated light. This can further increase the amount of light that illuminates adjacent uses. Spillover light can be minimized by using only the level of light necessary, and by using cutoff type fixtures or shielded light fixtures, or a combination of fixture types.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare. Glare can be reduced by design features that block direct line of sight to the light source and that direct light downward, with little or no light emitted at high (near horizontal) angles, since this light would travel long distances. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles.

Currently, the sources of light in the Project area are from streetlights, the vehicles traveling along Farmersville Road and nearby residential streets, commercial uses, and nighttime lighting from adjacent residences, mini storage and commercial store. The Project would necessitate street and residential nighttime lighting and such lighting that would be subject to City standards. Accordingly, potential impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

RESPONSES

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project site is located in an area of the City considered *Farmland of Local Importance* by the State Farmland Mapping and Monitoring Program.[1] The Project site is entirely within the Farmersville City limits and is designated General Commercial by the General Plan. Therefore, the proposed Project does not have the potential to result in the conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is ***no impact***.

Mitigation Measures: None are required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The 9.4-acre Project site is planned for urban uses and is currently zoned and designated in the General Plan as General Commercial. Upon approval of the Zone Change and General Plan Amendment, the eastern portion of the site will be Multi-family residential. The site is not under a Williamson Act Contract. There are ***no impacts.***

Mitigation Measures: None are required.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project is not zoned for forestland and does not propose any zone changes related to forest or timberland. There is ***no impact***.

Mitigation Measures: None are required.

[1] California Department of Conservation Division of Land Resource Protection. Farmland Mapping and Monitoring Program. https://maps.conservation.ca.gov/DLRP/CIFF. Accessed June 2023.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. No conversion of forestland, as defined under Public Resource Code or General Code, as referenced above, would occur as a result of the Project. There is ***no impact***.

Mitigation Measures: None are required.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. No land conversion from Farmland would occur for the Project. Surrounding land uses include residential and commercial. The proposed Project site is designated for urban development by the Farmersville General Plan and as such, does not have the potential to result in the conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is ***no impact***.

Mitigation Measures: None are required.

III. AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people)?	☐	☐	☒	☐

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed project by Johnson, Johnson & Miller Air Quality Consulting Services, report date September 22, 2023. The report can be read in its entirety in Appendix A.

RESPONSES

a. Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed Project site is located within the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures.

For projects that include stationary sources of emissions, the SJVAPCD relies on project compliance with Rule 2201—New and Modified Stationary Source Review to ensure that growth in stationary source emissions would not interfere with the applicable AQP. Projects exceeding the offset thresholds included in the rule are required to purchase offsets in the form of Emission Reduction Credits (ERCs).

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP.

Compliance with Applicable Control Measures

SJVAPCD's AQPs contain a number of control measures, which are enforceable requirements through the adoption of rules and regulations. The following rules and regulations are relevant to the Project:

Rule 4201—Particulate Matter Concentration. This rule shall apply to any source operation that emits or may emit dust, fumes, or total suspended particulate matter.

Rule 4601—Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling. Only compliant components are available for purchase in the San Joaquin Valley.

Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641. This regulation is enforced on the asphalt provider.

Rule 4702—Internal Combustion Engines. The purpose of this rule is to limit the emissions of NO_x, carbon monoxide (CO), VOC, and sulfur oxides (SO_x) from internal combustion engines. If the project includes emergency generators, the equipment is required to comply with Rule 4702.

Regulation VIII—Fugitive PM_{10} Prohibitions. This regulation is a control measure that is one main strategies from the 2006 PM_{10} for reducing the PM_{10} emissions that are part of fugitive dust. Projects over 10 acres are required to file a Dust Control Plan (DCP) containing dust control practices sufficient to comply with Regulation VIII. Rule 8021 regulates construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

Rule 9510–Indirect Source Review. This rule reduces the impact of NO_X and PM_{10} emissions from growth within the SJVAB. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site District-administered projects, or a combination of the two.

As discussed in Impact III(b) below, emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ associated with the proposed Project would not exceed the SJVAPCD's significance thresholds during the construction phase (see Table). Similarly, emissions of ROG, NO_X, CO, SO_X, $PM_{2.5}$ or PM_{10} during operations would not exceed any applicable threshold of significance (see Table 2).

The Project would comply with all applicable CARB and SJVAPCD rules and regulations. Therefore, the Project complies with this criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plan with regards to this criterion. The Project's regional operational emissions would not exceed any applicable SJVAPCD prior to the incorporation of mitigation measures (see Impact III(b)). Therefore, the Project would be considered consistent with the existing AQPs. Based on the findings above, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be ***less than significant***.

Mitigation Measures: None are required.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD's in its GAMAQI. The SJVAB is in nonattainment for ozone, PM_{10} (State only), and $PM_{2.5}$. Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. As such, the primary pollutants of concern during Project construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Since the SJVAB is nonattainment for ozone, PM_{10}, and $PM_{2.5}$, it is considered to have an existing significant cumulative health impact without the Project. When this occurs, the analysis considers whether the project's contribution to the existing violation of air quality standards is cumulatively considerable. The SJVAPCD regional thresholds for NO_X, ROG/VOC, PM_{10}, or $PM_{2.5}$ are applied as cumulative contribution thresholds. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_X, ROG, SO_X, PM_{10}, and $PM_{2.5}$. Air pollutant emissions have both regional and localized effects.

The Project's regional emissions are compared to the applicable SJVAPCD regional thresholds below to address if the Project would result in a cumulatively considerable net increase of any criteria pollutant (including ozone precursors) of concern.

Criteria Pollutant Emission Estimates

Construction Emissions (Regional)

Construction emissions associated with the development envisioned for the proposed project are shown in Table prior to the incorporation of any mitigation.

Table 1
Summary of Construction-Generated Emissions of Criteria Air Pollutants – Unmitigated

Emissions Source	Emissions (Tons/Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Construction (2025)	0.18	1.42	1.77	< 0.01	0.21	0.10
Project Construction (2026)	0.37	0.22	0.30	< 0.01	0.03	0.01
Total Construction Duration (2025-2026)						
Project Total	**0.55**	**1.64**	**2.07**	**< 0.01**	**0.24**	**0.11**
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.
Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 2023.

As shown in Table 1 above, emissions from construction activities associated with the proposed Project would fall below the significance thresholds. Therefore, regional and cumulative impacts associated with construction of the proposed Project are less than significant.

Operational Emissions (Regional)

Operational emissions occur over the lifetime of the project. The SJVAPCD considers permitted and non-permitted emission sources separately when making significance determinations. In addition, the annual operational emissions are also considered separately from construction emissions. Operational emissions associated with the proposed Project are shown in Table 2. Operational emissions were estimated using

a full buildout scenario in the earliest year of operations (2026), which provides a conservative estimate of emissions and resulting potential impacts.

Table 2
Summary of Operational Emissions of Criteria Air Pollutants – Unmitigated

Source	Emissions (tons/year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	0.49	0.03	0.49	< 0.01	0.00	0.00
Energy	0.01	0.11	0.07	< 0.01	0.01	0.01
Mobile (Automobiles)	2.48	0.92	6.71	< 0.01	0.28	0.08
Annual Total	**2.98**	**1.06**	**7.27**	**< 0.01**	**0.29**	**0.09**
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
Emissions were quantified using CalEEMod based on Project details and earliest operational year for the proposed Project.
Source: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

As shown in Table 2, operational emissions would not exceed the applicable SJVAPCD thresholds of significance for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$. Therefore, the impact from operations of the Project would be less than significant.

Conclusion

As shown in Table , the Project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds during project construction. During operations, the Project would not exceed the applicable regional criteria pollutant emissions quantitative thresholds (see Table 2). Therefore, the impact would be ***less than significant***.

Mitigation Measures: None are required.

c. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact with Mitigation. Emissions occurring at or near the Project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air

pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools.

The closest existing sensitive receptors to the Project site include residential receptors, the closest of which include existing single-family homes located within approximately 50 feet east of the Project boundary. See Appendix A (Attachment B-Construction Health Risk Assessment and Operational Health Risk Screening) for a graphical representation of the sensitive receptor locations within approximately ¼-mile of the Project site.

Localized Impacts

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO_2, SO_X, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

Construction: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_x, and NO_X

Local construction impacts would be short-term in nature lasting only during the duration of construction. As shown in

Table 3 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles

were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.

Table 3
Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_x, and NO_X for Construction - Unmitigated

Emission Source	On-site Emissions (pounds per day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Highest Daily Construction (2025)	3.39	31.75	30.51	0.05	9.78	5.27
Highest Daily Construction (2026)	33.78	10.10	14.04	0.02	1.14	0.43
Total Construction Duration						
Highest Daily Maximum	**33.78**	**31.75**	**30.51**	**0.05**	**9.78**	**5.27**
Significance Thresholds	**—**	**100**	**100**	**100**	**100**	**100**
Exceed Significance Thresholds?	**—**	**No**	**No**	**No**	**No**	**No**

Note:
Overlap of construction activities is based on the construction schedule shown in Table 2 and Attachment A of Appendix A.
Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A). Maximum daily emissions represent the maximum daily emissions between the Summer and Winter scenarios.
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 2023.

Operation: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_x, and NO_X

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. The maximum daily operational emissions would occur at Project buildout, which was modeled for the year 2026 (the earliest year of operations). Operational emissions include those generated on-site by area sources such as consumer products and landscape maintenance, energy use from natural gas combustion, and motor vehicles operation at the Project site. Motor vehicle emissions are estimated for on-site operations using trip lengths for on-site travel and ¼-mile of off-site emissions.

As shown in

Table 4 below, operational modeling of on-site emissions for the Project indicate that the Project would not exceed 100 pounds per day for each of the criteria pollutants. Therefore, based on the SJVAPCD's guidance, the operational emissions would not cause an ambient air quality standard violation. As such, impacts would be less than significant.

Table 4
Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_x, and NO_X for Operations

Source	On-site Emissions (pounds per day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	2.96	0.68	0.29	0.00	0.06	0.06
Energy	0.04	0.63	0.37	0.00	0.05	0.05
Mobile (Automobiles)	15.41	5.42	42.84	0.03	1.55	0.42
Total	**18.41**	**6.73**	**43.50**	**0.03**	**1.66**	**0.53**
Significance Thresholds	**—**	**100**	**100**	**100**	**100**	**100**
Exceed Significance Thresholds?	**—**	**No**	**No**	**No**	**No**	**No**

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 2023.

Toxic Air Contaminants

Construction

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. The SJVAPCD's current threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). The SJVAPCD's 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years. In addition, the most intense construction activities of the Project's construction would occur during site preparation and grading phases over a short period.

There are no conditions unique to the Project site that would require more intense construction activity compared to typical development. Examples of situations that would warrant closer scrutiny may include sites that would require extensive excavation and hauling due to existing site conditions. Building construction typically requires limited amounts of diesel equipment relative to site clearing activities. Nonetheless, a construction HRA was prepared as part of this analysis. In addition, the analysis includes an evaluation of potential health impacts from construction and operations of the Project considered together, over a 70-year exposure scenario.

The results of the HRA prepared for Project construction for cancer risk and long-term chronic cancer risk are summarized below. Construction emissions were estimated assuming adherence to all applicable rules, regulations, and Project design features. The construction emissions were assumed to be distributed over the Project area with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. Health risk calculations were completed using HARP2. Detailed parameters and complete calculations are included in Appendix A. The estimated health and hazard impacts at the Maximally Exposed Receptor (MER) from the Project's construction emissions are provided in **Error! Reference source not found.**.

Table 5
Unmitigated Health Risks from Project Construction to Off-Site Receptors

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index	Acute Non-Cancer Hazard Index
Risks and Hazards at the MER			
Risks and Hazards at the MER (Construction Only)	19.47	0.02005	0.00000
Risks and Hazards at the MER (Construction Plus Operations)	29.19	0.02015	0.00000
Significance Threshold	**20**	**1**	**1**
Threshold Exceeded in Any Scenario?	**Yes**	**No**	**No**

MER = Maximally Exposed Receptor
Project MER: Receptor #509 (36°18'52.8"N 119°12'16.4"W)
Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B of Appendix A).

As shown in **Error! Reference source not found.**, estimated health risks from elevated DPM concentrations during construction of the proposed Project would not exceed the applicable health risk significance thresholds when construction is considered alone; however, construction plus operational emissions would exceed the applicable cancer risk threshold. This represents a potentially significant construction TAC exposure impact. Therefore, mitigation is required to reduce the impact during the construction period to below a level of significance.

Mitigation measure AIR-1 requires the Project applicant, project sponsor, or construction contractor to provide documentation to the City of Farmerville that all off-road diesel-powered construction equipment greater than 50 horsepower meet EPA or CARB Tier 4 Interim off-road emissions standards or will utilize Level 3 filters. **Error! Reference source not found.** shows the health risks and non-cancer hazard index for construction with implementation of mitigation measure AIR-1.

Table 6
Summary of the Health Impacts from Mitigated Construction of the Project

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index	Acute Non-Cancer Hazard Index
Risks and Hazards at the MER—Tier 4 Equipment Scenario			
Risks and Hazards at the MER (Construction Only)	4.52	0.00466	0.00000
Risks and Hazards at the MER (Construction Plus Operations)	14.24	0.00476	0.00000
Risks and Hazards at the MER—Level 3 Filters Scenario			
Risks and Hazards at the MER (Construction Only)	5.32	0.00547	0.00000
Risks and Hazards at the MER (Construction Plus Operations)	15.04	0.00557	0.00000
Highest Risks and Hazards at the MER after Incorporation of MM AIR-C1			
Risks and Hazards at the MER	15.04	0.00557	0.00000
Significance Threshold	**20**	**1**	**1**
Threshold Exceeded in Any Scenario?	**No**	**No**	**No**

MER = Maximally Exposed Receptor
Project MER: Receptor #509 (36°18'52.8"N 119°12'16.4"W)
Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B of Appendix A).

As noted in **Error! Reference source not found.**, calculated health metrics from the proposed Project's construction DPM emissions would not exceed the cancer risk significance threshold or non-cancer hazard index significance threshold at the MER with incorporation of AIR-1. Therefore, the proposed Project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Operations

Unlike warehouses or distribution centers, the daily vehicle trips generated by the proposed residential and commercial mixed-use Project would be primarily generated by passenger vehicles. Passenger vehicles typically use gasoline engines rather than the diesel engines that are found in heavy-duty trucks. Gasoline-powered vehicles do emit TACs in the form of toxic organic gases, some of which are carcinogenic. Compared to the combustion of diesel, the combustion of gasoline had relatively low emissions of TACs. Thus, residential and commercial mixed-use development Projects typically produce limited amounts of TAC emissions during operation. Nonetheless, it is anticipated that there would be some heavy-duty trucks visiting the Project site during operations. Consistent with SJVAPCD guidance, an operational prioritization screening analysis was completed for the proposed Project.

Operational DPM emissions from diesel trucks were estimated using EMFAC2021 emission factors and estimated truck travel and idling at the Project site. The emissions were entered into the SJVAPCD Prioritization Screening Tool to determine the risk scores, with complete calculations and assumptions included as part of Attachment B of Appendix A. The results of the screening analysis are provided in **Error! Reference source not found.**.

Table 7
Prioritization Tool Health Risk Screening Results

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
Diesel Trucks	9.72	0.00010	0.00000
Total Risk from Project Operations	**9.72**	**0.00010**	**0.00000**
Screening Risk Score Threshold	**10**	**1**	**1**
Screening Thresholds Exceeded?	**No**	**No**	**No**
Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B of Appendix A)			

As shown in **Error! Reference source not found.**, the Project would not exceed the cancer risk or chronic hazard screening threshold levels during Project operations. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor. Since the Project does not exceed the applicable SJVAPCD screening thresholds for cancer risk, acute risk, or chronic risk, this impact would be less than significant.

Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. The San Joaquin Valley is considered an endemic area for Valley fever. During 2000–2018, a total of 65,438 coccidioidomycosis cases were reported in California; median statewide annual incidence was 7.9 per 100,000 population and varied by region from 1.1 in Northern and Eastern California to 90.6 in the Southern San Joaquin Valley, with the largest increase (15-fold) occurring in the Northern San Joaquin Valley. Incidence has been consistently high in six counties in the Southern San Joaquin Valley (Fresno, Kern, Kings, Madera, Tulare,

and Merced counties) and Central Coast (San Luis Obispo County) regions.[2] California experienced 7,517 new probable or confirmed cases of Valley fever in 2022. A total of 319 suspect, probable, and confirmed Valley fever cases were reported in Tulare County in 2022.[3]

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)
2) Old (prehistoric) Indian campsites near fire pits
3) Areas with sparse vegetation and alkaline soils
4) Areas with high salinity soils
5) Areas adjacent to arroyos (where residual moisture may be available)
6) Packrat middens
7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

1) Cultivated field
2) Heavily vegetated areas (e.g., grassy lawns)
3) Higher elevations (above 7,000 feet)
4) Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
5) Areas that are continually wet

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[2] Centers for Disease Control and Prevention (CDC). 2020. Regional Analysis of Coccidioidomycosis Incidence—California, 2000–2018. Website: https://www.cdc.gov/mmwr/volumes/69/wr/mm6948a4.htm?s_cid=mm6948a4_e. Accessed June 16, 2023.

[3] California Department of Public Health (CDPH). 2021. Coccidioidomycosis in California Provisional Monthly Report January – April 2023 (as of April 30, 2023). Website: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCA ProvisionalMonthlyReport.pdf. Accessed June 16, 2023.

6) Paved (asphalt or concrete) or oiled areas

7) Soils containing abundant microorganisms

8) Heavily urbanized areas where there is little undisturbed virgin soil.[4]

The Project is situated on a site previously disturbed that does not provide a suitable habitat for spores. Specifically, the Project site had been previously disturbed and has some vegetation cover in the form of shrubbery. Therefore, implementation of the proposed Project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

Although conditions are not favorable, construction activities could generate fugitive dust that contains *C. immitis* spores. The Project will minimize the generation of fugitive dust during construction activities by complying with SJVAPCD's Regulation VIII. Therefore, this regulation, combined with the relatively low probability of the presence of *C. immitis* spores would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be relatively small because most of the Project area where operational activities would occur would be occupied by the proposed residential buildings, commercial buildings, landscaping, pavement, and internal streets. This condition of the Project being built-up would lessen the possibility of the Project site providing habitat suitable for *C. immitis* spores and for generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

Naturally Occurring Asbestos

Review of the map of areas where naturally occurring asbestos in California are likely to occur found no such areas in the immediate Project area. Therefore, development of the Project is not anticipated to expose receptors to naturally occurring asbestos.[5] Impacts would be less than significant.

Operations—The Project's Potential to Locate Sensitive Receptor Near Existing Sources of TACs

As a residential and commercial mixed-use development Project, the Project would locate sensitive receptors (future residents) to a site where future Project residents could be subject to existing sources of

[4] United States Geological Survey (USGS). 2000. Operational Guidelines (Version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000, Open-File Report 2000-348. Website: https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf. Accessed September, 2023.

[5] U.S. Geological Survey. 2011. Van Gosen, B.S., and Clinkenbeard, J.P. California Geological Survey Map Sheet 59. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Open-File Report 2011-1188 Website: https://pubs.usgs.gov/of/2011/1188/. Accessed May 20, 2023.

TACs at the project site. However, the California Supreme Court concluded in *California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)* that agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. Therefore, this impact will not be further addressed in this document.

Impact Analysis Summary

In summary, the Project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant. The Project is not a significant source of TAC emissions during operations and would not be a significant source of TAC emissions during construction after incorporation of MM AIR-1. The Project is not in an area with suitable habitat for Valley fever spores and is not in an area known to have naturally occurring asbestos. Therefore, the Project would result in ***less than significant*** to sensitive receptors after incorporation of mitigation.

Mitigation Measures:

MM AIR-1:

Before a construction permit is issued for the proposed Project, the Project applicant, Project sponsor, or construction contractor shall submit documentation demonstrating reasonably detailed compliance with one of the following requirements to the City of Farmersville:

Option 1) Where portable diesel engines are used during construction, all off-road equipment with engines greater than 50 horsepower shall have engines that meet or exceed either United States Environmental Protection Agency (EPA) or California Air Resources Board (CARB) Tier 4 Interim off-road emission standards except as otherwise specified herein. If engines that comply with Tier 4 Interim or Tier 4 Final off-road emission standards are not commercially available, then the construction contractor shall use the next cleanest piece of off-road equipment (e.g., Tier 3) that is commercially available. For purposes of this Project design feature, "commercially available" shall mean the equipment at issue is available taking into consideration factors such as (i) critical-path timing of construction; and (ii) geographic proximity to the Project site of equipment. If the relevant equipment is determined by the Project applicant to not be commercially available, the contractor can confirm this conclusion by providing letters from at least two rental companies for each piece of off-road equipment that is at issue.

Option 2) Prior to the issuance of any demolition, grading, or building permits (whichever occurs earliest), the project applicant and/or construction contractor shall prepare a construction operations plan that, during construction activities, requires all off-road

equipment with engines greater than 50 horsepower to meet either the particulate matter emissions standards for Tier 4 Interim engines or be equipped with Level 3 diesel particulate filters. Tier 4 Interim engines shall, at a minimum, meet EPA or CARB particulate matter emissions standards for Tier 4 Interim engines. Alternatively, use of CARB-certified Level 3 diesel particulate filters on off-road equipment with engines greater than 50 horsepower can be used in lieu of Tier 4 Interim engines or in combination with Tier 4 Interim or better engines. The construction contractor shall maintain records documenting its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information shall include, but are not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. The Project applicant and/or construction contractor shall submit the construction operations plan and records of compliance to the City of Farmersville.

d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less Than Significant Impact. Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Although the Project is less than one mile from the nearest sensitive receptor, the Project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table .

Construction

During construction, various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and intermittent, which would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the Project's site boundaries. The potential for odor impacts from construction of the proposed Project would, therefore, be less than significant.

Table 8
Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 2023.	

Operations

Project as a Potential Odor Generator

The development of the proposed Project would not substantially increase objectionable odors in the area. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, asphalt batch plants, rendering plants, and other land uses outlined in Table . The proposed residential and commercial mixed-use Project would not engage in any of these activities. Minor sources of odors that would be associated with typical residential and commercial mixed-use development Projects, such as exhaust from mobile sources (including diesel-fueled vehicles), are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the proposed Project's operational activities would not expose receptors to objectionable odor emissions. Therefore, the proposed Project would not be considered to be a generator of objectionable odors during operations. As such, impacts would be less than significant.

Project as a Receptor

With the *CBIA v. BAAQMD* ruling, analysis of odor impacts on receivers is not required for CEQA compliance unless the project would exacerbate the impact. As discussed above, the Project is a residential and commercial mixed-use Project and would not be considered a major source of odors during construction or operation. Therefore, the Project would not exacerbate an existing odor impact and no further analysis is required. The impacts will be ***less than significant.***

Mitigation Measures: None are required.

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐

e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The proposed Project site is located in a portion of the central San Joaquin Valley that has, for decades, experienced intensive agricultural and urban disturbances. Current agricultural endeavors in the region include orange groves, olive orchards and row crops.

Like most of California, the Central San Joaquin Valley experiences a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures usually exceed 90 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely raise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. According to the Farmersville General Plan Community Profile, approximately 90 percent of all rainfall in Farmersville occurs between November and April. Average rainfall measured in Visalia is 10.15 inches.[6] Nearly all precipitation falls in the form of rain and stormwater readily infiltrates the soils of the surrounding the sites.

Native plant and animal species once abundant in the region have become locally extirpated or have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

The proposed Project site is currently vacant with minimal vegetation and located in an area surrounded with urban uses including residential and commercial.

[6] Ch. 2 Physical Environmental, Farmersville General Plan Part II Community Profile, November 2002. pg 2-1. Accessed June 2023.

RESPONSES

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. The proposed Project would include the development of a 9.4-acre parcel for two fully affordable multi-family projects for a total of 82 units, three commercial pads, a community building, and community areas. The site construction will also include parking spaces, internal access roads, lighting, site landscaping and additional related improvements.

The site is currently vacant and in an area that is highly disturbed and lacking in substantial vegetation, such as trees, brush or shrubs. This factor suggests that the Project site is extremely unlikely to serve as nesting habitat for bird species or any animal or plant species. No wetlands or waters of the U.S. or water of the State were found within the Project area.

According to the Farmersville General Plan, a total of eight special status animal species could potentially occur in the Farmersville area. Two of the eight species are listed as threatened or endangered by the U.S. Fish and Wildlife Service or the California Department of Fish and Game. The remaining six species are candidates for federal listing or listed species of special concern by the State of California. No special status plant species are likely to occur in the Farmersville planning area. The two species listed as Endangered or Threatened are the San Joaquin Kit Fox and the Valley Elderberry Longhorn Beetle. A biotic survey prepared for the General Plan update indicated that the overwhelming bulk of the planning area has been severely disturbed from its natural state by urbanization and agricultural activities.[7]

Tulare County is considered to be a portion of the larger regional habitat of the San Joaquin Kit Fox, a species whose habitat extends along the Sierra Nevada foothills and down to the Coast. According to the Tulare County Planning Department, kit foxes have been observed foraging in orange groves west of Lindsay City Limits many years previous. However, it is not known if any recent sightings have been documented. The potential for San Joaquin Kit Fox occurrence in the proposed Project area is considered to be quite low given the highly disturbed and barren nature of the site and precludes the ability of the San Joaquin Kit Fox to be on-site. Impacts are ***less than significant***.

Mitigation Measures: None are required.

[7] Ch. 4 Conservation, Open Space, Parks and Recreation Element, Farmersville General Plan Part I General Plan, November 2002. Accessed June 2023.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c. Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. There are no natural waterways, sensitive natural communities, riparian habitat or protected wetlands on the Project site. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impacts with Mitigation. The Project could impede the use of nursery sites for native birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC). Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region.

Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant impact. Mitigation Measure BIO-1 (below) will reduce the potential effect to a ***less than significant*** level.

Mitigation Measures:

BIO-1: Protect nesting birds.

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.

2. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. The City of Farmersville's General Plan includes various policies for the protection of biological resources. The proposed Project would not conflict with any of the adopted policies and any impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. There are no adopted habitat conservation plans that apply to the Project site. There is no impact.

Mitigation Measures: None are required.

V. CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c.	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

RESPONSES

a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant Impact with Mitigation. A cultural records search was conducted by the Southern San Joaquin Valley Information Center (SSJVIC) on May 30, 2023 (RS 23-182, Appendix B). The records search conducted at the SSJVIC indicated that there are no recorded cultural resources within the Project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal. There are no recorded cultural resources within the Project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

There have been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU- 00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

While no archaeological or built environment resources were identified within the area, subsurface construction activities associated with the proposed Project could potentially damage or destroy previously undiscovered historic resources. This is considered a potentially significant impact; however,

implementation of Mitigation Measure CUL-1 will ensure that significant impacts remain ***less than significant with mitigation incorporation.***

Mitigation Measures:

CUL-1: The following measures shall be implemented:

- Before initiation of construction or ground-disturbing activities associated with the Project, the City shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources;
- The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and
- If a potentially significant historical, archaeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or other appropriate measure, as outlined in Public Resources Code section 21083.2. The City of Farmersville shall implement said measures.

b. <u>Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</u>

Less Than Significant Impact with Mitigation. The possibility exists that subsurface construction activities may encounter undiscovered archaeological resources. This would be a potentially significant impact. Implementation of Mitigation Measure CUL-1 would require inadvertently discovery practices to be implemented should previously undiscovered archeological resources be located. As such, impacts to undiscovered archeological resources would be ***less than significant with mitigation incorporation.***

c. Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation. There are no unique geological features or known fossil-bearing sediments in the vicinity of the proposed Project site. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction activities. Therefore, this would be a potentially significant impact. Mitigation is proposed requiring standard inadvertent discovery procedures to be implemented to reduce this impact to a level of ***less than significant with mitigation incorporation***.

Mitigation Measures:

CUL-2: The Project applicant shall incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the Project applicant, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

RESPONSES

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed Project by Johnson, Johnson & Miller Air Quality Consulting Services, report date September, 2023. The report can be read in its entirety in Appendix A.

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The proposed Project would be served with electricity provided by Eastside Power Authority or Southern California Edison (SCE).

Methodology

The energy requirements for the proposed Project were determined using the construction and operational estimates generated from the Air Quality Analysis (refer to Attachment A of Appendix A for related CalEEMod output files). The calculation worksheets for diesel fuel consumption rates for off-road construction equipment and on-road vehicles are provided in Attachment C (Energy Consumption Calculations) of Appendix A. Short-term construction energy consumption is discussed below.

Short-Term Construction

Off-Road Equipment

Table provides estimates of the Project's construction fuel consumption from off-road construction equipment for the entire Project, categorized by construction activity.

Table 9
Construction Off-Road Fuel Consumption

Project Component	Construction Activity	Fuel Consumption (gallons)
Gardenia Gardens Project (On-site, Off-road Equipment Use)	Site Preparation	912
	Grading	1,015
	Building Construction	9,082
	Paving	507
	Architectural Coating	59
Total Construction Off-Road Fuel Consumption		**11,575**
Source: Energy Consumption Calculations (Attachment C of Appendix A).		

As shown in Table , use of off-road equipment associated with construction of the proposed Project is estimated to consume approximately 11,575 gallons of diesel fuel over the entire construction duration. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the City of Farmersville, the larger Tulare County region, or other parts of California. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 10 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of Farmersville or the Tulare County region. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Table 10
Construction On-Road Fuel Consumption

	Project Component	Total Annual Fuel Consumption (gallons)
Gardenia Gardens Project (On-road Fuel Consumption)	Site Preparation	107
	Grading	4,323
	Building Construction	8,510

	Project Component	Total Annual Fuel Consumption (gallons)
	Paving	194
	Architectural Coating	177
Total Construction On-Road Fuel Consumption		**13,311**
Source: Energy Consumption Calculations (Attachment C of Appendix A).		

As summarized in Table and Table 10, the proposed Project would require 11,575 gallons of diesel fuel for construction off-road equipment and 13,311 gallons of gasoline and diesel for on-road vehicles during construction. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or other parts of the state. In addition, the overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region, and as such, impacts would be less than significant.

Other Energy Consumption Anticipated During Project Construction

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. The Project site is located in the City of Farmersville. As construction activities would occur primarily during daylight hours, it is anticipated that the use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 14,885 kWh during the approximate 1.07-year construction phase (Attachment C of Appendix A).

Long-Term Energy Demand

Building Energy Demand

As shown in

Table 3 and Table 4, the proposed Project is estimated to demand 902,208 kilowatt-hours (KWhr) of electricity and 2,434,546 1,000-British Thermal Units (kBTU) of natural gas, respectively, on an annual basis.

Table 3
Long-Term Electricity Usage

Land Use	Total Electricity Demand (KWhr/year)
Apartments Low Rise (Multifamily Resisential)	184,398
Health Club (Multifamily Community Center)	18,646
Retirement Community (Senior Living Housing)	193,617
Strip Mall	71,687
Fast Food Restaurant with Drive Thru	260,706
Parking Lot	173,154
Total Project Consumption	**902,208**
Source: Energy Consumption Calculations (Attachment C of Appendix A).	

Table 4
Long-Term Natural Gas Usage

Land Use	Total Natural Gas Demand (kBTU/year)
Apartments Low Rise (Multifamily Resisential)	720,004
Health Club (Multifamily Community Center)	82,265
Retirement Community (Senior Living Housing)	756,004
Strip Mall	42,055
Fast Food Restaurant with Drive Thru	834,218
Parking Lot	0
Total Project Consumption	**2,434,546**
Source: Energy Consumption Calculations (Attachment C of Appendix A).	

Buildings and infrastructure constructed pursuant to the proposed Project would comply with the versions of CCR Titles 20 and 24, including California Green Building Standards (CALGreen), that are applicable at the time that building permits are issued. The proposed Project is estimated to demand 902,208 KWhr of electricity per year and 2,434,546 kBTU of natural gas per year. As the Project site is currently undeveloped, this would represent an increase in demand for electricity and natural gas.

It would be expected that building energy consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the City of Farmersville or the larger Tulare County region. Current state regulatory requirements for new building construction contained in the 2022 CALGreen and Title 24 standards apply to both residential and non-residential buildings and would increase energy efficiency and reduce energy demand in comparison to most existing development, and therefore would reduce actual environmental effects associated with energy use from the proposed Project. Additionally, the CALGreen and Title 24 standards have increased efficiency standards through each update. The most recent 2022 standards became effective January 1, 2023 and will be updated in the next cycle that will become effective at the start of 2026. Therefore, while the proposed Project would result in increased electricity and natural gas demand, electricity and natural gas would be consumed more efficiently than most existing development due to compliance with the latest building standards.

Based on the above information, the proposed Project would not result in the inefficient or wasteful consumption of electricity or natural gas, and impacts would be ***less than significant***.

Transportation Energy Demands

Table 5 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the proposed Project. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed Project.

Table 5
Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips	Annual VMT	Average Fuel Economy (miles/ gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	46.04	5,421,903	30.14	492.8	179,875
Light Trucks (Pickups) and Medium Vehicles	43.52	5,125,467	22.05	636.8	232,446
Light-Heavy to Medium-Heavy Diesel Trucks	6.04	711,656	11.56	168.7	61,585
Heavy-heavy Trucks	1.57	184,751	5.96	84.9	30,998
Motorcycles	2.17	255,223	41.76	16.7	6,111
Other	0.66	78,207	7.56	28.4	10,348
Total	**100**	**11,777,207**	**—**	**1,428**	**521,363**

Notes:
VMT = vehicle miles traveled
Percent of Vehicle Trips and VMT provided by CalEEMod.

Vehicle Type	Percent of Vehicle Trips	Annual VMT	Average Fuel Economy (miles/ gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
"Other" consists of buses and motor homes.					
Source: Energy Consumption Calculations (Attachment C of Appendix A).					

The daily vehicular fuel consumption is estimated to be 1,428 gallons of combined gasoline and diesel fuel. Annual consumption is estimated at 521,363 gallons. In addition, the proposed Project would constitute development within an established community and would not be opening a new geographical area for development. As such, the proposed Project would not result in unusually long trip lengths for future residents, visitors, customers, employees, or deliveries to the proposed residential and commercial mixed-use development.

The property is located near residential land uses, including adjacent single-family homes to the east of the Project site and to the west of the north half of the project site. The proposed Project would be well-positioned to accommodate an existing community and provide housing and commercial uses for planned growth. Vehicles accessing the site would be typical of vehicles accessing similar residential and commercial mixed-use development uses in the City of Farmersville, Tulare County, and surrounding areas. For these reasons, vehicular fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region, and impacts would be ***less than significant***.

Mitigation Measures: None are required.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The Project proposes the construction of new residential and commercial mixed-use development that would be built in accordance with all applicable rules and regulations. Compliance with established and applicable regulations would ensure that the project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Moreover, compliance with Title 24 standards would ensure that the proposed Project would not conflict with any energy conservation policies related to the proposed Project's building envelope, mechanical systems, and indoor and outdoor lighting. Notably, the applicable Title 24 standards require the Project to include on-site renewable energy to serve the future Project occupants and residents.

In addition, the proposed Project would constitute development within an established community. Specifically, the Project site is adjacent to built-up areas of the City of Farmersville. As such, the Project

would not be opening a new geographical area for development such that it would not result in unusually long trip lengths for future project residents or visitors. In addition, the proposed residential and commercial mixed-use development is specifically designed for increased walkability, facilitated by the proposed pedestrian connectivity throughout the Project site. For the above reasons, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be ***less than significant***.

Mitigation Measures: None are required.

VII. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become	☐	☐	☒	☐

	unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d.	Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?	☐	☐	☒	☐
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

RESPONSES

a-i. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The proposed Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone.[8] Since no known surface expression of active faults are believed to cross the site, fault rupture through the site is not anticipated. ***No impacts*** would occur.

Mitigation Measures: None are required.

[8] California Earthquake Hazards Zone Application, California Department of Conservation. https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed June 2023.

a-ii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less Than Significant Impact. There are no known active earthquake faults in the City of Farmersville. The proposed Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the local soil at the site. The closest known faults likely to affect the community are the Owens Valley fault, located about 65 miles to the east along the base of the Sierra Nevada in the Owens Valley, and the San Andreas fault located about 70 miles to the southwest in the coastal range. According to the Five County Seismic Safety Element (FCSSE), Farmersville is located in the V-1 zone, defined as an area "of hard rock alluvium on valley floors". The FCSSE further states that, "the distance to either of the faults expected to be a source of shaking is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal facilities."[9] Therefore, the impact is ***less than significant***.

Mitigation Measures: None are required.

a-iii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Tulare County has extremely low seismic activity levels, although shaking may be felt from earthquakes whose epicenter lie to the south and west. The proposed Project would comply with existing building code standards or design and construction, which would minimize any impacts resulting from ground shaking or liquefaction. Due to the relatively flat topography of the proposed Project area, impacts associated with landslides are not anticipated. Impacts would be ***less than significant.***

Mitigation Measures: None are required.

a-iv. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

[9] City of Farmersville General Plan Part II Community Profile. 2002. Page 2-4.

Less Than Significant Impact. The City of Farmersville sits on the floor of the San Joaquin Valley. The City is nearly flat which precludes the occurrence of landslides. Any potential impact is ***less than significant***.

Mitigation Measures: None are required.

b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The City of Farmersville sits on top of the alluvial fans of the Kaweah River and its distributaries. The soil in the proposed Project area is characterized as very deep, well-drained, and with low shrink/swell potential.[10] The proposed Project site has a generally flat topography, is in an established urban area and does not include any Project features that would result in substantial soil erosion or loss of topsoil. Therefore, the impact is ***less than significant***.

Mitigation Measures: None are required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. The City of Farmersville is nearly flat and soils in the area are very deep, well drained with a low shrink/swell potential. See also Response a-ii. Any impacts would be ***less than significant.***

Mitigation Measures: None are required.

d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

Less Than Significant Impact. See Responses (c) and (a-ii). The impact is ***less than significant***.

Mitigation Measures: None are required.

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[10] City of Farmersville General Plan Update Community Profile. November 2002. Page 2-2.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project will tie into the City's existing wastewater system and will not require the installation of a septic tanks or alternate wastewater disposal system. There is ***no impact.***

Mitigation Measures: None are required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact With Mitigation Incorporation. As identified in the cultural evaluation performed for the Project site, there are no known paleontological resources on or near the site (See Section V. for more details). Mitigation measures have been added that will protect unknown (buried) resources during construction, including paleontological resources. There are no unique geological features on site or in the area. Mitigation measures CUL-1 and CUL-2 shall be implemented to reduce potential impacts and as such, impacts are considered ***less than significant***.

Mitigation Measures: CUL-1 and CUL-2.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed Project by Johnson, Johnson & Miller Air Quality Consulting Services, report date September, 2023. The report can be read in its entirety in Appendix A.

RESPONSES

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant.

Quantification of Greenhouse Gas Emissions for Informational Purposes

Construction Emissions

GHG emissions generated during all construction activities were combined and are shown in **Error! Reference source not found.**.

Table 14
Summary of Construction-Generated Greenhouse Gas Emissions

Emissions Source	MT CO_{2e} per Year
Project Construction (2025)	280
Project Construction (2026)	48
Project Construction Total	**328**
Amortized over 30 Years	**10.9**
Notes: MTCO2e = metric tons of carbon dioxide equivalent	

Source: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

Operations

Operational or long-term emissions occur over the life of the Project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as landscaping activities. Operational GHG emissions associated with the proposed Project were estimated using CalEEMod 2022.1. Please see the "Assumptions" sections of the Technical Memorandum for details regarding assumptions and methodology used to estimate emissions. Operational GHG emissions for a full buildout scenario in the earliest operation year (2026) are shown in **Error! Reference source not found.**. Complete CalEEMod output files and additional supporting information are also included in Attachment A of Appendix A.

Table 15
Project Operational Greenhouse Gas Emissions (Buildout Year Scenario)

Emission Source	Unmitigated Buildout Year Total Emissions (MT CO_2e per year)
Area	33
Energy	316
Mobile (Automobiles)	446
Refrigerants	2
Water	14
Waste	80
Amortized Construction Emissions	11
Total (MT CO_2e per year)	**902**

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

The SJVAPCD has not yet adopted BPS for development projects that could be used to streamline the GHG analysis. The 29 percent GHG reduction level is based on the target established by CARB's AB 32 Scoping Plan, approved in 2008. The GHG reduction level for the State to reach 1990 emission levels by 2020 was reduced to 21.7 percent from BAU in 2020 in the 2014 First Update to the Scoping Plan to account for slower than projected growth after the 2008 recession.[11] First occupancy at the project site is expected to occur in 2026, which is after the AB 32 target year. The SJVAPCD has not updated its guidance to address SB 32 2030 targets or AB 1279 2045 targets. Therefore, whether the Project's GHG

[11] California Air Resources Board (CARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed May 24, 2023.

emissions would result in a significant impact on the environment is determined by assessing consistency with relevant GHG reduction plans.

The City of Farmerville has not adopted a GHG reduction plan. In addition, the City has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines. The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the Project. Since no other local or regional Climate Action Plan is in place, the Project is assessed for its consistency with CARB's adopted Scoping Plans.

Consistency with CARB's Adopted Scoping Plans

Consistency with AB 32 and CARB's 2008 Scoping Plan

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Former Governor Brown, in the introduction to Executive Order B-30-15, stated "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

Consistency with SB 32 and CARB's 2017 Scoping Plan

The 2017 Climate Change Scoping Plan Update (2017 Scoping Plan) includes the strategy that the State intends to pursue to achieve the 2030 targets of Executive Order S-3-05 and SB 32. **Error! Reference source not found.** provides an analysis of the Project's consistency with the 2017 Scoping Plan Update measures.

Table 16
Consistency with SB 32 Scoping Plan

Scoping Plan Measure	Project Consistency
SB 350 50% Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33% in 2020 to 50% in 2030. *(The requirement is now 60% in 2030 per SB 100.)*	**Consistent**: The project will purchase electricity from a utility subject to the SB 350 Renewable Mandate.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent	**Not Applicable**. This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are

Scoping Plan Measure	Project Consistency
reduction from 2014 building energy usage compared to current projected 2030 levels.	expected to increase in stringency over time. New buildings (both residential and non-residential buildings) constructed as part of the proposed project would comply with the applicable Title 24 Energy Efficiency Standards in effect at the time building permits are received. The current Title 24 regulations are the 2022 Title 24 standards, which become effective January 1, 2023. The next update would become effective January 1, 2026.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Consistent**. This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the project site would be subject to the standards. Vehicles accessing the project site will use fuel containing lower carbon content as the fuel standard is implemented.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Consistent**. Future project residents, visitors, customers, and employees can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. The CALGreen Code requires electrical service in new development to be EV charger-ready. In addition, home deliveries will be made by increasing numbers of ZEV delivery trucks as the statewide fleet is expected to get cleaner over time.
Sustainable Freight Action Plan. The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Not Applicable.** The measure applies to owners and operators of trucks and freight operations. The project is residential and commercial mixed-use development and would not be considered an industrial land use or a large freight operator. However, home and business deliveries are expected to be made by increasing numbers of ZEV delivery trucks as technology continues to improve accessibility to ZEV vehicles and as regulations are phased in over time.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Consistent**. The project is not expected to include fireplaces. However, any hearths that would be installed will only include natural gas hearths that produce very little black carbon compared with wood burning fireplaces and heaters in line with the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts mitigation measures.[1]
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	**Consistent**. The project will provide residential and commercial mixed-use development in the region that is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (SCS) strategy to increase development densities to reduce VMT.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large	**Consistent.** The post-2020 Cap-and-Trade Program indirectly affects people who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are

Scoping Plan Measure	Project Consistency
industrial sources such as power plants, refineries, and cement manufacturers.	transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program's first compliance period.
Natural and Working Lands Action Plan. CARB is working in coordination with several other agencies at the federal, state, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not Applicable**. The project is a residential and commercial mixed-use development and will not be considered natural or working lands.
Source: California Air Resources Board (CARB). 2017. The 2017 Climate Change Scoping Plan Update. January 20. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed September 2023. [1] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMA. Accessed September 2023.	

As described in **Error! Reference source not found.**, the proposed Project would be consistent with applicable 2017 Scoping Plan Update measures and would not obstruct the implementation of others that are not applicable. The State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS (Low Carbon Fuel Standard) that applies to all fuel sold in California, and the Renewable Portfolio Standard and Renewable Energy Standard under SB 100 that apply to utilities providing electricity to all California end users.

Moreover, the Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors that are the primary sources related to development projects and lower than average reductions from other sources such as agriculture. The proposed residential and commercial mixed-use development Project's operational GHG emissions would principally be generated from electricity consumption and vehicle use, which are directly under the purview of the Scoping Plan strategy and have experienced reductions above the State average reduction. Considering the information

summarized above, the proposed Project would be consistent with the State's AB 32 and SB 32 GHG reduction goals.

Consistency Regarding GHG Reduction Goals for 2050 under Executive Order S-3-05 and GHG Reduction Goals for 2045 under CARB's 2022 Scoping Plan

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed Project would comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update; however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately."

CARB recognized that AB 32 established an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, CARB's First Update "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by CARB would serve to reduce the proposed Project's post-2020 emissions level to the extent applicable by law:

- **Energy Sector:** Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the project's emissions level.

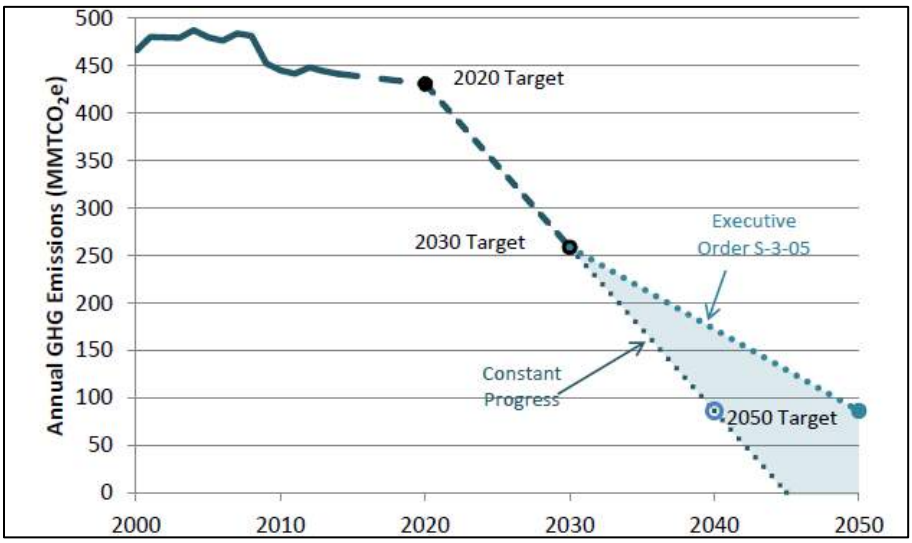
- **Transportation Sector:** Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project's emissions level.

- **Water Sector:** The project's emissions level will be reduced as a result of further desired enhancements to water conservation technologies.

- **Waste Management Sector:** Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project's emissions level.

For the reasons described above, the Project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets. The trajectory required to achieve the post-2020 targets is shown in Figure 4.

Figure 4
California's Path to Achieving the 2050 Target



Source: CARB 2017 Scoping Plan Update

In his January 2015 inaugural address, former Governor Brown expressed a commitment to achieve "three ambitious goals" that he would like to see accomplished by 2030 to reduce the State's GHG emissions:

- Increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the state agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change. Studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain

very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed Project's future emissions trajectory is expected to follow a declining trend, consistent with the 2030, 2045, and 2050 targets.

The 2017 Scoping Plan provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target. In addition, the 2022 Scoping Plan outlines objectives, regulations, planning efforts, and investments in clean technologies and infrastructure that outlines how the State can achieve carbon-neutrality by 2045. Accordingly, taking into account the proposed Project's design features and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the proposed Project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, carbon neutral by 2045, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment.

Summary

As described above, the proposed Project would be consistent with State GHG Plans and would not obstruct the State's ability to meet its goals of reducing GHG emissions 40 percent below 1990 levels by 2030, carbon neutral by 2045, and 80 percent below 1990 levels by 2050. Therefore, the Project's generation of GHG emissions would result in a ***less than significant impact*** on the environment.

Mitigation Measures: None are required.

b. <u>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</u>

Less Than Significant. As discussed under Impact VIII(a), neither the City of Farmersville nor the County of Tulare have adopted a GHG reduction plan that would be applicable to the proposed Project. In addition, the City of Farmersville has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions

contained in the CEQA Guidelines. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the Project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the Project. The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County and would not be appliable to the proposed Project. Since no other local or regional Climate Action Plan is in place, the Project is assessed for its consistency with CARB's adopted Scoping Plans. This assessment is included under Impact VIII(a) above. As demonstrated above, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce the emissions of greenhouse gases. This impact would be ***less than significant***.

Mitigation Measures: None required.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency	☐	☐	☐	☒

	response plan or emergency evacuation plan?				
g.	Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

RESPONSES

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. The proposed Project would include the development of two fully affordable multi-family projects for a total of 82 units and three commercial pads. The development also includes a community building, basketball court, bocce ball court, dog parks, retention basins, and parking spaces. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements.

Proposed Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program through the submission and implementation of a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the project site. Therefore, no significant impacts would occur during construction activities.

The operational phase of the proposed Project would occur after construction is completed and employees and residents move in to occupy the structures on a day-to-day basis. The proposed Project includes land uses that are considered compatible with the surrounding uses upon approval of the General Plan Amendment and Zone Change Approval. None of these land uses routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common commercial grade hazardous materials such as household and commercial cleaners, paint, etc. The proposed Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, nor would a significant hazard to the public or to the environment through the reasonably foreseeable upset and accidental conditions involving the

likely release of hazardous materials into the environment occur. Therefore, the proposed Project will not create a significant hazard to the public or the environment and any impacts would be ***less than significant***.

Mitigation Measures: None are required.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. See Response a. above. Any accumulated hazardous construction or operational wastes will be collected and transported away from the site in compliance with all federal, state and local regulations. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Farmersville High School is approximately 0.3 miles southeast of the proposed Project site. Construction-related activities will be intermittent, temporary, and short-term, and are not anticipated to result in the release of hazardous emissions, involve hazardous materials, or create a hazard to the school. As noted earlier, the proposed Project includes the development of general commercial and multi-family residences, hence it is not reasonably foreseeable that the Project will cause a significant impact by emitting hazardous waste or bringing hazardous materials. General commercial and residential land uses do not generate, store, or dispose of significant quantities of hazardous materials. Such uses also do not normally involve dangerous activities that could expose persons onsite or in the surrounding areas to large quantities of hazardous materials. See also Responses a. and b. regarding hazardous material handling. The impact is ***less than significant.***

Mitigation Measures: None are required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed Project site is not located on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Geotracker[12] and DTSC Envirostor[13] databases – accessed in July 2023). There are no hazardous materials sites that impact the Project. As such, ***no impacts*** would occur that would create a significant hazard to the public or the environment.

Mitigation Measures: None are required.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed Project site is approximately 5.7 miles northwest of the Exeter Airport and the airport's safety zones do not extend into the City of Farmersville. There is ***no impact***.

Mitigation Measures: None are required.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project will not interfere with any adopted emergency response or evacuation plan. Construction activities will take place within right-of-ways of existing roadways. Construction activities will be temporary in nature and will not cause any road closures that could interfere with any adopted emergency response or evacuation plan. The construction contractor will be required to work with the City and County (public works, police/fire, etc.) if and when roadway diversions are required to ensure that adequate access is maintained for residents and emergency vehicles. There is ***less than significant impact.***

Mitigation Measures: None are required.

[12] GeoTracker, State Water Resources Control Board. https://geotracker.waterboards.ca.gov/. Accessed July 2023.

[13] EnviroStor, Department of Toxic Substances Control. https://www.envirostor.dtsc.ca.gov/public/. Accessed July 2023.

g. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The site is surrounded by urban uses and as such, there are no wildlands on or near the Project site. There is ***no impact***.

Mitigation Measures: None are required.

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off- site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

According to the City's Comprehensive Infrastructure Management Plan (CIMP), eight well sites are located in the City's water distribution system. On average, the wells can each produce around 700 gallons per minute (gpm), and are considered fairly shallow, with groundwater depths encountered approximately 60 feet below ground surface. [14]

The Kaweah Basin is the source of all drinking water supply for the City of Farmersville and surrounding communities. The Kaweah Delta Water Conservation District (KDWCD) manages the Basin. KDWCD and other irrigation districts and companies have historically managed groundwater through the conjunctive use of surface water. KDWCD regularly provides programs that benefit local agricultural customers by making available additional surface water supplies for irrigation. These programs effectively reduce the withdrawals of groundwater resulting in in-lieu recharge of the aquifer. Groundwater is normally used by agriculture as an alternate source when surface supplies are not available and is the sole source in areas within KDWCD jurisdiction that do not have access to surface water.

RESPONSES

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

[14] Comprehensive Infrastructure Management Plan, City of Farmersville. November 2012. Pg 4-2

Less Than Significant Impact.

Construction

Grading, excavation and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed project are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, "good housekeeping" procedures can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. In addition, grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. These Best Management Practices (BMPs) would be required in the Stormwater Pollution Prevention Plan (SWPPP) to be prepared prior to commencement of Project construction. When properly designed and implemented, these "good-housekeeping" practices are expected to reduce short-term construction-related impacts to less than significant.

In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, the Project will be required to comply with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB) has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

Operation

The proposed Project includes the construction and operation of a multifamily housing consisting of 82 units, community areas and three commercial/retail pads including parking spaces, internal access roads,

lighting, site landscaping, and other improvements. The Project will tie into the existing City water and wastewater systems.

The proposed Project will result in wastewater from residential units and commercial structures that will be discharged into the City's existing wastewater treatment system. The wastewater will be typical of other urban/residential developments consisting of bathrooms, kitchen drains and other similar features. The Project will not discharge any unusual or atypical wastewater. Site buildout has been planned for and anticipated in the City's planning documents. Therefore, the proposed Project will not result in additional production of wastewater that was not already accounted for in the City's infrastructure planning documents.

The Project will comply with all City ordinances and standards to assure proper grading and drainage. Compliance with all local, state, and federal regulations will prevent violation of water quality standards or waste discharge requirements. The proposed Project will be required to prepare a grading and drainage plan for review and approval by the City Engineer, prior to issuance of building permits.

Additionally, there will be no discharge to any surface or groundwater source. As such, the proposed Project will not violate any water quality standards and will not impact waste discharge requirements. The impact will be ***less than significant***.

Mitigation Measures: None are required.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The City of Farmersville will provide water services upon development. The City of Farmersville's water supply comes from groundwater extraction. The City of Farmersville is located in the Kaweah Subbasin area and falls under the Greater Kaweah Groundwater Sustainability Agency (GKGSA). The Kaweah Subbasin is classified as high-priority, according to California Water Code § 10933 (b) and has been designated a critically overdrafted by the California Department of Water Resources (DWR).[15] GKGSA acknowledges a continuing decline in groundwater levels of the aquifer system below the Farmersville area.

[15] Executive Summary, Greater Kaweah Groundwater Sustainability Agency Groundwater Sustainability Plan. January 2020. https://greaterkaweahgsa.org/resources/.

The City of Farmersville General Plan has designated the site for urban development as an such, site development has been included and planned for in the City's infrastructure planning documentation. To assist in mitigating the groundwater decline, the City of Farmersville has established fees that are charged to new development, which will fund groundwater recharge and other water resource projects within the City. Project implementation would not affect groundwater supplies beyond what has already been accounted for. Impacts would be ***less than significant.***

Mitigation Measures: None are required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i. result in substantial erosion or siltation on- or offsite;

   ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

   iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

   iv. impede or redirect flood flows?

Less Than Significant Impact. The site is currently vacant with minimal vegetation. The proposed Project will change drainage patterns of the site through the installation of impervious surfaces and structures (apartment complex, commercial pads, driveways, parking areas, streets, etc.) and will be required by the City to be graded to facilitate proper stormwater drainage into the stormwater basin included with the Project. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP will be retained on-site during construction.

The commercial buildings and residential dwellings will be built in accordance with the current California Building Code and the on-site retention basins have been appropriately sized to accommodate potential flood waters. Accordingly, the chance of flooding (and therefore the release of pollutants due to flooding) at the site is remote. Impacts are ***less than significant.***

Mitigation Measures: None are required.

d. In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The proposed Project site is located within Zone X, which experiences minimal flood hazards, as indicated by FEMA flood hazard map 06107C0954E, effective 6/15/2009.[16] The site development includes retention basins and will be designed for adequate storm drainage and will be required to prepare and submit a water quality control plan to be implemented during construction, as required by the National Pollutant Discharge Elimination System. This plan must be reviewed and approved by the City Engineer prior to the start of construction.

There are no inland water bodies that could be potentially susceptible to a seiche in the Project vicinity. This precludes the possibility of a seiche inundating the Project site. The Project site is more than 100 miles from the Pacific Ocean, a condition that precludes the possibility of inundation by tsunami. There are no steep slopes that would be susceptible to a mudflow in the Project vicinity, nor are there any volcanically active features that could produce a mudflow in the City of Farmersville. This precludes the possibility of a mudflow inundating the Project site. Any impacts are ***less than significant***.

Mitigation Measures: None are required.

LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

[16] National Flood Hazard Layer (NFHL) Viewer, FEMA. https://www.fema.gov/flood-maps/national-flood-hazard-layer. Accessed August 2023.

RESPONSES

a. Physically divide an established community?

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project would include the development of two fully affordable multi-family projects for a total of 82 residential units and up to 13,950 square feet of commercial space. The northern portion of the Project site would consist of four buildings of senior housing developments with a total of 42 units, a commercial pad, community area, fenced dog park, bocce ball court, community garden, retention basins, and 97 parking spaces. The southern portion of the Project site would consist of an apartment complex with five residential buildings consisting of a total of 40 units, a community building, two commercial/retail pads, dog park, basketball court, retention basins, and 92 parking spaces. This apartment complex would include residential units, tot lot, half-basketball court, fenced dog park, on-site laundry facility, and outdoor picnic-barbeque area. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements.

The proposed Project is located in the northeastern portion of the City of Farmersville within city limits, in an area of suburban residential and commercial land uses. The proposed Project site covers approximately 9.4 acres and consists of vacant land with minimal vegetation. The site is zoned General Commercial (C-G) and is also designated General Commercial by the Farmersville General Plan. The proposed Project includes a General Plan Amendment for the land use change of the eastern portion of the site to "Multi-Family Residential", and a Zone Change to "Multi-Family Residential (R-M)". Upon approval the Project will be in compliance with the General Plan and zoning ordinance.

The proposed Project will extend an existing community in the region. The Project has no characteristics that would physically divide the City of Farmersville. Access to the existing surrounding areas will be improved. ***No impacts*** would occur as a result of this Project.

Mitigation Measures: None are required.

XII. MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

RESPONSES

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The most economically important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas. The four streams that have provided the main source of high-quality sand and gravel in Tulare County to make Portland cement concrete and asphaltic concrete are the Kaweah River, Lewis Creek, Deer Creek and the Tule River[17].

[17] Tulare County General Plan 2030 Update Recirculated Draft EIR. February 2010. Page 3.7-9.

The proposed Project area is not included in a State classified mineral resource zone[18], and the Kaweah River is approximately 1.7 miles northwest of the Project site. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

XIII. NOISE

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

RESPONSES

a. <u>Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</u>

[18] Ibid. Page 3.7-10.

b. Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The City of Farmersville General Plan does not include a noise element, but rather states that the City has adopted Tulare County's Noise Element. The County of Tulare Noise Element of the General Plan (August 2012) establishes noise level criteria in terms of the Day-Night Average Level (Ldn) metric. The Ldn is the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The Ldn represents cumulative exposure to noise over an extended period of time and is therefore calculated based upon *annual average* conditions.

Site development may increase ambient noise levels in the Project vicinity beyond those already present on the site from the residential activity. In the short term, noise levels would be raised during construction of the Project phases by the operation of heavy equipment and other associated activities. Because construction noise would generally occur intermittently on Monday through Saturdays during daylight hours, per the Farmersville Noise Ordinance, the impact of noise in surrounding land uses is not expected to be significant.

In the long term, any development would add traffic and other sources of noise that will somewhat increase the ambient noise levels in the vicinity. However, these noise levels should be relatively consistent with those experienced in the area and other existing developed areas of Farmersville.

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project includes the construction of multifamily housing consisting of 48 units along with grocery store, oil change/car wash, fueling station, convenience store with drive-thru, and general commercial. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day. Table 17 describes the typical construction equipment vibration levels.

Table 17
Typical Construction Vibration Levels

Equipment	VdB at 25 ft
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities will be temporary and not exceed the Federal Transit Administration (FTA) threshold for the nearest residences which are located adjacent to the project site on the eastern boundary. As such, any impacts resulting from an increase in ambient noise levels or excessive groundborne vibration will be ***less than significant.***

c. For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project is not located within an airport land use plan. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

XIV. POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

RESPONSES

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed Project would include the development of a 9.4-acre parcel for two fully affordable multi-family projects for a total of 82 units, three commercial/retail pads and community areas. The site construction will also include parking spaces, internal access roads, lighting, site landscaping and additional related improvements. The 9.4-acre site is currently designated and zoned for general commercial. The eastern portion of the site is proposed for the General Plan Amendment and Zone Change to Multi-family Residential to accommodate the Project.

According to the current Tulare County Regional Housing Needs Assessment (RHNA), the City of Farmersville needs a total of 654 net new housing units between the 8.5-year projection period (June 30, 2023 – December 31, 2031).[19] As part of the total RHNA Allocation, 218 units will be needed as part of

[19] Final Regional Housing Needs Plan, Cycle 6. August 2022. Tulare County Associated of Governments. https://tularecog.org/sites/tcag/assets/FINAL%20RHNP%20-%20COMBINED.pdf. Accessed June 2023.

Affordable Allocation (Combined Very Low + Low Income groups). Estimates as of 1/1/2023 shows the City has 2,783 housing units with an average of 3.75 people per household.[20]

The proposed Project includes construction of up to 82 fully affordable multi-family residential units. Based on the per-unit average of 3.75 persons for the City, the proposed Project would provide housing for approximately 308 people. The proposed Project would assist the City in reaching its RHNA goal, and as such, the site is planned for development. The City of Farmersville has sufficient labor force in the area to support many other types of industries. As such, any impacts are ***less than significant***.

Mitigation Measures: None are required.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant. There are no residential structures currently on-site. As noted earlier, the Project intends to add multi-family housing to the community. The Project will not displace any housing and therefore there is ***less than significant***.

Mitigation Measures: None are required.

[20] E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023. May 2023. State of California Department of Finance. https://dof.ca.gov/Forecasting/Demographics/Estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. Accessed June 2023.

XV. PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

RESPONSES

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

Less Than Significant Impact. The Farmersville Fire Department is located at 909 W Visalia Road Farmersville, CA 93223, approximately 1.3 miles southwest of the Project site. The Department maintains a fleet of specialized fire apparatus including a 4-wheel drive Brush Fire Patrol Unit, a Quick Attack

Squad Unit (250 GPM Pumper), an Engine (1,500 GPM Pumper), a 55 Ft. Ladder Truck (1,500 GPM Pumper), and several Command/Utility Vehicles.

The Project site is already serviced by the Fire Department. The proposed Project at full buildout will add to the number of "customers" served, however, the Fire Department has capacity for the additional service need. No additional fire equipment, personnel, or services will be required by Project implementation. In addition, the Project applicant will be required to pay all associated impact fees related to public services. As such, any impacts would be less ***than significant***.

Police Protection?

Less Than Significant Impact. The proposed Project includes the construction of 82 multi-family residential units, which will accommodate approximately 308 persons, and up to 13,950 sq.ft. of commercial/retail space. The proposed Project site will continue to be served by the City of Farmersville Police Department, located at 909 W Visalia Road, Farmersville, CA 93223. Implementation of the proposed Project would result in an increase in demand for police services; however, this increase would be minimal compared to the number of officers currently employed by the Farmersville Police Department and would not trigger the need for new or physically altered police facilities. No additional police personnel or equipment is anticipated. In addition, each residential unit will be assessed a public safety impact fee by the City that is used to make capital improvements for the Police Department. The impact is ***less than significant.***

Schools?

Less Than Significant Impact. The proposed Project site is located within the Farmersville Unified School District. Farmerville High School and Freedom Elementary School are both located approximately 0.3 miles and 0.4 miles southeast of the Project site respectively. Other schools in the District include Deep Creek Academy, Farmersville Jr. High School, Hester Elementary School, Snowden Elementary School, and Farmersville Adult School. Pursuant to California Education Code Section 17620(a)(1), the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district for the purpose of funding the construction or reconstruction of school facilities. The Project applicant would be required to pay such fees to reduce any impacts of new residential development of school services. Payment of the developer fees will offset the addition of school-age children within the district. As such, any impacts would be ***less than significant.***

Parks?

Less Than Significant Impact. The City of Farmersville has six developed park sites, including Armstrong Park (4 acres), Jennings Park (2.1 acres), Liberty Park (6 acres), Riverbank Park (0.5 acres), Roy's Park (4.5 acres), Veterans Memorial Park (4.33 acres), Veterans Memorial Sports Park (11.82 acres).

To ensure sufficient recreational opportunities, the City has established a Park Impact Fee, implemented by Chapter 4, Development Fees, of the Municipal Code. Municipal Code states that parks must be constructed or expanded commensurate with growth of the City. The City Council determined that a park impact fee is required to assist in the financing of these public park improvements and to pay for new development's fair share of the acquisition and development costs of these improvements. The Project applicant would be required to comply with the Municipal Code. As such, any impacts would remain ***less than significant.***

Other public facilities?

Less Than Significant Impact. The proposed Project is within growth projections identified in the City's General Plan and other infrastructure studies. As such, the Project would not result in increased demand on other public facilities such as library services that has not already been planned for. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

XVI. RECREATION

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

RESPONSES

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. As described in Impact XIV(a), the City has established a Park Impact Fee through the Municipal Code, which states that parks must be constructed or expanded commensurate with growth of the City. The Project applicant will be required to comply with that Municipal Code, as well as any fees that apply, and as such, any impacts will be ***less than significant***.

Mitigation Measures: None are required.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. The proposed Project does includes the construction of community areas with recreation facilities. The Project development consists of a community area, a community building, fenced dog parks, bocce ball court, community garden, tot lot, half-basketball court, and outdoor picnic-barbeque area. As determined by the analysis contained within this document, ***less than significant impacts*** would occur.

Mitigation Measures: None are required.

XVII. TRANSPORTATION/TRAFFIC

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐
b.	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☒	☐	☐
c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d.	Result in inadequate emergency access?	☐	☐	☒	☐

A Traffic Analysis was performed on behalf of the proposed Project by Ruettgers & Schuler Civil Engineers (Appendix C). The following discussion and impact analysis are directly referencing this technical report.

RESPONSES

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact with Mitigation. The City of Farmersville General Plan Circulation Element contains Goals, Objectives and Action Plans to Ensure that streets in Farmersville are not congested and that the traffic on Farmersville's streets operates in an efficient and safe manner.

The Project site is situated on approximately 9.4 gross acres of undeveloped vacant land. The property is zoned Central Commercial. The proposed development would include 40 multi-family dwelling units, 42 multi-family senior adult housing, and up to 13,950 square feet of commercial development. Access to the site will be along Farmersville Boulevard.

Trip Generation

The Project trip generation volumes shown in Table 18 were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.[21] Trip rates, equations, and directional splits for ITE Land Use Codes 220 (Multifamily Housing-Low Rise), 252, (Senior Adult Housing-Multifamily), 822 (Strip Retail <40k), and 934 (Fast-Food Restaurant with Drive-Through) were used to estimate Project trips for weekday peak hour of adjacent street traffic.

Table 18
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
220	Multifamily Housing (Low Rise)	40 Dwelling Units	eq	332	eq	24% 8	76% 27	eq	63% 24	37% 14
252	Senior Adult Housing - Multifamily	42 Dwelling Units	eq	146	eq	34% 3	66% 6	eq	56% 6	44% 5
822	Strip Retail (<40k)	6.96 1000 sq.ft. GLA	eq	523	eq	60% 14	40% 9	eq	50% 30	50% 30
934	Fast-Food Restaurant with Drive-Through	4.19 1000 sq.ft. GLA	467.48	1959	44.61	51% 95	49% 92	33.03	52% 72	48% 66
934	Fast-Food Restaurant with Drive-Through	2.8 1000 sq.ft. GLA	467.48	1309	44.61	51% 64	49% 61	33.03	52% 48	48% 44
Sub-total				4269		184	195		180	159
Adjustments										
Capture		5%		213		9	8		8	7
Pass-by		15%		640		26	24		23	21
Total				**3416**		**149**	**163**		**150**	**131**

Trip Distribution and Assignment

[21] Traffic Study- Gardenia Courtyard, City of Farmersville. Ruettgers & Schuler Civil Engineers. September 2023. Appendix C.

The distribution of Project peak hour trips is shown in Table 19 and represents the movement of traffic accessing the project site by direction. The Project trip distribution was developed based on site location and travel patterns anticipated for the proposed land uses.

Table 19
Project Trip Distribution

Direction	Percent
North	10
East	35
South	10
West	45

Project peak hour trips were assigned to the study intersections as shown in Figure 4 of Appendix C. Project trip assignment was developed based on trip generation, trip distribution and likely travel routes for traffic accessing the Project site.

Existing and Future Traffic

Existing peak hour turning movement counts were obtained in March and July 2022. Average annual growth rates ranging between 0.5 and 2.53 percent were applied to the 2023 peak hour volumes to estimate peak hour volumes for the year 2043. These growth rates were developed based on a review of historical count data and output from TCAG's regional travel demand model as well as a discussion with the City of Farmersville Planning Consultant. Cumulative volumes were estimated based on information provided by the City of Farmersville regarding build year, land use, size and location for each pending development. See Appendix C for figures.[22]

Intersection Analysis

A capacity analysis of the study intersections was conducted using Synchro software from Trafficware, as detailed in Appendix C. The analysis was performed for each of the following traffic scenarios.

- Existing (2023)
- Existing (2023) + Project
- Future Cumulative (2043)

[22] Ibid, pg 7.

- Future Cumulative (2043) + Project

Level of service (LOS) criteria for unsignalized and signalized intersections, as defined in HCM 2010, are presented in the tables below. The City of Farmersville's Circulation Element designates LOS C as the minimum acceptable intersection peak hour level of service.

Table 20
Level of Service Criteria - Unsignalized Intersection

Level of Service	Average Control Delay (sec/veh)	Expected Delay to Minor Street Traffic
A	≤ 10	Little or no delay
B	> 10 and ≤ 15	Short delays
C	> 15 and ≤ 25	Average delays
D	> 25 and ≤ 35	Long delays
E	> 35 and ≤ 50	Very long delays
F	> 50	Extreme delays

Table 21
Level of Service Criteria - Signalized Intersections

Level of Service	Average Control Delay (sec/veh)	Volume-to-Capacity Ratio
A	≤ 10	< 0.60
B	> 10 and ≤ 20	0.61 - 0.70
C	> 20 and ≤ 35	0.71 - 0.80
D	> 35 and ≤ 55	0.81 - 0.90
E	> 55 and ≤ 80	0.91 - 1.00
F	> 80	> 1.00

Peak hour level of service for the study intersections is presented in Tables 22 and 23.[23] Intersection delay in seconds per vehicle is shown within parentheses for intersections operating below LOS C.

[23] Ibid, page 14.

Table 22
Intersection Level of Service - Weekday PM Peak Hour

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	Farmersville Blvd & Ave 296	AWSC	B	B	C	C	-
2	SR 198 EB Ramps & Ave 296	NB	B	B	C	C	-
3	SR 198 EB Ramps & Ave 295	Roundabout	A	A	B	B	-
4	Farmersville Blvd & Ave 295	Roundabout	A	A	C	C	-
5	Farmersville Blvd & Walnut Ave/W Walnut Ave	Signal	C	C	C	C	-
6	Farmersville Blvd & Front St	AWSC	C	C	E (49.2)	E (49.5)	A

Note:
[1] *See Table 28 for mitigation measures.*

Table 23
Intersection Level of Service - Weekday AM Peak Hour

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	Farmersville Blvd & Ave 296	AWSC	B	B	C	C	-
2	SR 198 EB Ramps & Ave 296	NB	B	C	C	C	-
3	SR 198 EB Ramps & Ave 295	Roundabout	A	A	A	A	-
4	Farmersville Blvd & Ave 295	Roundabout	A	A	C	C	-
5	Farmersville Blvd & Walnut Ave/W Walnut Ave	Signal	C	C	C	C	-
6	Farmersville Blvd & Front St	AWSC	C	C	F (50.5)	F (51.0)	B

Note:
[1] *See Table 28 for mitigation measures.*

Traffic Signal Warrant Analysis

Peak hour signal warrants were evaluated for the unsignalized intersections within the study based on the 2014 California Manual on Uniform Traffic Control Devices (2014 CA MUTCD). Peak hour signal

warrants assess delay to traffic on minor street approaches when entering or crossing a major street. Signal warrant analysis results are shown in Tables 24 and 25.[24]

Table 24
Traffic Signal Warrants - Weekday PM Peak Hour

		2023			2023+Project			2043			2043+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Farmersville Blvd at Ave 296	397	173	NO	409	173	NO	595	253	YES	607	253	YES
2	SR 198 EB Ramps at Ave 296	539	54	NO	551	74	NO	754	91	NO	766	111	NO
3	SR 198 EB Ramps at Ave 295	399	213	NO	418	213	NO	587	286	YES	606	297	YES
4	Farmersville Blvd at Ave 295	556	475	YES	599	494	YES	962	724	YES	1005	743	YES
6	Farmersville Blvd at Front St	1105	131	YES	1113	131	YES	1730	182	YES	1738	182	YES

Table 25
Traffic Signal Warrants - Weekday PM Peak Hour

		2023			2023+Project			2043			2043+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Farmersville Blvd at Ave 296	439	141	NO	459	147	NO	620	197	NO	640	203	NO
2	SR 198 EB Ramps at Ave 296	592	61	NO	612	67	NO	788	90	NO	808	96	NO
3	SR 198 EB Ramps at Ave 295	344	193	NO	363	199	NO	495	349	YES	514	355	YES
4	Farmersville Blvd at Ave 295	607	235	YES	652	241	YES	993	375	YES	1038	381	YES
6	Farmersville Blvd at Front St	954	210	YES	961	210	YES	1470	289	YES	1477	289	YES

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified. It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service or operate below an acceptable level of service and not meet signal warrant criteria.

Roadway Analysis

A capacity analysis of the study roadways was conducted using Table 4 in the State of Florida Department of Transportation *Quality/Level of Service Handbook* dated June 2020 (see Appendix). The City of Farmersville Circulation Element states that the peak hour level of service for roadways shall be no

[24] Ibid, page 15.

lower than LOS "C" for urban areas. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2023)
- Existing (2023) + Project
- Future Cumulative (2043)
- Future Cumulative (2043) + Project

Table 26
PM Roadway Level of Service

Street	2023 Two-Way LOS		2023+Project Two-Way LOS		2043 Two-Way LOS		2043+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
Farmersville Blvd to SR 198 WB Ramps	518	C	550	C	782	C	814	C
Ave 295: SR 198 EB Ramps to Farmersville Rd	648	C	678	C	1009	C	1039	C
Farmersville Blvd: Font St to Walnut St	955	C	1003	C	1394	C	1402	C
Farmersville Blvd: Walnut St to Ave 295	821	C	877	C	1412	C	1468	C
Farmersville Blvd: Ave 295 to Ave 296	609	C	641	C	951	C	983	C

Table 27
AM Roadway Level of Service

Street	2022 Two-Way LOS		2022+Project Two-Way LOS		2042 Two-Way LOS		2042+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
Farmersville Blvd to SR 198 WB Ramps	544	C	570	C	772	C	798	C
Ave 295: SR 198 EB Ramps to Farmersville Rd	428	C	453	C	704	C	729	C
Farmersville Blvd: Font St to Walnut St	954	C	961	C	1318	C	1325	C
Farmersville Blvd: Walnut St to Ave 295	663	C	714	C	1138	C	1189	C
Farmersville Blvd: Ave 295 to Ave 296	602	C	628	C	922	C	948	C

Intersection Improvements

Intersection improvements needed by the year 2043 to maintain or improve the operational level of service of the street system in the vicinity of the Project are presented in Table 28.[25]

Table 28
Future Intersection Improvements

#	Intersection	Total Improvements Required by 2043	Project Share
6	Farmersville Rd & Front St	Signal	1.1%

Project percent share is calculated using the following formula:

$$\% \text{ Share} = \frac{\text{Project Traffic}}{\text{(Future+Project Traffic) - Existing Traffic}} \times 100\%$$

In summary, all six study intersections currently operate at or above LOS C during peak hours prior to and with the addition of Project traffic. In 2043, it is anticipated that Farmersville Boulevard & Front Street will operate below an acceptable level of service prior to the addition of Project traffic. All roadway segments within the scope of the study currently operate above LOS C during peak hours prior to, and with the addition of Project traffic in both 2023 and 2043. With the addition of the mitigation measure identified in Table 28, all intersections will operate at acceptable levels.

As such, potential impacts will be ***less than significant with mitigation incorporation.***

Mitigation Measures:

TRA-1

> The Applicant shall pay the City of Farmersville for their Fair Share Portion of the intersection improvements described in Table 28, in order to maintain or improve the operational level of service of the street system in the Project vicinity.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact with Mitigation. An evaluation of vehicle miles traveled (VMT) for project traffic was conducted in accordance with California Environmental Quality Act (CEQA) requirements.

[25] Ibid, pg 17.

The City of Farmersville has adopted the "County of Tulare SB 743 Guidelines", dated June 8, 2020, which contain recommendations regarding VMT assessment, significance thresholds and mitigation measures.

Baseline VMT was determined utilizing data from the California Statewide Travel Demand Model (CSTDM). The proposed residential Project is located in Traffic Analysis Zone (TAZ) 2757, which has an average VMT/capita of 11.27 miles. The proposed residential Project is considered a typical Project within the TAZ and therefore the Project would be expected to have the same VMT per capita. There are no special considerations with the Project to assume the Project would produce a VMT/capita lower than the average for the TAZ. The threshold of significance for residential Project VMT/capita is if the Project VMT is below the average in the TAZ where the Project is located. Since VMT/capita is assumed to be equal to the average for the aforementioned zone, it is anticipated that the proposed Project will have a significant transportation impact prior to mitigation. The proposed Project includes locally-serving retail as well as residential dwelling units. Locally-serving retail is defined by a retail development that is less than 50,000 square feet. The locally-serving retail "screens out" of VMT analysis and therefore, only the vehicle trips generated by the residential dwelling units is used in the VMT mitigation.

The Tulare County guidelines include detailed instructions for mitigation if a project has significant impacts. The guidelines state "The preferred method of VMT mitigation in Tulare County is for project applicants to provide transportation improvements that facilitate travel by walking, bicycling, or transit." In accordance with these guidelines, a survey was conducted within a half mile of the Project to determine any pedestrian, bicycle or transit facilities deficiencies exist. After review, three ADA compliant wheelchair ramps are proposed to be constructed at the following location: Farmersville Boulevard & Walnut Avenue. The proposed mitigation measures are shown in Figure 5.

The guidelines include a minimum cost for mitigation of $20 per daily trip generated by the Project or 0.5% of the total construction cost of the Project (not including land acquisition). As shown in Table 1, the Project excluding the locally-serving retail is anticipated to generate 478 daily trips, which equates to a target value of improvements of $9,560. The total mitigation cost is estimated at approximately $10,800 with a 20% contingency.

Pursuant to the guidelines, if a project provides mitigation which meets the minimum threshold listed above, the project can presume a 1% reduction in VMT. The assumed VMT/capita reduction is 1% of 11.27 or 0.11. The resulting VMT/capita after mitigation is 11.16 which is below the average VMT/capita in the TAZ which the Project is located.

Project VMT analysis showed a VMT which was equal to the existing local VMT in the area, which indicates a transportation impact under CEQA. With implementation of the mitigation measure TRA-2

identified above for reduction of VMT, the Project will have a ***less than significant transportation impact***.

Mitigation Measures:

TRA-2

The applicant shall install ADA compliant wheelchair ramps at the following locations:

- Farmersville Road & Walnut Avenue (3 ramps)

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The proposed Project has been designed for ease of access, adequate circulation/movement, and is typical of residential developments in the City of Farmersville. On-site circulation patterns do not involve high speeds, sharp curves or dangerous intersections. Although there will be an increase in the volume of vehicles accessing the site and surrounding areas, the proposed Project will not present a substantial increase in hazards. Any impacts are considered ***less than significant.***

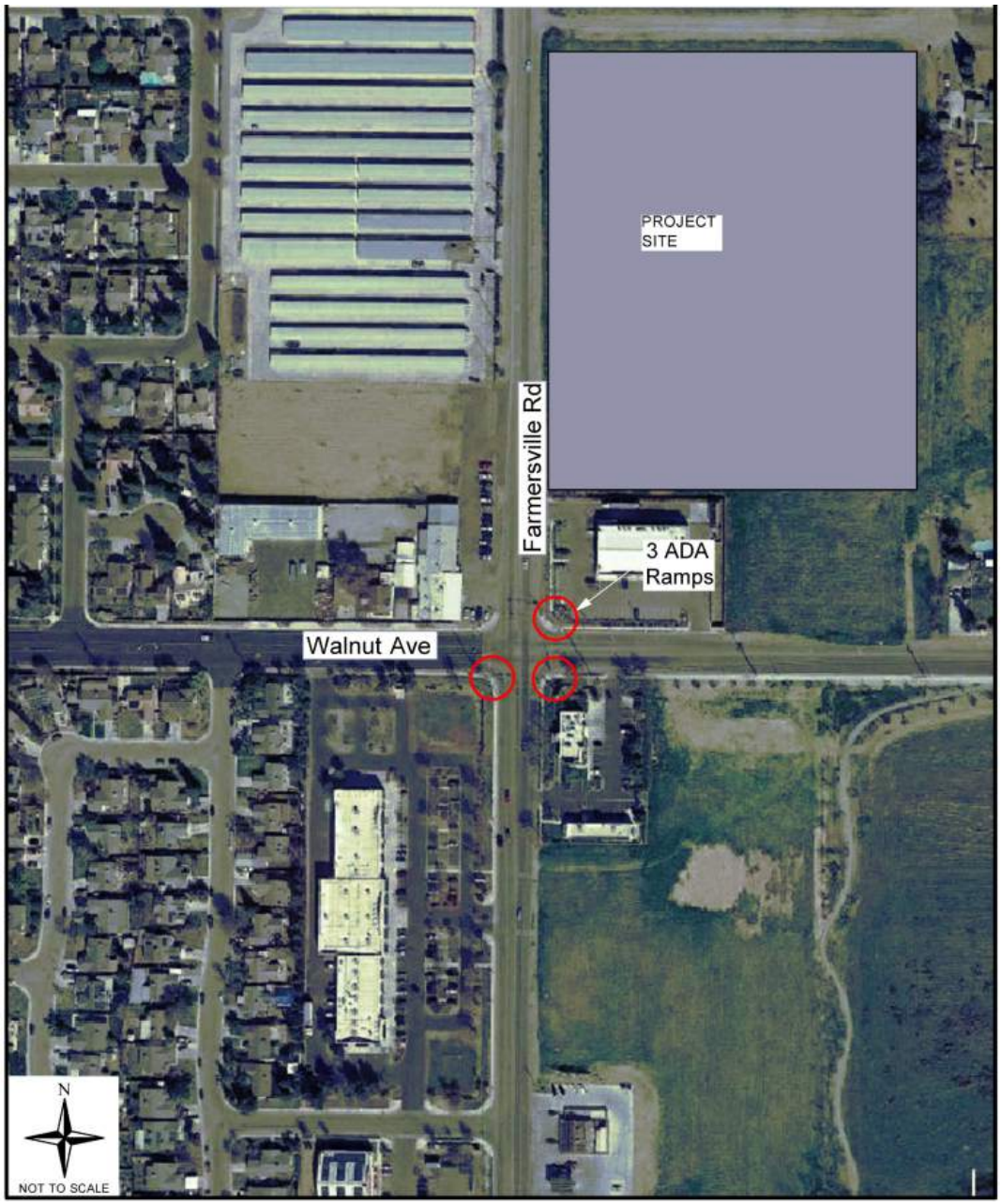
Mitigation Measures: None are required.

d. Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project does not involve a change to any emergency response plan. Access to the site is proposed via Farmersville Boulevard. The site will remain accessible to emergency vehicles of all sizes. As such, potential impacts are ***less than significant.***

Mitigation Measures: None are required.

Figure 5
VMT Mitigation



XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

RESPONSES

a-i, a-ii. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact. A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources, or if the City of Farmersville, acting as the Lead Agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. As discussed above, under Section V, Cultural Resources, no subsurface construction is anticipated to occur as a result of Project implementation as the site is currently built out.

The California Native American Tribes were contacted pursuant to AB 52 (Public Resources Code Section 21080.3.1, et seq.) and SB 18 on behalf of the City of Farmersville on May 30, 2023.

- Big Sandy Rancheria of Western Mono Indians
- Santa Rosa Indian Community of the Santa Rosa Rancheria
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley band
- Tubatulabals of Kern Valley
- North Fork Mono Tribe
- Big Sandy Rancheria of Western Mono Indians
- Kern Valley Indian Community

Tribes were provided 90 days, to request consultation pursuant to those statutes. The Santa Rosa Rancheria – Tachi Yokuts responded on July 3, 2023 and requested to be retained for consultation and monitoring, and to conduct a cultural presentation for construction staff. They also requested copies of the archaeological survey and record search as well as the Sacred Lands File search, which were provided via email. No other comments were received. Potential impacts to tribal cultural resources will be ***less than significant.***

Mitigation Measures: None are required.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

RESPONSES

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. The proposed Project would include the development of two fully affordable multi-family projects for a total of 82 units and three commercial pads. The development also includes a community area, fenced dog park, bocce ball court, community garden, on-site laundry facility, and outdoor picnic-barbeque area. The site construction will also include internal access roads, parking spaces, lighting, site landscaping and additional related improvements.

Wastewater service, water, electric power, natural gas and telecommunications facilities would all provide service to the proposed Project from their respective existing facilities and as such, would not be required to construct new or expanded facilities.

As discussed in Section X, Hydrology and Water Quality, with an increase in the area of impervious surfaces on the Project site, an increase in the amount of storm water runoff is anticipated. The site will be designed so that storm water is collected and deposited in the City's existing storm drain system. The storm water collection system design will be subject to review and approval by the City Public Works Department. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP is retained on-site during construction. Thus, the proposed Project would have a ***less than significant impact.***

The Project will have a ***less than significant impact*** to this analysis area.

Mitigation Measures: None are required.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. As discussed in Impact X(b), the proposed Project will increase demands on the Farmersville water production and distribution area. The City's water system consists of a series of wells, pump stations, treatment facilities and distribution lines. The system draws from the groundwater system underlying Farmersville and the Central Valley. While groundwater supplies can accommodate multiple dry years, the City of Farmersville, Tulare County, and nearby cities are engaging in groundwater management activities to monitor and enhance recharge capabilities to accommodate future demands. The Project site has been designated for urban development and as such, has been

accounted for in the City's infrastructure planning documents and projections. The City will have sufficient supply to serve the proposed Project. As such, the proposed Project will have a ***less than significant impact*** to this impact area.

Mitigation Measures: None are required.

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The Project will result in wastewater from residential units and commercial buildings that will be discharged into the City's existing wastewater treatment system. The wastewater will be typical of other urban/residential and general commercial/retail developments consisting of bathrooms, kitchen drains and other similar features. The Project will not discharge any unusual or atypical wastewater that would violate the City's waste discharge requirements. The City of Farmersville Public Works Department has reviewed the Project and determined that it can accommodate the wastewater generated from the project. Additionally, the proposed Project applicant would be required to comply with any applicable City and WWTF regulations and would be subject to applicable development impact fees and wastewater connection charges. With compliance to applicable standards and payment of required fees and connection charges, the Project would not result in a significant impact related to construction or expansions of existing wastewater treatment facilities. Therefore, the impact of the Project on wastewater treatment is ***less than significant***.

Mitigation Measures: None are required.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Disposal services in the City are provided by a private contractor, Mid Valley Disposal. Solid waste is usually hauled to the Visalia Landfill, north of Visalia on Road 80. The State of California requires that all cities and counties reduce the amount of waste going to landfills and the City is meeting its recycling requirements. Mid Valley Disposal has a program of recycling pick-ups in Farmersville; materials separated for recycling include paper, glass, metals and plastics to provide a diversion of portions of the waste stream resulting in a reduction of the solid waste stream going to landfills and similar disposal locations. The site has been designated for urban uses by the General Plan

and as such, the demand for City infrastructure, such as disposal services, has been accounted for in City planning documents. Impacts to this resource area are ***less than significant.***

Mitigation Measures: None are required.

e. Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. See Response d, above. The proposed Project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed Project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during project construction and operation. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

RESPONSES

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. The proposed Project is located in an area developed with residential and commercial uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread.

To receive building permits, the proposed Project would be required to be in compliance with the adopted emergency response plan. As such, any wildfire risk to the project structures or people would be ***less than significant.***

Mitigation Measures: None are required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

RESPONSES

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict

the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to ***less than significant***.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the Project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). The impact is ***less than significant***.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project design to reduce all potentially significant impacts to ***less than significant.***

LIST OF PREPARERS

Crawford & Bowen Planning, Inc., *Initial Study/MND*

- Emily Bowen, LEED AP, Principal Environmental Planner
- Travis Crawford, AICP, Principal Environmental Planner
- Deepesh Tourani, Environmental Planner

Technical Studies Prepared by:

- Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum - Johnson Johnson and Miller Air Quality Consulting Services
- Phase I Cultural Resource Survey for Gardenia Courtyards Project – Hudlow Cultural Resource Associates
- Traffic Study – Ruettgers & Schuler Civil Engineers

Persons and Agencies Consulted

City of Farmersville

- Karl Schoettler, Contract City Planner

California Historic Resources Information System

- Celeste Thomson, Coordinator

Appendix A

Air Quality, GHG & Energy Technical Memo

Appendix B

Cultural Resource Study

Appendix C

Traffic Study

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CITY OF FARMERSVILLE
Master Planning Application Form

COMMUNITY DEVELOPMENT DEPARTMENT 909 W. VISALIA ROAD FARMERSVILLE, CA 93223 (559) 747-0458

Please type or print clearly in ink. Incomplete applications will be returned.

Applicant Name: AMG & Associates, LLC

Address: PO Box 260770

City: Los Angeles State: CA ZIP: 91316

Phone/Email: (310) 968-3196

Agent/Representative: Jacob Soroudi

Address: PO Box 260770

City: Los Angeles State: CA ZIP: 91316

Phone/Email: jsoroudi@amgland.com

Property Owner: Marlene E. Gardiner Survivor's Trust & DMA Investments Limited Partnership

Address: PO Box 260770

City: Los Angeles State: CA ZIP: 91316

Phone/Email: (310) 968-3196 / jsoroudi@amgland.com

Please indicate if correspondence is to be sent to:
__ Applicant X Agent __ Property Owner

Specific Description of Request (ATTACH ADDITIONAL SHEET IF NECESSARY)

GPA/Zone Change + Environmental Review + Site Plan Review

Project Location: Farmersville Road

Assessor's Parcel Number(s) APN 111-290-015

Current Zoning: G-C Current Land Use Designation: General Commercial

Check planning permit(s) that apply to your project
(If you are applying for more than one permit, you need to fill out only one Master Application form)

- ☐ Conditional Use Permit ($1,780*)
- ☒ Site Plan Review ($2,210*)
- ☐ Variance ($1,780*)
- ☒ Environmental Assessment ($3,960 for Negative Dec. $(4,200 for Mit Neg Dec. EIR: Actual cost Add'l state and county fees apply
- ☐ General Plan Amendment ($2,275)
- ☐ Zone Change ($1,350)
- ☒ Combined GPA/ZC ($2,765)
- ☐ Lot Line Adjustment ($2,210)
- ☐ Tentative Parcel Map ($3,015)
- ☐ Final Parcel Map : ($3,030 + $40/lot)
- ☐ Tentative Subdivision Map ($$6,060 up to 30 lots; $35 per addional lot tentative;
- ☐ Final Subdivision Map: $4,750 + $40 per lot
- ☐ Lot Merger ($1,515)

* Plus engineer's fees

I (we) hereby certify that the statements furnished above and in the attached exhibits present the data and information required in this application to the best of my (our) ability, and that the facts, statements and information presented are true and correct to the best of my (our) knowledge and belief.

DocuSigned by: Michael Job 4/11/2023
55726AF54F1547... Owner/Applicant Date

DocuSigned by: Marlene E. Gardiner
81443C977CFD433... Owner/Applicant Date

Jacob Soroudi 4/10/23
Agent Date

Michael Job Marlene E. Gardiner
Print Name

Jacob Soroudi
Print Name

Note: The City must have signed consent of all property owners of the project site.

CITY OF FARMERSVILLE
Environmental Questionnaire

COMMUNITY DEVELOPMENT DEPARTMENT 909 W. VISALIA ROAD FARMERSVILLE, CA 93223 (559) 747-0458

Please type or print clearly in ink. Incomplete applications will be returned. You may attach additional sheets to answer questions if necessary. Please note that some items may not apply to your project

GENERAL INFORMATION

Applicant Name:
AMG & Associates, LLC

Address:
PO Box 260770, Encino, CA 91316

Phone/E-mail:
jsoroudi@amgland.com / (310) 968 -3196

Project Address:
Farmersville Road

Assessor's Parcel Number(s): 111-290-015

List and describe any other permits or public agency (Federal, State or local) approvals required for this project (such as building permit, County Health Department permit, etc.):
Building permit.

PROJECT DESCRIPTION

Describe your project/request:
The proposed project will be two separate apartment communities (one senior, one family) built in two phases. Both communities will be 40 units and will be restricted to residents earning 60% or less of the AMI for Tulare County. Each community will be operated separately and will have its own live-in resident manager. There will also be three commercial pads on the subject property, one 4,187 SF, another 6,960 SF, and another 2,800 SF.

Site area in acres: 9.4
Square footage of buildings: 31,803 SF (Senior) + 36,190 SF (Family) + 13,947 (Commercial)
Square footage of parking areas: 33,210 SF

Number of on-site parking spaces: 84 family + 51 senior + 70 commercial

Describe any proposed phasing of the project:

Project will be phased. The phase to commence construction first will be whichever housing type (senior or family) is funded first, as this project will pursue public funding through a variety of sources including but not limited to CTCAC, CDLAC, HOME, etc. The commercial retail pads will likely all be built in one phase, and will constitute the last structures to be built.

If the project is residential, include the number of units, unit sizes, anticipated sales price or rents and anticipated household size:
Project will be 40 units of family housing and 40 units of senior housing. Family housing will be 2 and 3 bedroom units between 765 to 1,000 SF each, Senior housing will be 1 and 2 bedroom units between 705 and 906 SF each. Rents will be restricted to residents earning 60% or less of the Area Median Income for Tulare County, based on household size.

If the project is commercial, indicate the type (neighborhood, regional, etc.), and square footage of sales areas
There will be 3 commercial sales areas, one will be 4,187 SF, another will be 6,800 SF, and another will be 2,800 SF. The former 2 pads will be positioned for retail use, the latter pad will be positioned as a drive-through eatery.

If the project is industrial, indicate type, estimated employment per shift, and products/byproducts produced:

N/A.

If the project is institutional, indicate major functions, estimated employment per shift, estimated occupancy, and community benefits to be derived from the project:

N/A.

ENVIRONMENTAL SETTING (Please answer the following questions - you may attach additional sheets if necessary)

1. Describe the project site as it exists before the project, including information on topography, soil stability, availability of utilities, and any cultural, historical or

scenic aspects. Describe any existing structures on the site, and the use of the structures.

Site is flat, vacant land.

2. Describe the surrounding properties, including the type of land use (residential, commercial, etc. intensity of development, and scale of development.

North: Single Family Homes
West: Car dealership and Mini Storage
South: Vacant, unimproved land
East: Single Family Homes

3. Explain how your project fits into the surrounding neighborhood in terms of architectural design, building materials, colors, scale of buildings, height of buildings, landscaping, etc..

The project will blend into the surrounding community by virtue of its open courtyard and garden style. The project is minimally dense by intentional design, in order to be as unassuming as possible while still being multi-family apartments. The setbacks provided are more than required per code in order to make the project seem smaller and less imposing. There will also be ample open space and amenities to enhance the community oriented appeal of the project.

ENVIRONMENTAL EFFECTS

Are the following potential effects of your project? Provide a written response explaining each item:

GRADING. What (if any) type of grading will be done? Include estimates of material to be moved on or off the site. Where will any excess material be disposed of?
Grading will be minimal, as the site is already relatively flat. Grading will consist of cuts and fills of any uneven spaces.

AIR QUALITY. Will the project generate substantial air emissions or cause deterioration of air quality?. Will there be any types of equipment (i.e. generators, paint spray booths, etc.)that will generate air emissions.? How much vehicle traffic will be generated by the project?

Project will not generate any air emissions and will not deteriorate air quality. Project will generate up to 135 new vehicles. This figure is gathered by combining the total number of residential parking spaces. Applicant however anticipates the project contributing much less vehicles than this, for a significant amount of anticipated residents are forecasted to already be living in Farmersville, albeit in overcrowded conditions. The residency of such tenants would have no impact at all on local traffic.

WATER & DRAINAGE. Will the project result in changes in soil absorption rates, drainage patterns or the rate and amount of surface runoff? How will runoff be handled?

The parts of the project that will be covered in either asphalt or concrete will change soil absorption rates, though the parts of the project that will become landscape areas will not. The project will divert drainage patterns to nearby gutters, where runoff will be safely mitigated, thereby leading to less risk of flooding and gathering of mosquitoes and other vectors of disease.

WATER SUPPLY. Will the project result in a substantial reduction in the amount of water otherwise available for public water supplies? Include an estimate of daily water use.

It will not. Estimates place water use between 9,000 - 9,500 gallons per day for both residential projects. The commercial uses are more difficult to estimate without us knowing the type of business that will inhabit the commercial buildings, but reasonable estimates place water use between 500 - 1,500 gallons per day.

WATER, SEWER &STORM DRAINAGE. Can the proposed project be adequately served by the existing water, sewer and storm drainage facilities. Do water, sewer and storm drain lines exist along the project frontage?

Yes. Water, sewer, and storm drain lines run along Farmersville Road.

FLOODING. Is the project being proposed within a flood zone? What measures will be taken to floodproof the project?

The project site is within an area of potential flooding. The project will be equipped with a code-compliant drainage system.

AGRICULTURE & VEGETATION. Will the proposed project require the removal of any agricultural land or crops? How many acres? Will the project reduce the numbers of any unique, rare or endangered species of plants?

No.

ANIMALS. Will the proposed project reduce the numbers of any unique, rare or endangered species of animals?

No.

NOISE. Will the proposed project result in significant increases in noise levels or expose people to severe noise levels? If so, what measures will be taken to reduce noise levels?

No.

LAND USE PLANS. Will the proposal result in a substantial alteration of the present or planned land use of the project area? Does the project require a rezoning or General Plan Amendment?

It will require a rezoning from General Commercial to Multifamily Residential, specifically, RM 2-5.

HAZARDOUS MATERIALS. Does any part of the project create a risk of explosion or the release of hazardous substances. Include information on the use of hazardous substances in the operation of the proposed project.

No.

HOUSING. Will the proposed project result in a significant increased demand for additional housing within Farmersville?

No, to the contrary. The project will help alleviate some of the demand for housing within Farmersville.

TRAFFIC & CIRCULATION. Will the project generate significant volumes of additional traffic? Will the project require alterations to streets or highways or require the construction of new streets?

No. As Farmersville Road is a major artery, it is not believed that the Project will create traffic that cannot be handled. The project site is already zoned General Commercial, meaning that the EIR prepared in relation to that original land use designation already considered the effects of traffic by a general commercial compliant use on the subject property. Applicant believes that the current design layout of commercial uses in front and relatively low density uses in the back of the subject property to be overall less intensive than a full commercial use throughout the entirety of the parcel.

PUBLIC SERVICES. Will the project impact the city's police and fire services and other government services such as the school district?
Yes. All impact fees in relation to these services will be paid to offset the project's impact thereon.

SOLID WASTE. Will the project generate significant volumes of solid waste? How will solid waste be disposed of at the site?
Project will generate amounts of solid waste comparable to that of other local multi-family and low-intensity commercial projects. It will be disposed via the municipal sewer system.

AESTHETICS. Will the proposed project result in the obstruction of any scenic vista or view open to the public, or will the project result in the creation of an aesthetically offensive site open to public view? How will unsightly views be screened?
No.

HISTORIC & ARCHAEOLOGICAL RESOURCES. Will the project result in the destruction of any prehistoric or historic archaeological sites? Will the project result in physical changes to historic buildings or other structures or sites? Will the project cause physical changes that would affect unique ethnic cultural values or restrict religious or sacred uses within the project site?
No.

Findings:

Please answer the following questions as completely as possible. You may attach additional sheets if necessary.

1. Does public necessity require the proposed change? Is there a real need in the community for more of the types of uses permitted by the Zone requested than can be accommodated in the areas already zoned for such uses? (Fully explain your answer, considering the surrounding property as well as the property proposed to be reclassified.)

   Subject property (APN 111-290-015) is currently zoned G-C (General Commercial). According to the 2015-2023 Farmersville Housing Element, the City was assigned the responsibility to construct 466 units, of which, 139 (29%) should be restricted to low, very low, or extremely low income per the RHNA. Per the 2009 Housing Element, Farmersville was responsible for the construction of 518 units. In consideration of the fact that new housing, especially affordable housing, is a top priority for Farmersville, this GPA/Zone Change should be approved. According to table 6-3 in the Housing Element, one can see that there is only one other site zoned RM 2-5 large enough to accomodate the proposed 80 unit project (40 units in two phases). All other sites are either too small and/or non-contiguous, therefore making the same construction impossible. It should also be noted that this specific design, of commercial + residential is not possible on any of the RM-2.5 zoned properties in table 6-3.

2. Is the property involved in the proposed reclassification more suitable for the purposes permitted in the proposed classification than for the purposes permitted in the present classification? (Answer completely; specify reasons for your answer.)

   Yes, the landscape is relatively flat and will be able to sustain residential units in addition to commercial pads. Additionally, the parcels to the north and east of the subject property are already purposed for residential use.

3. Would the uses permitted by the proposed zone be detrimental in any way to surrounding property? (Explain reasons supporting your answer.)

   No. The propoed 20 - 21.5 du/ac is not dense in consideration of the fact that Farmersville's RM-2.5, the lowest density multi-family zone available, specifies a minimum density of 20 du/ac, meaning AMG's proposed development is theoretically as low density of an apartment project as possible.

4. What were the original deed restrictions, if any, concerning the type and class of uses permitted on the property involved? Give the expiration date of these restrictions. (You may attach a copy of these restrictions.)

   None.

CITY OF FARMERSVILLE
General Plan Amendment/Zone Change Questionnaire

COMMUNITY DEVELOPMENT DEPARTMENT 909 W. VISALIA ROAD FARMERSVILLE, CA 93223 (559) 747-0458

Please type or print clearly in ink. Incomplete applications will be returned.

Project Address or legal description

PARCEL 1 OF PARCEL MAP NO. 3826, IN THE COUNTY OF TULARE, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN BOOK 39, PAGE 29 OF PARCEL MAPS, TULARE COUNTY RECORDS.

Assessor Parcel Number:

111-290-015-000

Existing use of project site:

Vacant land.

What is the proposed use(s) of the site

Two individual apartment communities and three commercial pads.

What is the existing General Plan and zoning designations for the site:

General Commercial.

What is the proposed General Plan designation and/or zoning?

Medium Density Residential.

How many acres are involved:

9.4

CITY OF FARMERSVILLE
Site Plan Review Questionnaire

COMMUNITY DEVELOPMENT DEPARTMENT 909 W. VISALIA ROAD FARMERSVILLE, CA 93223 (559) 747-0458

Please type or print clearly in ink. Incomplete applications will be returned.

Project Address or legal description:
PARCEL 1 OF PARCEL MAP NO. 3826, IN THE COUNTY OF TULARE, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN BOOK 39, PAGE 29 OF PARCEL MAPS, TULARE COUNTY RECORDS.
Assessor Parcel Number:

APN 111-290-015

Existing use of project site:

Vacant, unimproved land.

Describe the proposed project, including hours of operation, number of employees, type of business and other relevant information.
The proposed project will be two separate apartment communities (one senior, one family) built in two phases. Both communities will be 40 units and will be restricted to residents earning 60% or less of the AMI for Tulare County. Each community will be operated separately and will have its own live-in resident manager. There will also be three commercial pads on the subject property, one 4,187 SF, another 6,960 SF, and another 2,800 SF.

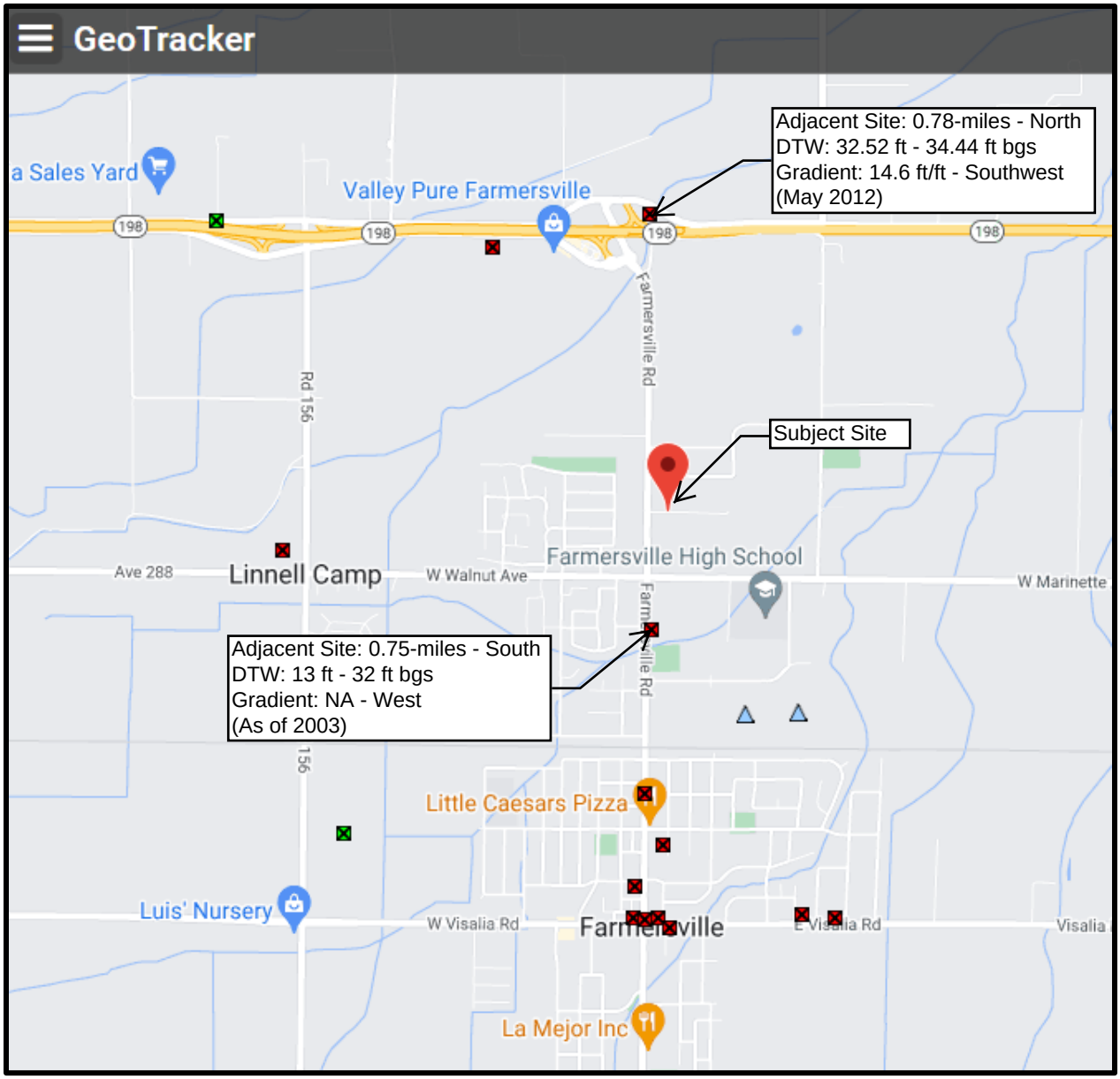
What are the zoning and General Plan Land Use Map designations of the site:
General Commercial for both.

How many acres are involved:

Approximately 9.4

APPENDIX C-5

HYDROLOGY INFORMATION


GeoTracker
Adjacent Site: 0.78-miles - North
DTW: 32.52 ft - 34.44 ft bgs
Gradient: 14.6 ft/ft - Southwest
(May 2012)
Subject Site
Adjacent Site: 0.75-miles - South
DTW: 13 ft - 32 ft bgs
Gradient: NA - West
(As of 2003)
a Sales Yard
Valley Pure Farmersville
198
Farmersville Rd
Rd 156
Ave 288
Linnell Camp
W Walnut Ave
Farmersville High School
W Marinette
156
Little Caesars Pizza
Luis' Nursery
W Visalia Rd
Farmersville
E Visalia Rd
Visalia
La Mejor Inc

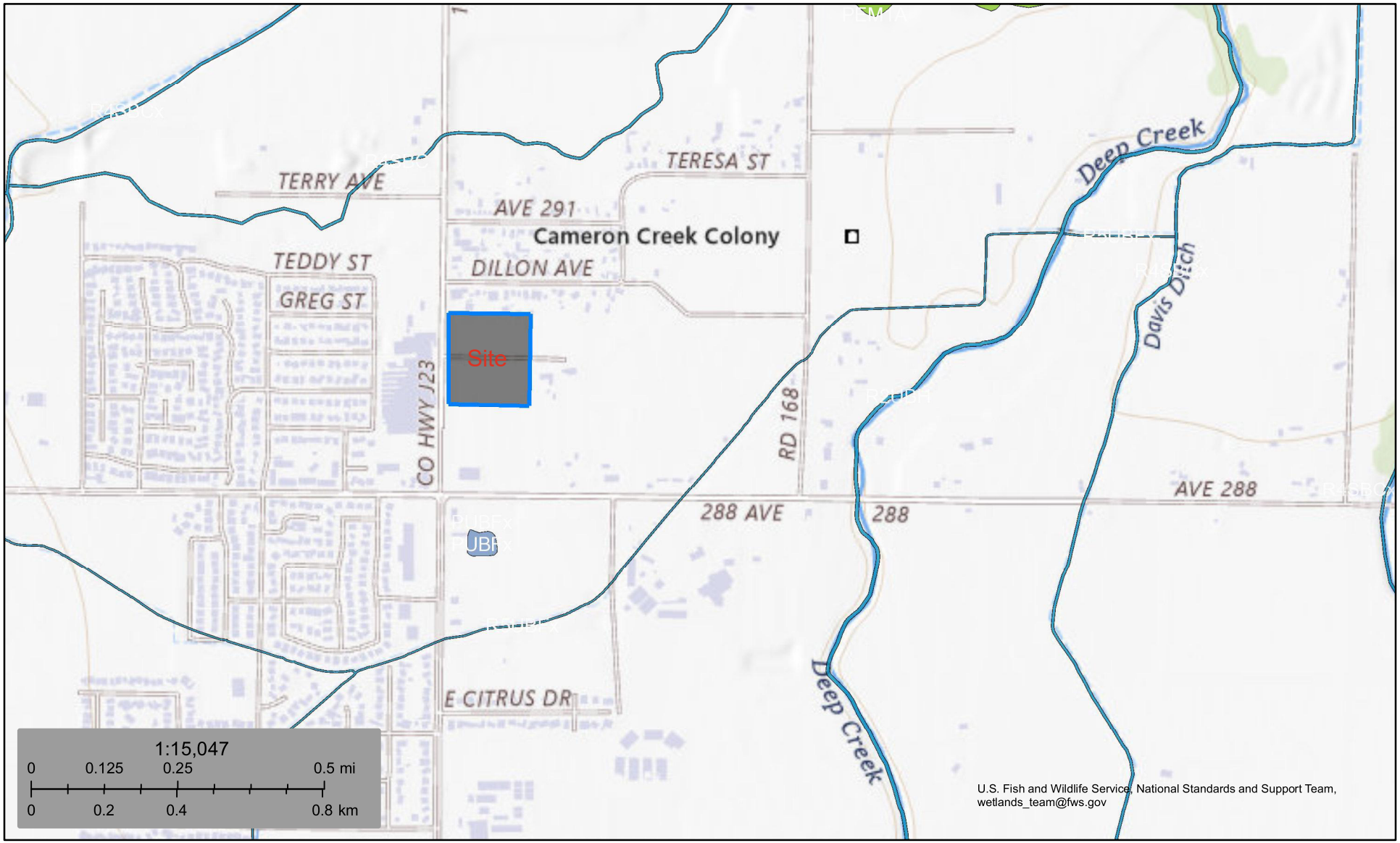
APPENDIX C-6

NATIONAL WETLANDS INVENTORY -
WETLAND MAP

U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



December 2, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

APPENDIX C-7

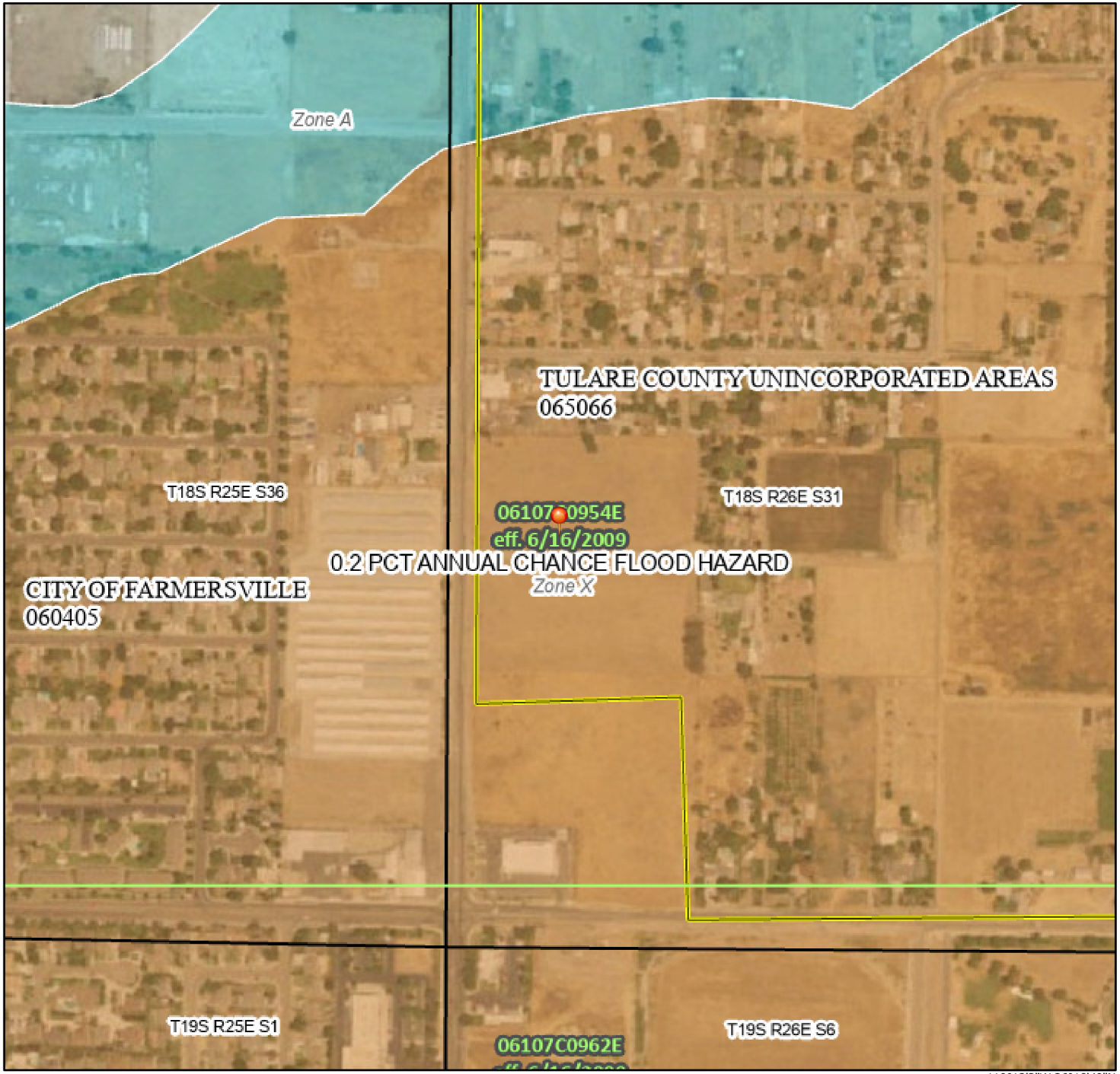
FEDERAL EMERGENCY MANAGEMENT AGENCY

NATIONAL FLOOD HAZARD MAP

National Flood Hazard Layer FIRMette

FEMA

119°12'40"W 36°19'9"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

119°12'3"W 36°18'40"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/2/2025 at 4:05 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

APPENDIX D-1

HISTORIC MAPS

Vacant Land

APN 111-290-015-000

Farmersville, CA 93292

Inquiry Number: 8187223.3

December 01, 2025

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

12/01/25

Site Name:

Vacant Land
APN 111-290-015-000
Farmersville, CA 93292
EDR Inquiry # 8187223.3

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Hagop T.

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by KCE Matrix were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # BE85-47AB-9E01

PO # KCE-2025-348E

Project Vacant Land

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: BE85-47AB-9E01

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX D-2

AERIAL PHOTOGRAPHS

Vacant Land

APN 111-290-015-000

Farmersville, CA 93292

Inquiry Number: 8187223.8

December 01, 2025

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

12/01/25

Site Name:

Vacant Land
APN 111-290-015-000
Farmersville, CA 93292
EDR Inquiry # 8187223.8

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Hagop T.

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2022	1"=500'	Flight Year: 2022	USDA/NAIP
2018	1"=500'	Flight Year: 2018	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1994	1"=500'	Acquisition Date: May 21, 1994	USGS/DOQQ
1984	1"=500'	Flight Date: June 16, 1984	USDA
1977	1"=500'	Flight Date: June 02, 1977	USGS
1969	1"=500'	Flight Date: July 24, 1969	USGS
1961	1"=500'	Flight Date: June 14, 1961	USGS
1956	1"=500'	Flight Date: April 20, 1956	USGS
1952	1"=500'	Flight Date: October 09, 1952	USDA
1937	1"=500'	Flight Date: August 28, 1937	USDA

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INQUIRY #: 8187223.8

YEAR: 2022

= 500'

N

EDR

INQUIRY #: 8187223.8
YEAR: 2018
= 500'
N
EDR

INQUIRY #: 8187223.8
YEAR: 2014
= 500'
N
EDR

INQUIRY #: 8187223.8

YEAR: 2010

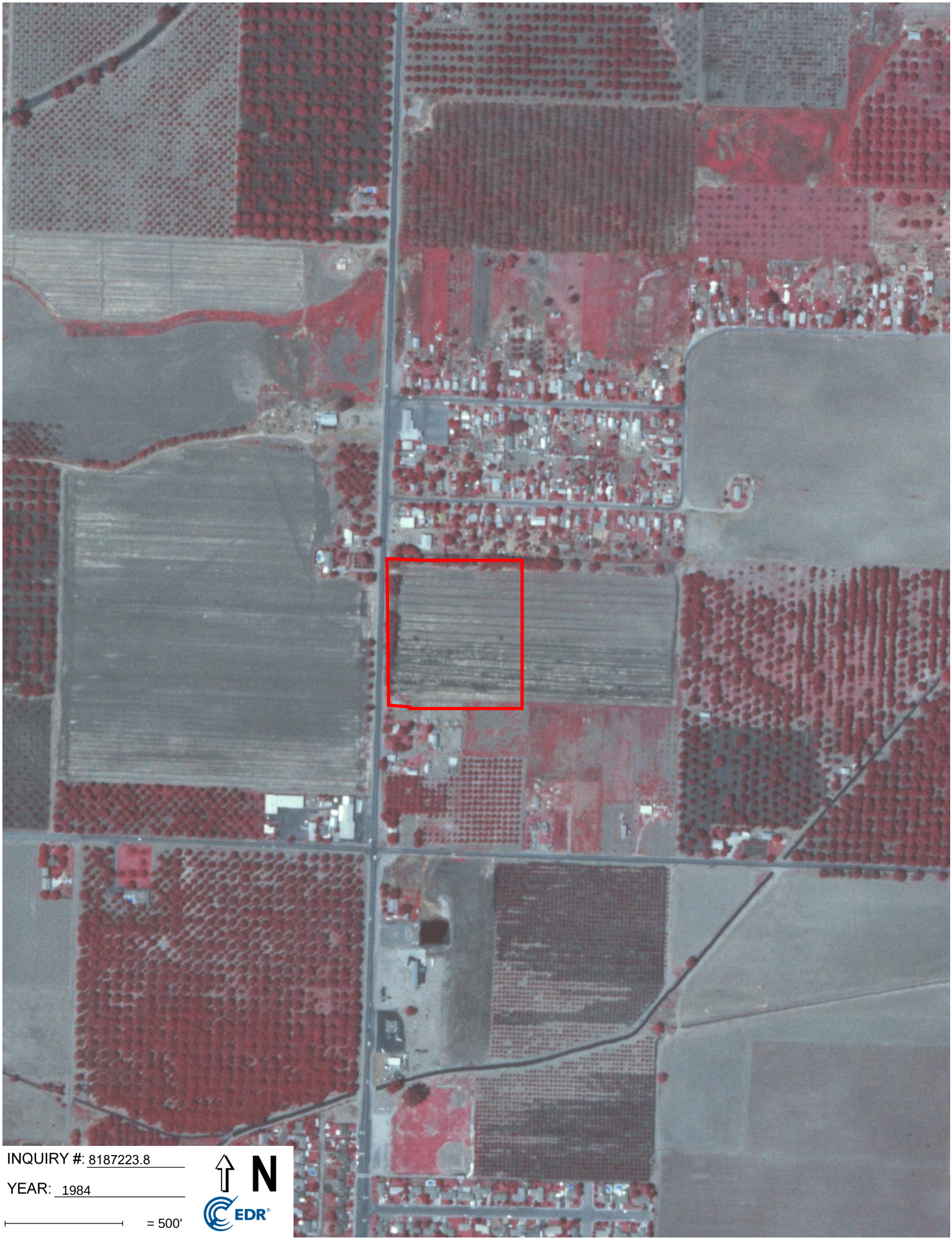
= 500'

N

EDR

INQUIRY #: 8187223.8
YEAR: 2006
= 500'
N
EDR

INQUIRY #: 8187223.8
YEAR: 1994
= 500'
N
EDR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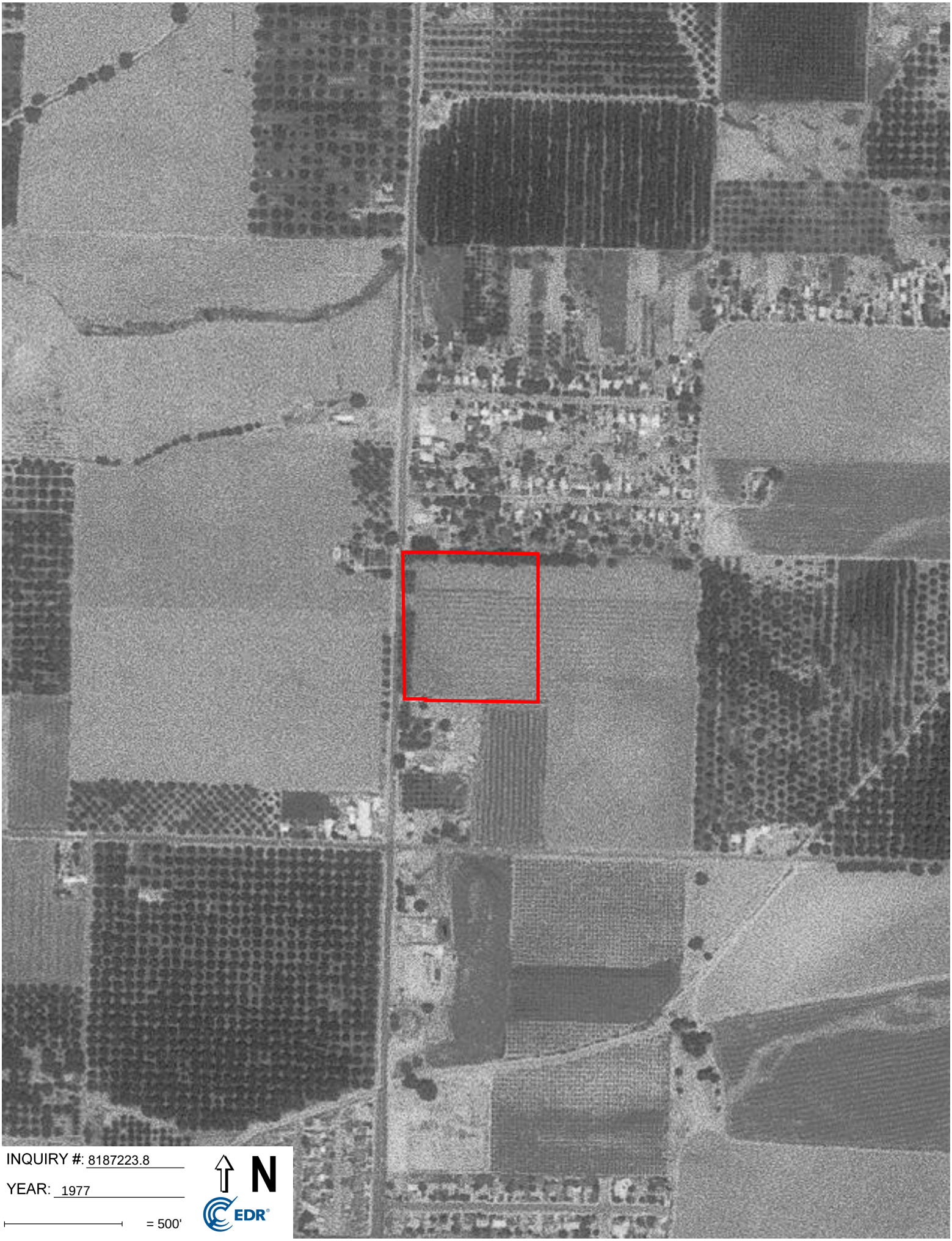
YEAR: 1984
= 500'
N
EDR


INQUIRY #: 8187223.8
YEAR: 1977
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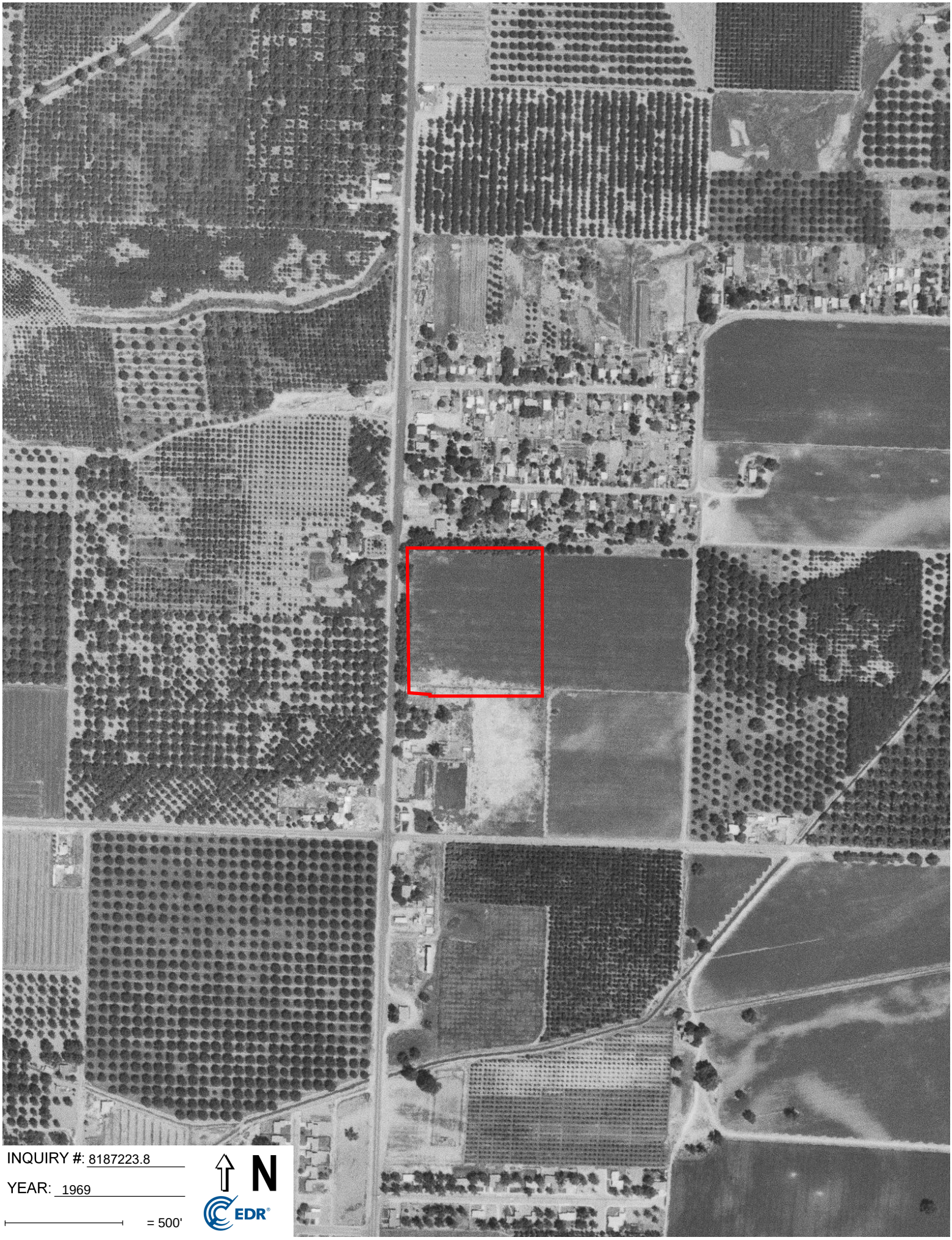
N
EDR


INQUIRY #: 8187223.8
YEAR: 1969
= 500'
N
EDR

INQUIRY #: 8187223.8

YEAR: 1961

= 500'

N

EDR

INQUIRY #: 8187223.8

YEAR: 1956

= 500'

N

EDR

INQUIRY #: 8187223.8
YEAR: 1952
= 500'
N
EDR

INQUIRY #: 8187223.8

YEAR: 1937

= 500'

N

EDR

APPENDIX D-3

HISTORICAL TOPOGRAPHIC MAPS

Vacant Land

APN 111-290-015-000

Farmersville, CA 93292

Inquiry Number: 8187223.4

December 01, 2025

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

12/01/25

Site Name:

Vacant Land
APN 111-290-015-000
Farmersville, CA 93292
EDR Inquiry # 8187223.4

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Hagop T.

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by KCE Matrix were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# KCE-2025-348E

Project: Vacant Land

Coordinates:

Latitude:	36.314985 36° 18' 54" North
Longitude:	-119.205813 -119° 12' 21" West
UTM Zone:	Zone 11 North
UTM X Meters:	301974.17
UTM Y Meters:	4021143.94
Elevation:	365.00' above sea level

Maps Provided:

2021
2018
2015
2012
1969
1952
1950
1926

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2021 Source Sheets

Exeter
2021
7.5-minute, 24000

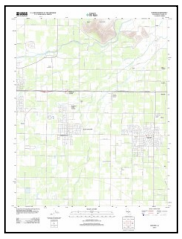
2018 Source Sheets

Exeter
2018
7.5-minute, 24000

2015 Source Sheets

Exeter
2015
7.5-minute, 24000

2012 Source Sheets

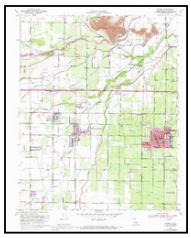


Exeter
2012
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1969 Source Sheets

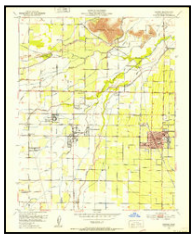


Exeter
1969
7.5-minute, 24000
Aerial Photo Revised 1969

1952 Source Sheets

Exeter
1952
15-minute, 62500
Aerial Photo Revised 1946

1950 Source Sheets



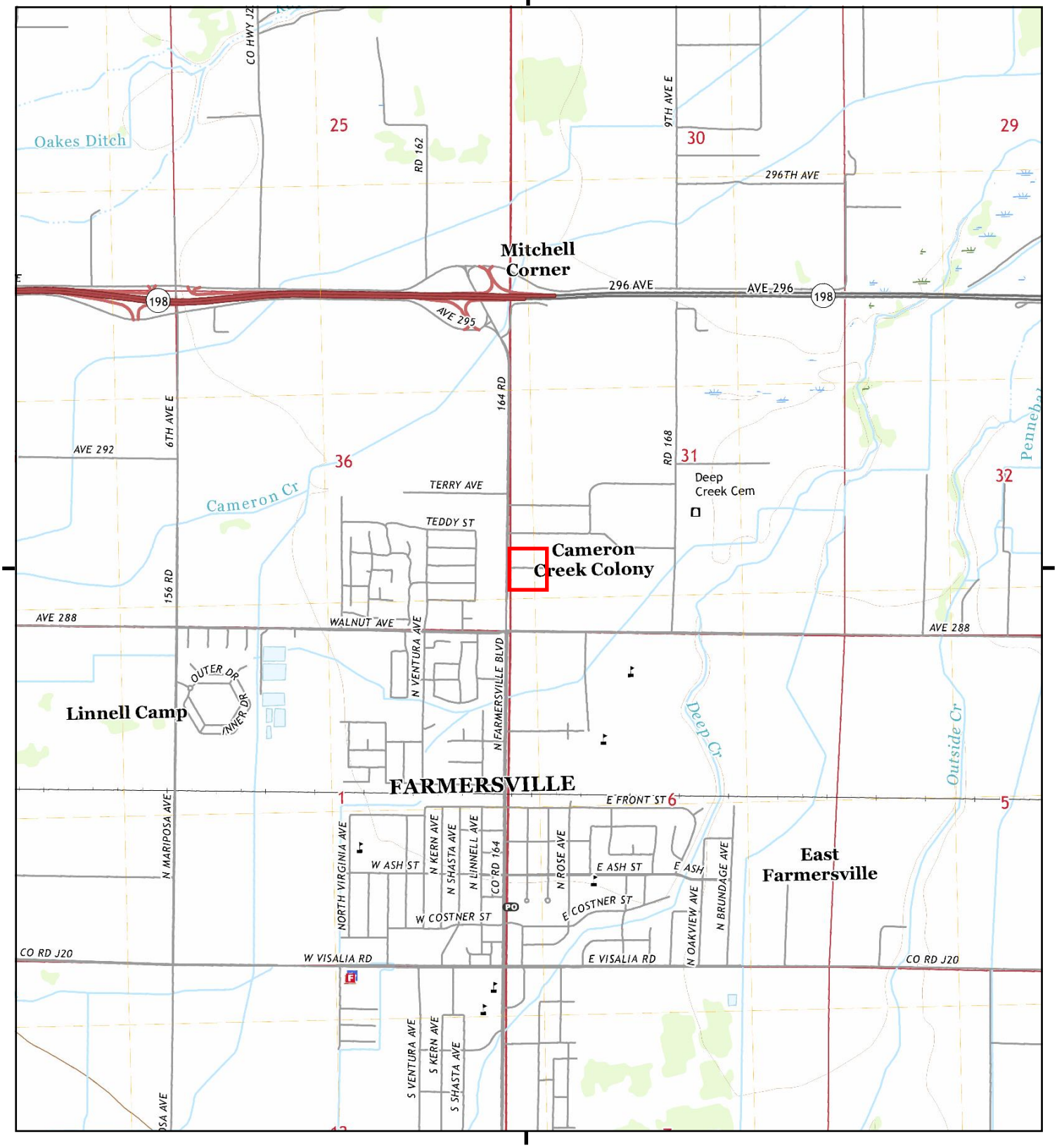
Exeter
1950
7.5-minute, 24000
Aerial Photo Revised 1946

1926 Source Sheets

Exeter
1926
7.5-minute, 31680

Historical Topo Map

2021



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

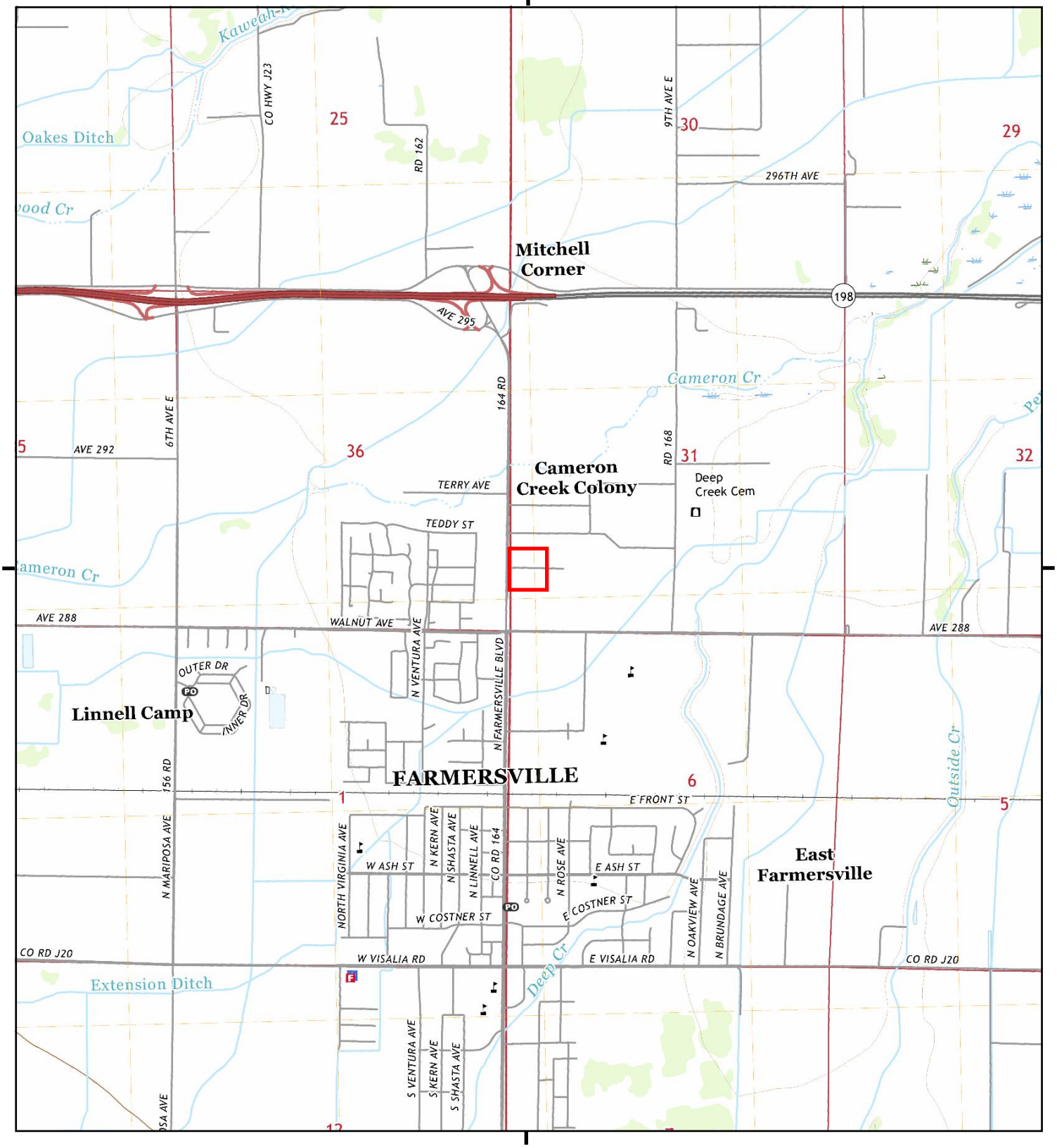
TP, Exeter, 2021, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Farmersville, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

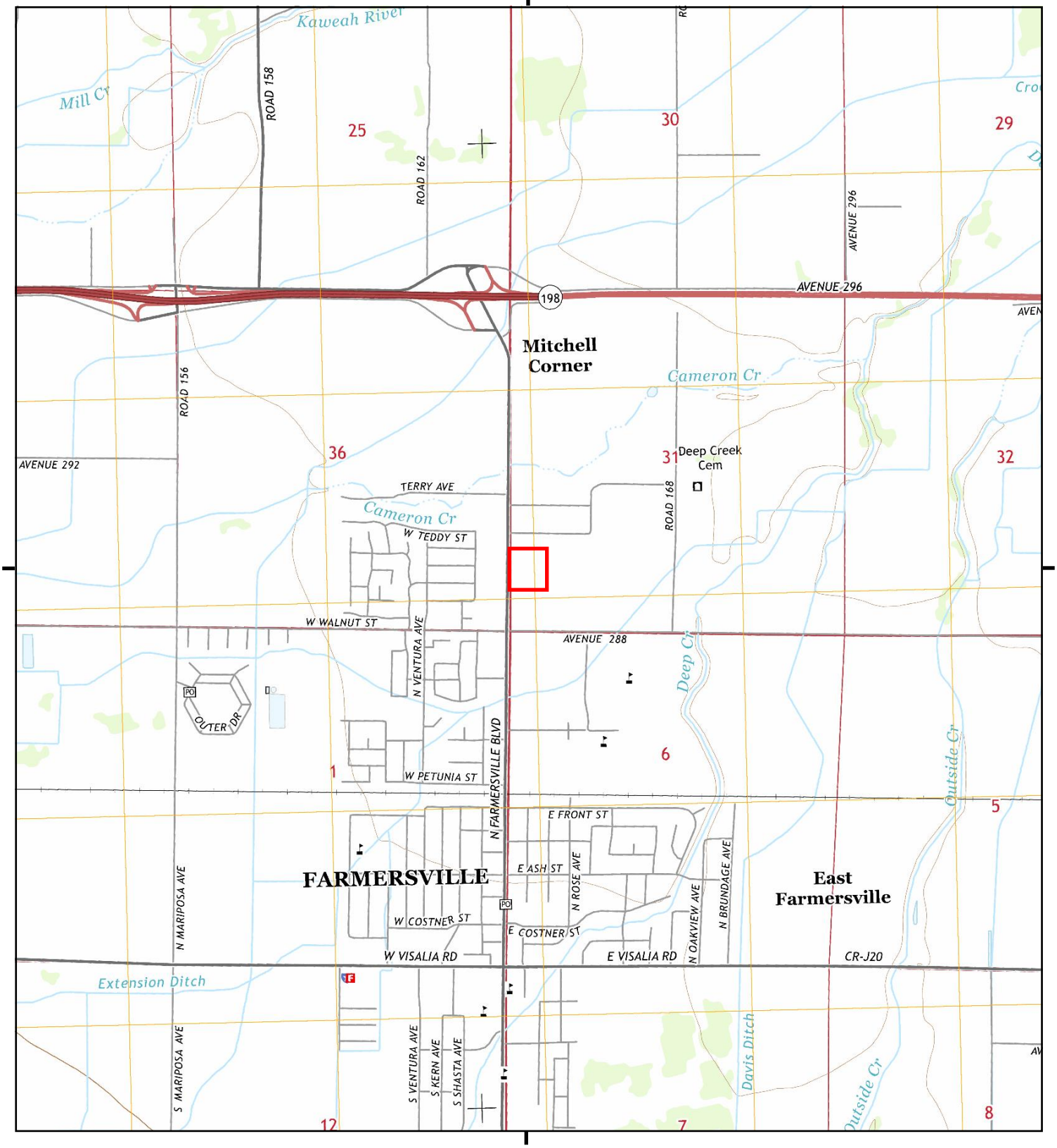
TP, Exeter, 2018, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Farmersville, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

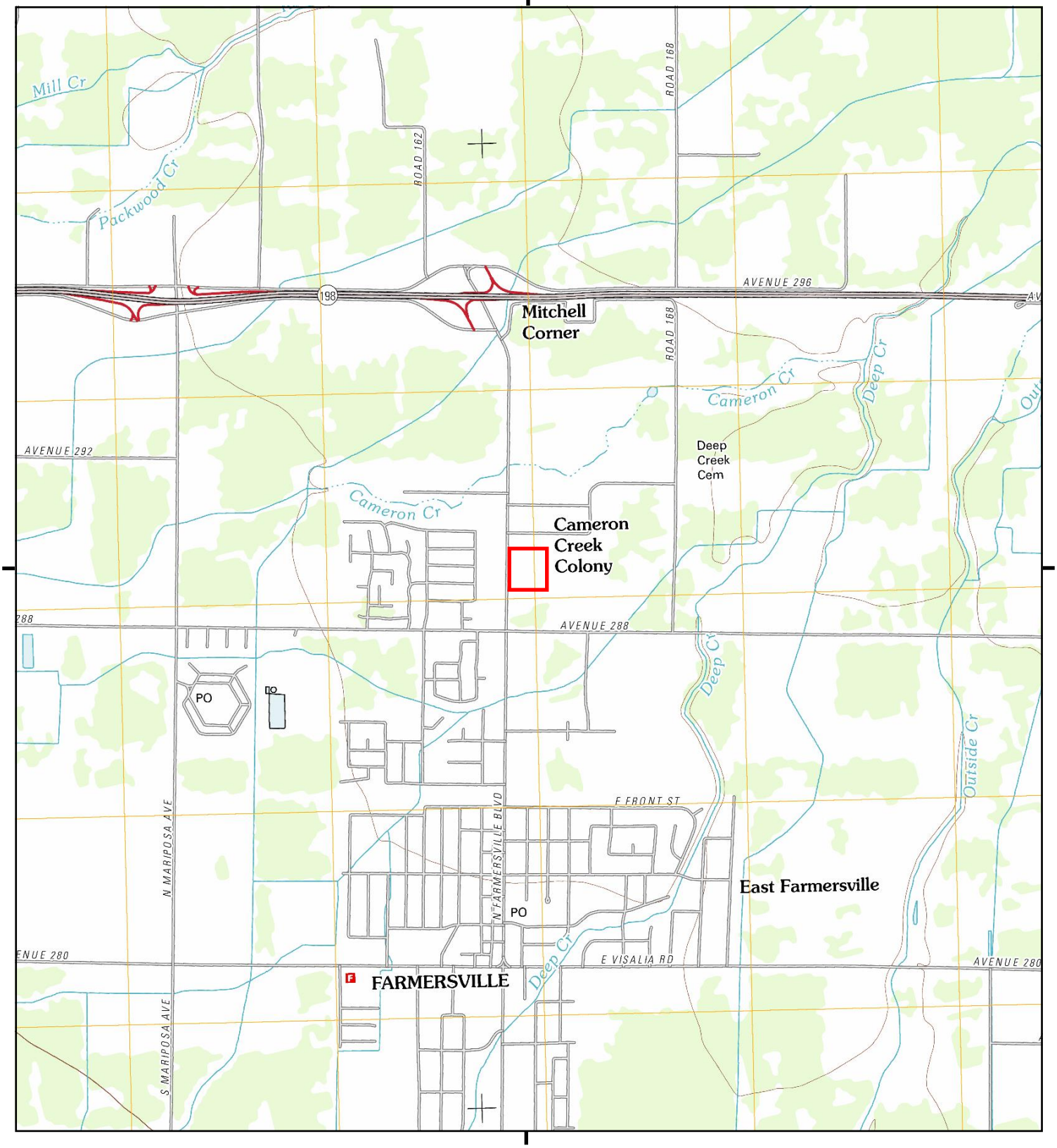
TP, Exeter, 2015, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Farmersville, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

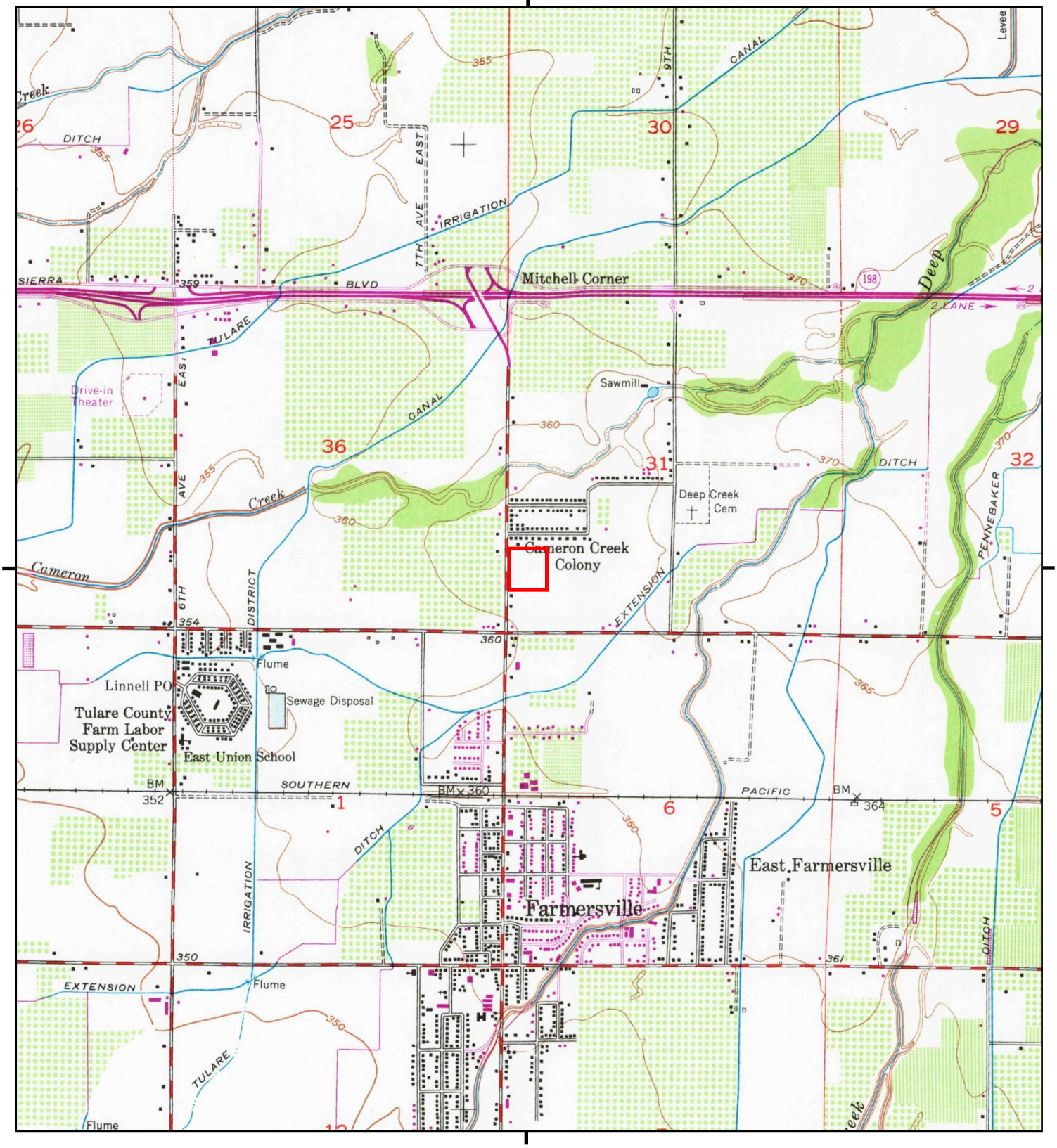
TP, Exeter, 2012, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Farmersville, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

1969



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

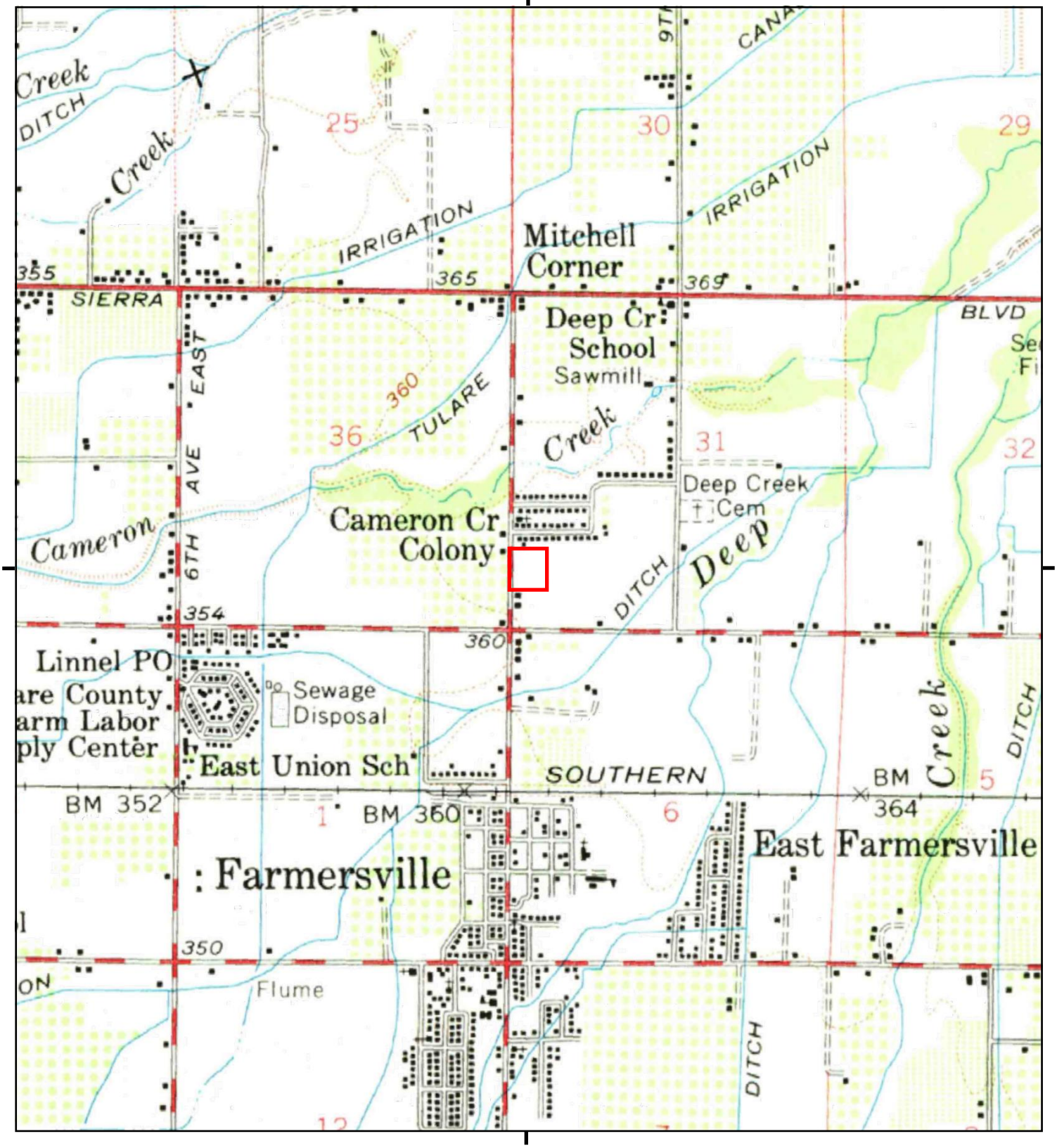
TP, Exeter, 1969, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Farmersville, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

1952



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

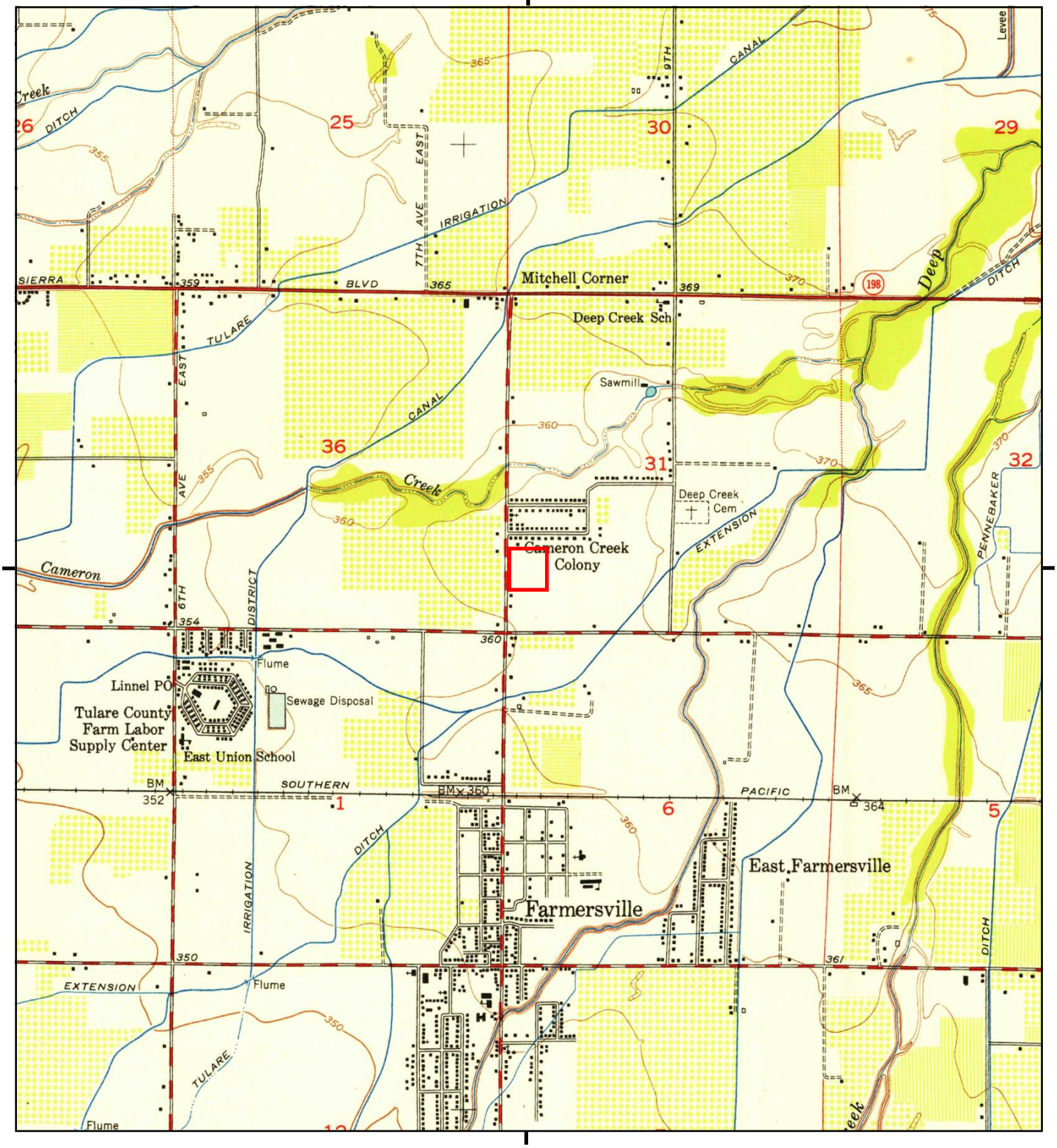
TP, Exeter, 1952, 15-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Farmersville, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

1950



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

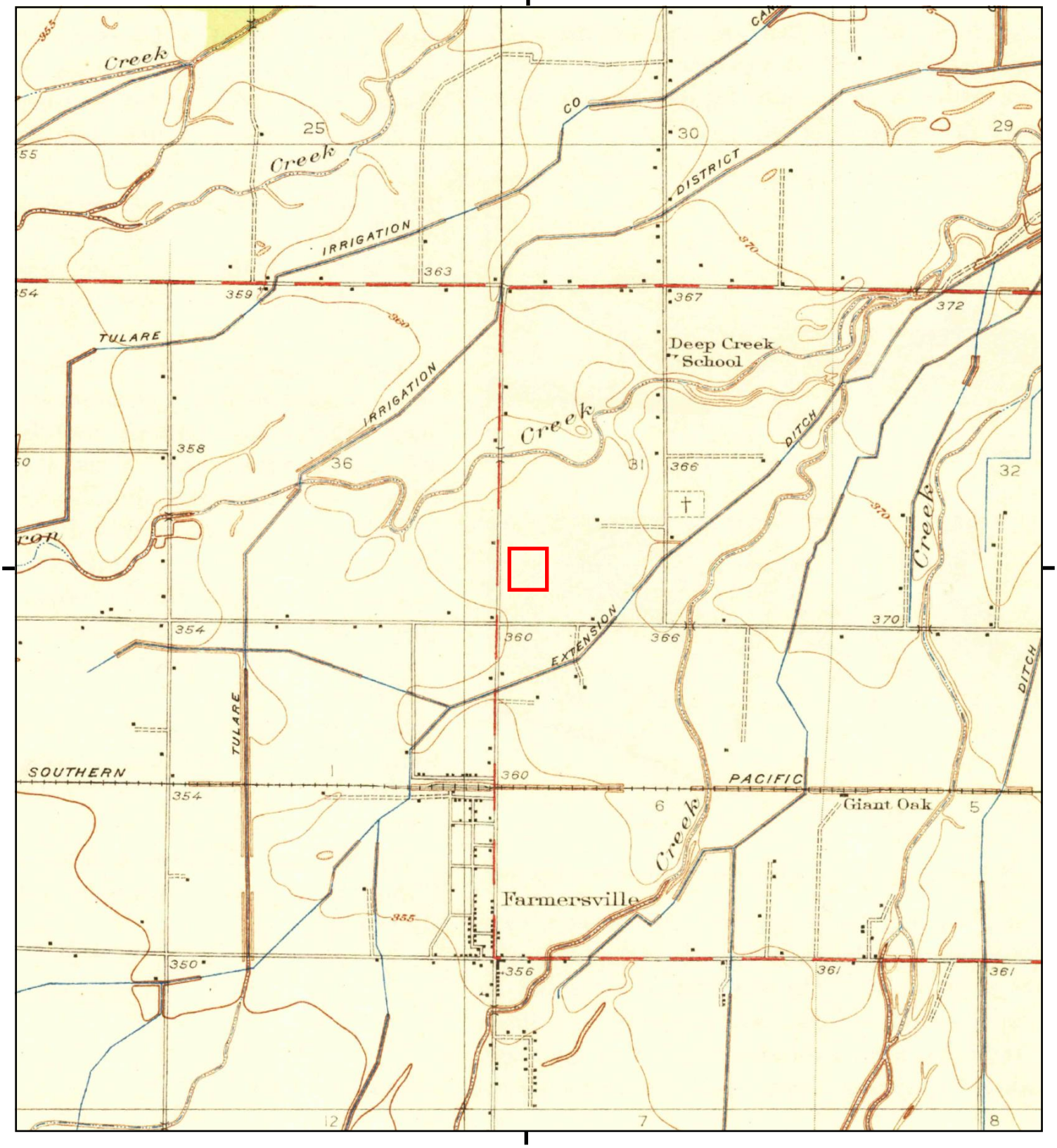
TP, Exeter, 1950, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Farmersville, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

1926



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Exeter, 1926, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Farmersville, CA 93292
CLIENT: KCE Matrix

N

APPENDIX D-4

CITY DIRECTORY ABSTRACT

Vacant Land
APN 111-290-015-000
Farmersville, CA 93292

Inquiry Number: 8187223.5
December 03, 2025

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2022	☑	☑	EDR Digital Archive
2017	☑	☑	Cole Information
2014	☑	☑	Cole Information
2010	☑	☑	Cole Information
2005	☑	☑	Cole Information
2000	☑	☑	Cole Information
1995	☑	☑	Cole Information
1992	☑	☑	Cole Information
1986	☐	☐	Polk's City Directory
	☐	☐	Stewart Directories Inc
1981	☐	☐	Polk's City Directory
	☐	☐	Stewart Directories Inc
1976	☐	☐	Polk's City Directory
	☐	☐	Stewart Directories Inc
1971	☐	☐	Polk's City Directory
	☐	☐	Stewart Directories Inc
1967	☐	☐	Polk's City Directory
	☐	☐	Stewart Directories Inc
1962	☐	☐	Polk's City Directory
	☐	☐	Stewart Directories Inc
1959	☐	☐	Polk's City Directory
	☐	☐	Stewart Directories Inc

EXECUTIVE SUMMARY

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	***Target Street***	***Cross Street***	***Source***

FINDINGS

TARGET PROPERTY STREET

APN 111-290-015-000
Farmersville, CA 93292

Year	*CD Image*	*Source*	

N FARMERSVILLE BLVD

2022	pg A4	EDR Digital Archive	
2017	pg A6	Cole Information	
2014	pg A8	Cole Information	
2010	pg A10	Cole Information	
2005	pg A12	Cole Information	
2000	pg A15	Cole Information	
1995	pg A17	Cole Information	
1992	pg A19	Cole Information	
1986	-	Stewart Directories Inc	Target and Adjoining not listed in Source
1981	-	Stewart Directories Inc	Target and Adjoining not listed in Source
1976	-	Stewart Directories Inc	Target and Adjoining not listed in Source
1971	-	Stewart Directories Inc	Target and Adjoining not listed in Source
1967	-	Stewart Directories Inc	Target and Adjoining not listed in Source
1962	-	Stewart Directories Inc	Street not listed in Source
1959	-	Stewart Directories Inc	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
DILLON AV			
2000	pg. A13	Cole Information	
DILLON AVE			
2022	pg. A2	EDR Digital Archive	
2017	pg. A5	Cole Information	
2014	pg. A7	Cole Information	
2010	pg. A9	Cole Information	
2005	pg. A11	Cole Information	
2000	pg. A14	Cole Information	
1995	pg. A16	Cole Information	
1992	pg. A18	Cole Information	
1986	-	Polk's City Directory	Street not listed in Source
1981	-	Polk's City Directory	Street not listed in Source
1976	-	Polk's City Directory	Street not listed in Source
1971	-	Polk's City Directory	Street not listed in Source
1967	-	Polk's City Directory	Street not listed in Source
1962	-	Polk's City Directory	Street not listed in Source
1959	-	Polk's City Directory	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

DILLON AVE 2022

16418	FRANCISCO MEZA
16423	MITCHELL HUESTON
16434	ASHLEY SANCHEZ
	ROSALIA RAMOS
16439	DONNA PENA
16456	DERRICK LEACH
	LULA BUTTS
	MANDY LEACH
16461	MARISELA HARO
16468	ANNA FORD
	DONALD FORD
	ORVILLE FORD
	VERLINDA FORD
16469	JOSE LEMUS
	MARIA LEMUS
	YOLANDA LEMUS
16477	JOSE NARANJO
	MARIA NARANJO
16480	CHRISTINA ELLIS
	CORY ELLIS
16483	JOSE BUENROSTRO
16490	LISBETH UGALDE
16491	JUDITH CONTRERAS
16498	BARTOLO CORNEJO
	LILIA CORNEJO
16505	W M BUILT MORE CONSTRUCTION
	WAYNE STORMS
	WES STORMS
16508	MICHAEL CURTIS
	TOMAS FLORES
16511	MEGAN HAMBY
	RODNEY HAMBY
	TIMOTHY WILLIAMS
16514	ISAIAS GALLARDO
16521	AARON BURDGE
	ALLAN BURDGE
	AUDREY BURDGE
	CRLOTTA BURDGE
	HOLLI BURDGE
	JOHNNY BURDGE
	RAYMOND BURDGE
16528	JESUS ZAMORA
	LUZ ZAMORA
	MARIA ZAMORA
16529	MICHAEL MARQUEZ
16536	ANITA ZAMORA
	PIEDAD ZAMORA
	SALVADOR ZAMORA
16549	BERTHA KETCHIE
	FRANCISCO CANALES

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

DILLON AVE 2022 (Cont'd)

16549 MICHAEL KETCHIE
16554 MICAELA GOMEZ
16559 GRISELDA CORONA
16564 AGUSTIN CORONA
MAURO CORONA
16567 PASCUAL IBARRA
16574 ALBERTO SANTILLAN
16583 AMALIA ARROYO

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N FARMERSVILLE BLVD 2022

1660	FRED GIBBY
	VTP ENTERPRISES
1662	ANA PATINO
	JACK IN THE BOX
1710	RITE AID PHARMACY
1715	BRIAN GARNER
	C B PERFORMANCE
	CB PERFORMANCE
	CLAUDES BUGGIES INC
	CLAUDES BUGGIES, INC
	KEVIN LEWIS
	LORETTA TOMLINSON
	SUSY CANZASSER
1877	BRENT BAKER
	GLENS MINI STORAGE
	U-HAUL
2073	B M TRANSMISSIONS
	JESUS SOTO
	LA RAZA AUTO PLAZA INC
2465	DANNY QUINN
	ERIN QUINN
2515	PATRICIA VERBURG
2975	DEBBIE VIERRA
	HEATHER ROJAS
	KAWEAH DELTA WATER CONSERVATION DISTRICT
	KAWEAH DELTA WATER CONSERVTION

Target Street	Cross Street	Source
-	✓	Cole Information

DILLON AVE 2017

16418 GARRETT, GROVER
16434 SANCHEZ, ASHLEY
VASQUEZ, EFRAIN
16439 PENA, DONNA D
16461 HARO, MARISELA
16468 FORD, ORVILLE
16477 NARANJO, MARIA
16480 DELGADO, MARYELLEN A
16483 BUENROSTRO, JOSE A
16490 DURAN, RODOLFO C
16491 LOPEZ, MARIBEL
16498 CORNEJO, BARTOLA P
16505 STORMS, WAYNE E
16508 CURTIS, MICHAEL H
16511 WILLIAMS, KAREN D
16514 GALLARDO, ISAIAS I
16521 BURDGE, JOHNNY R
16529 MARQUEZ, ESTANISLADO M
16536 ZAMORA, SALVADOR M
16549 FERNANDEZ, FRANCISCO
16554 CARDENAS, ARTURO
TORRES, CONSTANCE
16559 IBARRA, CRISTINA
16567 IBARRA, PASCUAL
16574 SANTILLAN, MIGUEL D
16583 ARROYO, AMALIA M

Target Street	Cross Street	Source
✓	-	Cole Information

N FARMERSVILLE BLVD 2017

1616	SANCHEZ, E
1660	VTP ENTERPRISES
1662	JACK IN THE BOX
1877	GLENS MINI STORAGE
2073	CHITO TIRE & WHEEL REPAIR
2465	BALTEZOR, DAWAYNE
2975	KAWEAH DELTA WATER CONSERVATION DIST

Target Street	Cross Street	Source
-	✓	Cole Information

DILLON AVE 2014

16418	GARRETT, GROVER
16434	SANCHEZ, ASHLEY
	VASQUEZ, EFRAIN
16461	HARO, MARISELA
16468	FORD, ORVILLE
16469	LEMUS, JOSE F
16477	NARANJO, JOSE D
16480	DELGADO, MARYELLEN
16483	BUENROSTRO, JOSE A
16490	DURAN, RODOLFO C
16491	IBARRA, GUADALUPE
	LOPEZ, MARIBEL
16498	CORNEJO, BARTOLA P
16505	STORMS, WAYNE E
16508	CURTIS, MICHAEL H
	OCCUPANT UNKNOWN,
16511	WILLIAMS, KAREN D
16521	BURDGE, JOHNNY R
16528	ZAMORA, JESUS
16529	MARQUEZ, ESTANISLADO M
16536	ZAMORA, SALVADOR M
16549	FERNANDEZ, FRANCISCO
16554	CARDENAS, ARTURO
	GOMEZ, JESUS Y
16559	IBARRA, CRISTINA
16564	CORONA, AGUSTIN J
16567	IBARRA, PASCUAL
16573	OCCUPANT UNKNOWN,
16574	SANTILLAN, MIGUEL D
16583	ARROYO, AMALIA M
16599	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	Cole Information

N FARMERSVILLE BLVD 2014

1555	AUTOZONE
	CENTRO DE SERVICIOS
	CHECK N GO
	DOLLAR TREE
	PIZZA FACTORY
	TAQUERIA EL TAPATIO
1616	SANCHEZ, E
1662	JACK IN THE BOX
1877	GLENS MINI STORAGE
2465	JAMES, DOROTHY D
	QUINN, DANNY J
2975	KAWEAH DELTA WATER CONSERVATION DIST

Target Street	Cross Street	Source
-	✓	Cole Information

DILLON AVE 2010

16418 GARRETT, JAIMEY A
16434 CORONA, RAQUEL
RAMOS, ROSALIA
SANCHEZ, ASHLEY
16439 CASTILLO, DAR V
16456 BUTTS, C S
LEACH, DERRICK
16461 VALENCIA, JOSE
16469 LEMUS, JOSE F
16477 NARANJO, JOSE D
16480 DELGADO, MARYELLEN
16483 OCCUPANT UNKNOWN,
16490 DURAN, RODOLFO C
16491 IBARRA, GUADALUPE
OSUNA, RAUL
16498 BONITA NURSERY
CORNEJO, BARTOLA P
16505 HAMBY, PAULETTE
W M BUILT MORE CONSTRUCTION
16508 CURTIS, MICHAEL H
OCCUPANT UNKNOWN,
16511 NGUYEN, THUY
16514 GALLARDO, ISAIAS I
16521 OCCUPANT UNKNOWN,
16528 OCCUPANT UNKNOWN,
16529 OLIVERA, MARIA
16536 BARAJAS, MARINA V
16549 OCCUPANT UNKNOWN,
16554 GOMEZ, JESUS Y
16559 IBARRA, CRISTINA
16564 CORONA, AGUSTIN J
16567 BANUELOS, VIDALLA N
16573 OCCUPANT UNKNOWN,
16574 DESTRADE, REYNA
16583 TORRES, ERNESTO

Target Street	Cross Street	Source
✓	-	Cole Information

N FARMERSVILLE BLVD 2010

1555	ACADEMY WEST INSURANCE SVC INC
	AUTOZONE
	CHECK N GO
	DOLLAR TREE
	PIZZA FACTORY
	TAQUERIA LOS ALTOS
1616	BURKETT, ANITA
1660	VTP ENTERPRISES
1662	JACK IN THE BOX
1877	GLENS MINI STORAGE
	UHAUL CO
2465	BALTEZOR, OSCAR
	QUINN, KEVIN P
2495	QUINN, DANNY J
2515	OCCUPANT UNKNOWN,
2975	KAWEAH DELTA WATER CNSRVTN

Target Street	Cross Street	Source
-	✓	Cole Information

DILLON AVE 2005

16418 GARRETT, JAIMEY A
16434 CASSLE, STARLA
VASQUEZ, EFRAIN
16439 CASTILLO, DAR V
16456 LEACH, DON A
16461 HARO, MARISELA
16469 LEMUS, JOSE F
16477 OCCUPANT UNKNOWN,
16480 DELGADO, MARYELLEN
16483 TABER, WILLIAM
16490 RAMOS, VERONICA
16491 IBARRA, GUADALUPE
16498 BONITA NURSERY
CORNEJO, BARTOLA P
16505 HAMBY, PAULETTE
WM BUILT MORE CONSTRUCTION
16508 CURTIS, MICHAEL H
OCCUPANT UNKNOWN,
16514 WELCH, ALLEN
16521 MID VALLEY DESIGNS
16529 MARQUEZ, YNOSENCI V
16536 GONZALEZ, FELIX G
16549 KETCHIE, MICHAEL L
16554 GOMEZ, MICAELA
16559 ARAGON, SEBASTIAN
16564 CORONA, AGUSTIN J
16567 BANUELOS, VIDALLA
16573 OCCUPANT UNKNOWN,
16574 GARCIA, MARIA
16583 MCGAHEY, GRADY
16599 YOUNG, THAD

Target Street	Cross Street	Source
✓	-	Cole Information

N FARMERSVILLE BLVD 2005

1456	FARMERSVILLE FOOD MART
1616	BURKETT, ANITA
1715	CB PERFORMANCE
	CLAUDES BUGGIES INC
2465	WATSON, LILLIAN
2515	HENRY, BOB V
2975	KAWEAH RIVER POWER AUTHORITY

Target Street	Cross Street	Source
-	✓	Cole Information

DILLON AV 2000

16469 LEMUS, JOSE F

Target Street	Cross Street	Source
-	✓	Cole Information

DILLON AVE 2000

16418	GARRETT, GROVER J
16434	MARLOW, LARRY J
16439	OCCUPANT UNKNOWN,
16456	BUTTS, C S
16461	BELL, JAMES E
16468	ENNIS, GILBERT F
16469	MONTEJANO, MARIA O
16477	BARRETT, OPAL
16483	MCALLISTER, LOUIS D
16490	OCCUPANT UNKNOWN,
16491	SILVA, OSCAR F
16498	CORNEJO, BARTOLA P
16505	STORMS, WAYNE E
16514	WELCH, ALLEN
16521	BURDGE, JOHNNY D
16528	OCCUPANT UNKNOWN,
16536	ZAMORA, S
16549	CANALES, F F
16564	OCCUPANT UNKNOWN,
16567	WILSON, ROSE M
16573	HODGE, VIRGIL
16574	SANTILLAN, ALBERTO

Target Street	Cross Street	Source
✓	-	Cole Information

N FARMERSVILLE BLVD 2000

1456	JACKPOT FOOD MART
1616	OCCUPANT UNKNOWN,
1667	OCCUPANT UNKNOWN,
1715	CLAUDES BUGGIES INCORPORATED
1877	GLENS MINI STORAGE
2073	TERRY, TED C
2515	DAVIDSON, ESTHER

Target Street	Cross Street	Source
-	✓	Cole Information

DILLON AVE 1995

16418	GARRETT, JAIMEY
16434	ROCHA, EDWARDO
16439	LYNCH, LULA B
16456	BUTTS, C S
16461	OCCUPANT UNKNOWNN
16468	OCCUPANT UNKNOWNN
16469	VALDEZ, ERNEST D
16477	BARRETT, OPAL
16480	PEARSON, CONNIE A
16490	OCCUPANT UNKNOWNN
16505	STORMS, WAYNE E
16508	CURTIS, MICHAEL H
16511	OCCUPANT UNKNOWNN
16514	WELCH, ALLEN
16521	MCCOLLOUGH, RALPH
16528	OCCUPANT UNKNOWNN
16529	OCCUPANT UNKNOWNN
16536	OCCUPANT UNKNOWNN
16549	PHILLIPS, ELOISE

Target Street	Cross Street	Source
✓	-	Cole Information

N FARMERSVILLE BLVD 1995

1315 OCCUPANT UNKNOWNN
1335 WHITSON, BOBBY J
1376 MASON TIRE
1616 LEWIS, CHARLES

Target Street	Cross Street	Source
-	✓	Cole Information

DILLON AVE 1992

16490 AGUIRRE, G

Target Street	Cross Street	Source
✓	-	Cole Information

N FARMERSVILLE BLVD 1992

1376 MASON TIRE
1456 JACKPOT FOOD MART
1616 HOPKINS, EDMUND

APPENDIX E

USER QUESTIONNAIRE, TITLE REPORT
AND CLIENT PROVIDED DOCUMENTATION

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Site Address, APN, etc.: 111-290-015-000, Farmersville, CA 93292

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

1. **Environmental cleanup liens that are filed or recorded against the site**
   Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law?
   ☒ **No** ☐ **Yes, please explain** _____

2. **Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry**
   Are you aware of any Activity and Use Limitations (AULs), such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?
   ☒ **No** ☐ **Yes, please explain** _____

3. **Specialized knowledge or experience of the person seeking to qualify for the LLP**
   As the *user* of this *ESA,* do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?
   ☒ **No** ☐ **Yes, please explain** _____

4. **Relationship of the purchase price to the fair market value of the *property* if it were not contaminated**
   Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?
   ☒ **Yes** ☐ **No, there is a difference between the purchase price and the fair market value**
   If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?
   please explain _____

5. **Commonly known or *reasonably ascertainable* information about the *property***
   Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,

   (a.) Do you know the past uses of the *property*?
   ☒ **No** ☐ **Yes, please explain** _____

   (b.) Do you know of specific chemicals that are present or once were present at the *property*?
   ☒ **No** ☐ **Yes, please explain** _____

   (c.) Do you know of spills or other chemical releases that have taken place at the *property*?
   ☒ **No** ☐ **Yes, please explain** _____

   (d.) Do you know of any environmental cleanups that have taken place at the *property*?
   ☐ **No** ☐ **Yes, please explain** _____

6. **The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation**
   As the *user* of this *ESA*, based on your knowledge and experience related to the *property,* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?
   ☒ **No** ☐ **Yes, please explain** _____

Note: Landowner Liability Protections, or *LLPs*, is the term used to describe the three types of potential defenses to Superfund liability in EPA's *Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Limitations on CERCLA Liability* ("*Common Elements*" Guide) issued on March 6, 2003.

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

In addition, certain information should be collected, if available, and provided to *KCE Matrix, Inc.* to conduct the Phase I Environmental Site Assessment. This information is intended to assist *KCE Matrix, Inc.* but is not necessarily required to qualify for one of the *LLPs*. The information includes:

(a) The reason why the Phase I Environmental Site Assessment is required,

Construction loan closing

(b) The type of *property* and type of *property* transaction, for example, sale, purchase, exchange, etc.,

Purchase

(c) The complete and correct address for the *property* (a map or other documentation showing *property* location and boundaries is helpful)

2074 N Farmersville Blvd Farmersville CA

(d) The scope of services desired for the Phase I (including whether any parties to the *property* transaction may have a required standard scope of services on whether any considerations beyond the requirements of Practice E 1527 are to be considered),

Standard Scopt

(e) Identification of all parties who will rely on the Phase I *report*,

Pacific West Communities

(f) Identification of the site contact and how the contact can be reached,

Niki Slattery, nikis@tpchousing.com

(g) Any special terms and conditions which must be agreed upon by the *environmental professional*

None

(h) Any other knowledge or experience with the *property* that may be pertinent to the *environmental professional* for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *property* and its environmental condition).

None

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Vapor Encroachment Screening Section

1. **Property Type:**
☐ Commercial ☐ Industrial ☐ Multi Tenant ☒ Vacant Land

2. **Are there any building/structures on the property?**
☒ No ☐ Unknown ☐ Yes, type construction _____

3. **Will buildings/structures be constructed on the property in the future?**
☐ No ☐ Unknown ☒ Yes, type construction Multi-Family Affordable Housing

4. **If buildings exist or are proposed, do/will they have elevators?**
☒ Yes ☐ No

5. **Type of level below grade (existing or proposed)?**
☐ Full Basement ☐ Crawl Space ☒ Slab on Grade ☐ Parking Garage ☐ Multi-Level

6. **Ventilation in level below grade?**
☐ Yes ☐ No ☒ Unknown

7. **Sump pumps, floor drains, or trenches (existing or proposed)?**
☐ Yes ☐ No ☒ Unknown

8. **Radon or methane mitigation system installed?**
☐ Yes ☐ No ☒ Unknown

9. **Heating system type? (existing or proposed)? (CHECK ALL THAT APPLY)**

☒ Hot Air Circulation	☐ Electric Baseboard	☐ Hot Air Radiation	☐ Heat Pump
☐ Hot Water Radiation	☐ Wood Stove	☐ Kerosene Heater	☐ Steam Radiation
☐ Fireplace	☐ Coal Furnace	☐ Radiant Floor Heat	☐ Hot Water Circulation
☐ Fuel Oil Furnace	☐ Gas Furnace	☐ Other	

10. **Type of fuel energy? (existing or proposed)? (CHECK ALL THAT APPLY)**

☐ Natural Gas	☒ Electric	☐ Propane	☐ Fuel Oil
☐ Kerosene	☐ Wood	☐ Coal	☐ Solar
☐ Other			

11. **Have there ever been any environmental problems at the property?**
☐ No ☒ Unknown ☐ Yes, describe _____

12. **Does/will a gas station or dry cleaner operate anywhere on the property?**
☐ Yes ☒ No ☐ Unknown

13. **Do any tenants use hazardous chemicals in relatively large quantities on the property?**
☒ No ☐ Unknown ☐ Yes, describe _____

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Vapor Encroachment Screening Section Continued:

14. Have any tenants ever complained about odors in the building or experienced health related problems that may have been associated with the building?

☐ Yes ☐ No ☒ Unknown

15. Are the operations (or proposed operations to be performed) on the property OSHA regulated?

☐ Yes ☒ No ☐ Unknown

16. Are there any existing or proposed underground storage tanks (USTs) or above ground storage tanks (ASTs)?

☐ Yes ☐ No ☒ Unknown

17. Are there any sensitive receptors (for example, children, elderly, people in poor health, and so forth) that occupy or will occupy the property?

☒ Yes ☐ No ☐ Unknown

Print Name: Niki Slattery **Date:** 11/24/2025

Updated

First American Title™

First American Title Company

3000 W. Main St
Visalia, CA 93291
California Department of Insurance License No. 2549-4

Escrow Officer:	Ann Kay
Phone:	(559)635-6803
Fax No.:	(866)590-2167
E-Mail:	akay@firstam.com
Title Officer:	Ann Kay
Phone:	(559)635-6803
Fax No.:	(866)590-2167
E-Mail:	akay@firstam.com
E-Mail Loan Documents to:	Lenders please contact the Escrow Officer for email address for sending loan documents.
Borrower:	Housing Authority of the County of Tulare
Property:	Vacant Land City of Farmersville, CA

PRELIMINARY REPORT

In response to the above referenced application for a policy of title insurance, this company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Exhibit A attached. *The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties*. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Exhibit A. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

Please be advised that any provision contained in this document, or in a document that is attached, linked or referenced in this document, that under applicable law illegally discriminates against a class of individuals based upon personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or any other legally protected class, is illegal and unenforceable by law.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of November 20, 2025 at 7:30 A.M.

The form of Policy of title insurance contemplated by this report is:

To Be Determined

A specific request should be made if another form or additional coverage is desired.

Title to said estate or interest at the date hereof is vested in:

Housing Authority of the County of Tulare

The estate or interest in the land hereinafter described or referred to covered by this Report is:

FEE

The Land referred to herein is described as follows:

(See attached Legal Description)

At the date hereof exceptions to coverage in addition to the printed Exceptions and Exclusions in said policy form would be as follows:

A. General and special taxes and assessments for the fiscal year 2025-2026, a lien not yet due or payable.

1. All taxes - secured, supplemental, defaulted, escaped and including bonds and assessments are not available at this time. Please verify any/all tax amounts and assessment information with the County Tax Collector prior to the close of the contemplated transaction.

2. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.

3. AN EASEMENT FOR THE PURPOSE SHOWN BELOW RIGHTS INCIDENTAL THERETO, AS SHOWN BELOW MAP OF: TULARE COUNTY ASSESSOR'S MAP IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY PURPOSE : ROAD 164
AFFECTS : WEST LINE OF SAID LAND

4. An easement shown or dedicated on the Map as referred to in the legal description

   For: PUBLIC UTILITIES, ACCESS EASEMENT, PUBLIC USE THE ROAD RIGHT OF WAY AND IRREVOCABLE OFFER OF DEDICATION TO COUNTY OF TULARE and incidental purposes.

5. The effect of a map purporting to show the land and other property, filed IN BOOK 30, PAGE 72 of Record of Surveys.

6. An easement for CONSTRUCTION AND RELATED PURPOSES and incidental purposes, recorded MAY 12, 2020 as INSTRUMENT NO. 2020-26557 OF OFFICIAL RECORDS.

   In Favor of: THE CITY OF FARMERSVILLE, A MUNICIPAL CORPORATION
   Affects: as described therein

7. Rights of the public in and to that portion of the Land lying within any Road, Street, Alley or Highway.

8. Water rights, claims or title to water, whether or not shown by the Public Records.

9. The new lender, **if any**, for this transaction may be a Non-Institutional Lender. If so, the Company will require the Deed of Trust to be signed before a **First American approved notary**.

10. Rights of parties in possession.

INFORMATIONAL NOTES

Note: The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

1. The property covered by this report is vacant land.

2. According to the public records, there has been no conveyance of the land within a period of twenty four months prior to the date of this report, except as follows:

   A document recorded MARCH 22, 2024 as INSTRUMENT NO. 2024-13214 of Official Records.

   From: MARLENE E. GARDINER, AS TRUSTEE OF THE MARLENE E. GARDINER SURVIVOR'S TRUST, DATED JANUARY 5, 1988 AND DMA INVESTMENTS LIMITED PARTNERSHIP, A CALIFORNIA LIMITED PARTNERSHIP
   To: HOUSING AUTHORITY OF THE COUNTY OF TULARE

3. We find no outstanding voluntary liens of record affecting subject property. Disclosure should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any possible security interest in the subject property.

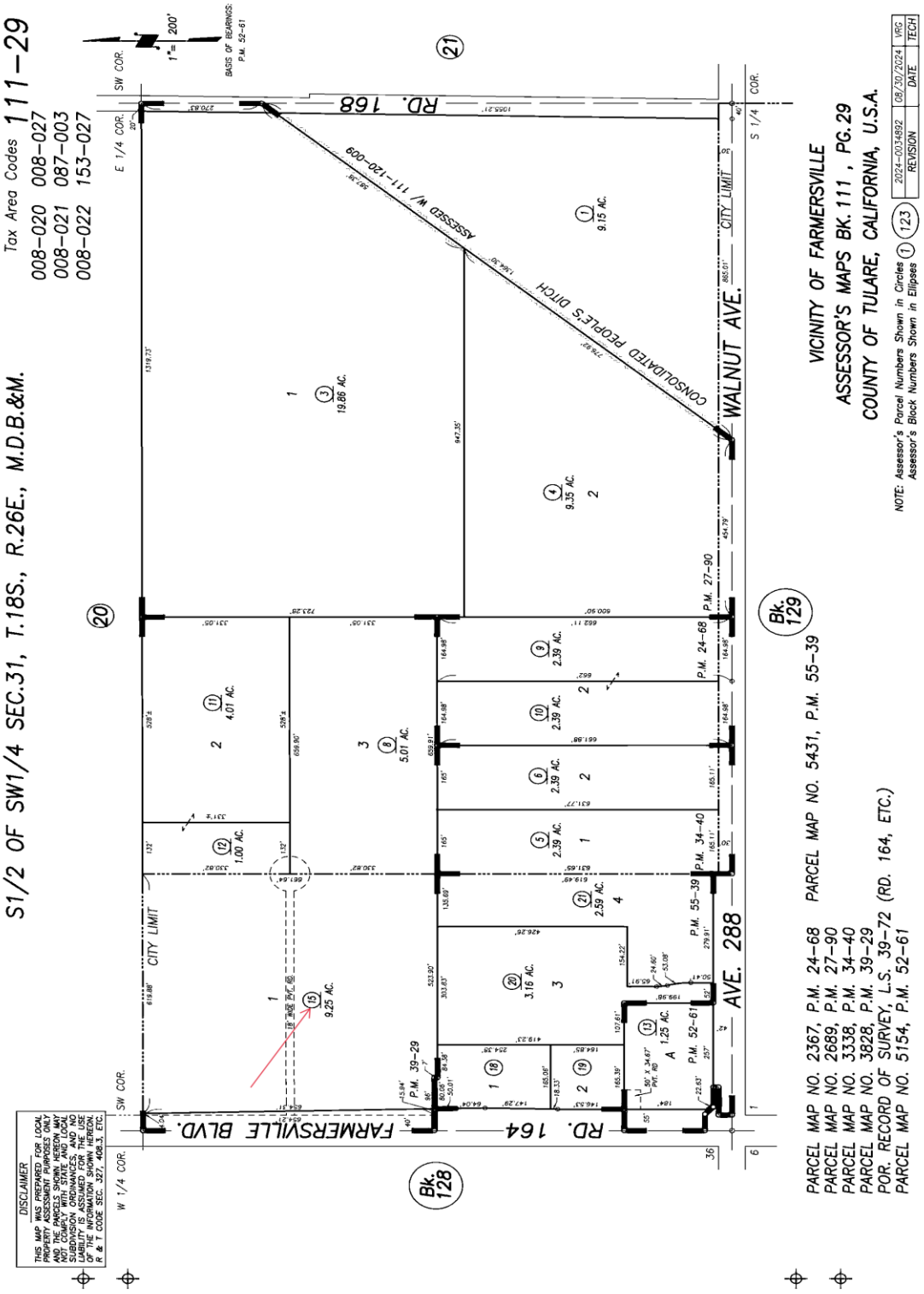
The map attached, if any, may or may not be a survey of the land depicted hereon. First American expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

LEGAL DESCRIPTION

Real property in the City of Farmersville, County of Tulare, State of California, described as follows:

Parcel 1 of Parcel Map No. 3826, in the County of Tulare, State of California, according to the map thereof recorded in Book 39, Page 29 of parcel maps, Tulare County Records.

APN: 111-290-015-000


S1/2 OF SW1/4 SEC.31, T.18S., R.26E., M.D.B.&M.
Tax Area Codes 111-29
008-020 008-027
008-021 087-003
008-022 153-027
1"= 200'
BASIS OF BEARINGS: P.M. 52-61
RD. 168
AVE. 288
RD. 164
FARMERSVILLE BLVD.
WALNUT AVE.
CONSOLIDATED PEOPLE'S DITCH
ASSESSED W/ 111-120-009
CITY LIMIT
P.M. 24-68
P.M. 27-90
P.M. 34-40
P.M. 55-39
P.M. 39-29
P.M. 52-61
Bk. 129
Bk. 128
SW COR.
E 1/4 COR.
S 1/4 COR.
W 1/4 COR.
VICINITY OF FARMERSVILLE
ASSESSOR'S MAPS BK. 111, PG. 29
COUNTY OF TULARE, CALIFORNIA, U.S.A.
NOTE: Assessor's Parcel Numbers Shown in Circles (1) (123)
Assessor's Block Numbers Shown in Ellipses
2024-0034892 08/30/2024 VRG
REVISION DATE TECH
DISCLAIMER
THIS MAP WAS PREPARED FOR LOCAL PROPERTY ASSESSMENT PURPOSES ONLY AND THE PARCELS SHOWN HEREON MAY NOT COMPLY WITH STATE AND LOCAL SUBDIVISION ORDINANCES, AND NO LIABILITY IS ASSUMED FOR THE USE OF THE INFORMATION SHOWN HEREON. R & T CODE SEC. 327, 408.3, ETC.
PARCEL MAP NO. 2367, P.M. 24-68
PARCEL MAP NO. 2689, P.M. 27-90
PARCEL MAP NO. 3338, P.M. 34-40
PARCEL MAP NO. 3828, P.M. 39-29
POR. RECORD OF SURVEY, L.S. 39-72 (RD. 164, ETC.)
PARCEL MAP NO. 5154, P.M. 52-61
PARCEL MAP NO. 5431, P.M. 55-39

NOTICE

Section 12413.1 of the California Insurance Code, effective January 1, 1990, requires that any title insurance company, underwritten title company, or controlled escrow company handling funds in an escrow or sub-escrow capacity, wait a specified number of days after depositing funds, before recording any documents in connection with the transaction or disbursing funds. This statute allows for funds deposited by wire transfer to be disbursed the same day as deposit. In the case of cashier's checks or certified checks, funds may be disbursed the next day after deposit. In order to avoid unnecessary delays of three to seven days, or more, please use wire transfer, cashier's checks, or certified checks whenever possible.

EXHIBIT A
LIST OF PRINTED EXCEPTIONS AND EXCLUSIONS (BY POLICY TYPE)

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE [(07-01-2021) v. 01.00]

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy and We will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
      i. the occupancy, use, or enjoyment of the Land;
      ii. the character, dimensions, or location of any improvement on the Land;
      iii. the subdivision of land; or
      iv. environmental remediation or protection.
   b. any governmental forfeiture, police, or regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.
   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23, or 27.
2. Any power to take the Land by condemnation. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 17.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by You;
   b. not Known to Us, not recorded in the Public Records at the Date of Policy, but Known to You and not disclosed in writing to Us by You prior to the date You became an Insured under this policy;
   c. resulting in no loss or damage to You;
   d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 5, 8.f., 25, 26, 27, 28, or 32); or
   e. resulting in loss or damage that would not have been sustained if You paid consideration sufficient to qualify You as a bona fide purchaser of the Title at the Date of Policy.
4. Lack of a right:
   a. to any land outside the area specifically described and referred to in Item 3 of Schedule A; and
   b. in any street, road, avenue, alley, lane, right-of-way, body of water, or waterway that abut the Land.
   Exclusion 4 does not modify or limit the coverage provided under Covered Risk 11 or 21.
5. The failure of Your existing structures, or any portion of Your existing structures, to have been constructed before, on, or after the Date of Policy in accordance with applicable building codes. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 14 or 15.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transfer of the Title to You is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 30.
7. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
8. Negligence by a person or an entity exercising a right to extract or develop oil, gas, minerals, groundwater, or any other subsurface substance.
9. Any lien on Your Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 9 does not modify or limit the coverage provided under Covered Risk 8.a. or 27.
10. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:
For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.
The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1% of Policy Amount Shown in Schedule A or $2,500 (whichever is less)	$10,000
Covered Risk 18:	1% of Policy Amount Shown in Schedule A or $5,000 (whichever is less)	$25,000
Covered Risk 19:	1% of Policy Amount Shown on Schedule A or $5,000 (whichever is less)	$25,000
Covered Risk 21:	1% of Policy Amount Shown on Schedule A or $2,500 (whichever is less)	$5,000

ALTA OWNER'S POLICY [(07-01-2021) V. 01.00]
CLTA STANDARD COVERAGE OWNER'S POLICY [(02-04-22) V. 01.00]
EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
   i. the occupancy, use, or enjoyment of the Land;
   ii. the character, dimensions, or location of any improvement on the Land;
   iii. the subdivision of land; or
   iv. environmental remediation or protection.
   b. any governmental forfeiture, police, regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.

Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.

2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by the Insured Claimant;
   b. not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   c. resulting in no loss or damage to the Insured Claimant;
   d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
   e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
6. Any lien on the Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
7. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

NOTE: The 2021 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed below as numbers 1 through 7. The 2021 CLTA Standard Coverage Owner's Policy will include the Western Regional Standard Coverage Exceptions listed below as numbers 1 through 7.

EXCEPTIONS FROM COVERAGE

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document are excepted from coverage.

This policy does not insure against loss or damage and the Company will not pay costs, attorneys' fees, or expenses resulting from the terms and conditions of any lease or easement identified in Schedule A, and the following matters:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas,

uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.

   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
   (a) a fraudulent conveyance or fraudulent transfer; or
   (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

NOTE: The 2006 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed below as numbers 1 through 7.

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL, CIVIL & ENVIRONMENTAL

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Vacant Land
(APN: 111-290-015-000)
Farmersville, California 93223

Prepared For:

Pacific West Communities, Inc.
430 East State Street, Suite 100
Eagle, Idaho 83616

KCE-2022-454E-R1
December 6, 2022

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I. SUMMARY AND CONCLUSIONS

KCE Matrix, Inc. (KCE Matrix) has been retained by Pacific West Communities, Inc. (referred to as "the client" and/or "the user" in this report) to conduct a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing and Materials (ASTM) standard practice E1527-13 for the property consisting of vacant land that has the Assessor's Parcel Number (APN) of 111-290-015-000, Farmersville, California (referred to as "the subject property" in this report).

The following summarizes the findings of this Phase I ESA:

- The subject property is located in a commercial/retail and residential area on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Street, in Farmersville, California. The property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed through the entire western property line along Farmersville Road and through vacant land located along the southern property line.

- Based on the historic information obtained during this investigation (including research of Sanborn Maps, Aerial Photographs, regulatory records and city directories), the subject property consisted of vacant unoccupied land with no structures from 1937 through the present. The site appears to have been used as agricultural land between approximately 1952 and 1984. As of 1994 and through the present, a private road has been and continues to be located in the central portion of the property that connects Farmersville Road along the western perimeter of the site to the properties located adjacent to and east of the subject site. On December 1, 2022, a representative of KCE Matrix conducted site inspection of the subject property and confirmed that the property currently consists vacant land with no structures and has a dirt surface.

- The environmental disclosure report obtained by KCE Matrix from EDR presents information with regard to other sites in the immediate and general site vicinity of the subject property. Based on review of the report as provided by EDR, only three other sites were identified as being located in the general vicinity of the subject property. Two of these other sites have and/or have had at least one Underground Storage Tank (UST) used for regular product. The one other site identified as being located in the general vicinity of the subject property was listed on the RCRA NONGEN / NLR database. This facility has been identified as a non-generator with no reported violations. Based on the information obtained during this investigation and the site vicinity reconnaissance performed, KCE Matrix did not discover or observe subsurface

environmental site assessment activity that would indicate potential migration of contamination from other nearby sites towards the subject property.

- Based on the Vapor Encroachment Screen (VES) conducted during this investigation, a Vapor Encroachment Condition (VEC) originating from the subject property could not be ruled out. Furthermore, based on the research conducted during this investigation, a VEC originating from other nearby sites in the vicinity for the subject property could not be ruled out.

- KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on monitoring data collected from wells located at a site that is approximately 0.78-mile north of the subject site, the depth to groundwater was reported to range between 32.52 feet and 34.44 feet below the surface as monitored in May of 2012. Based on information as reported in the "Site Closure Summary" report dated April 1, 2003, for a property located approximately 0.75-mile south of the subject site, the highest depth to groundwater was reported as 13 feet below the top of well casings, and the lowest depth to groundwater was reported as 32 feet below the top of well casings, and the groundwater flow direction was reported to be towards the west.

The ASTM standard practice E1527-13 defines the following terms:

Recognized Environmental Condition (REC) as "the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment".

Historical Recognized Environmental Condition (HREC) as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria as established by the regulatory authority, without subjecting the property to any required controls".

Controlled Recognized Environmental Condition (CREC) as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls".

KCE Matrix has performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527-13 of the property consisting of vacant land with the APN of 111-290-015-000, Farmersville, California, the subject property. Any exceptions to, or deletions from, this practice are described in this report. This assessment has revealed no

evidence of a REC, an HREC or a CREC in connection with the subject property, except as follows:

- REC – Historic agricultural land use. The subject property appears to have been used as agricultural land from at least approximately 1952 through 1984. As such, KCE Matrix recommends that subsurface environmental assessment work be performed for the subject property to determine whether or not the property has been impacted by the potential former usage of pesticides over an extended period of time, and to assess any potential impact from metals (such as Arsenic). The proposed subsurface assessment work should also be conducted in a manner so as to address potential vapor encroachment conditions.

II. INTRODUCTION

A. Purpose

This report presents the results of a Phase I ESA conducted by KCE Matrix for the subject property. The purpose of this investigation is to research and report existing environmental conditions for the subject property based on the American Society of Testing and Materials (ASTM) standard practice E1527-13. Performing a Phase I ESA according to the ASTM Standard E1527-13 is intended to permit a user to satisfy one of the requirements in qualifying for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* limitations on Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability (the "*landowner liability protections*," or "*LLPs*"). This practice constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice".

B. Detailed Scope-of-Services

The scope of services performed during this Phase I ESA project includes:

1. Collecting available information concerning the property as it pertains to:
   a. Past land use
   b. Past owners
   c. Location of buried storage tanks, hazardous waste storage, wastewater treatment facilities and/or on-site landfills, etc.
   d. Types of chemicals used on site, past and present
   e. Geologic and hydrogeologic features
   f. Past geotechnical investigations (if available)
   g. Other data pertinent to the specific site
2. Conducting a site visit to:
   a. Identify vegetative features
   b. Locate surface waters
   c. Assess physical features

   d. Observe adjacent land use
   e. Gather evidence of indiscriminate and/or illegal waste disposal
3. Conducting a review of records maintained by regulatory agencies as follows:
   a. Reviewing regulatory files regarding the property in question
   b. Contacting appropriate regulatory personnel
4. Conducting a Vapor Encroachment Screen.
5. Preparing the Phase I Environmental Site Assessment Report, summarizing our findings and inclusive of supporting documentation.

C. Significant Assumptions

No significant assumptions were made during the course of this investigation.

D. Limitations and Exceptions

This type of ESA does not include air, soil or water sampling; or sampling of building materials. Site-specific conditions such as soil deposits and rock formations may vary in thickness, lithology, saturation strength, and other properties across any site beyond what available documentation indicates. Therefore, it is possible that undocumented or concealed improvements or alterations to the property could exist beyond the inquiry of the activities conducted during this site assessment. In addition, environmental changes, either naturally occurring or artificially induced, may cause changes or alterations (which can be significant) to the property as compared to the conditions found at the time that this assessment was conducted.

Based on the best available investigative technologies, no amount of assessment can guarantee that the subject property does not contain contaminants or hazardous substances. The activities conducted during this limited investigation cannot identify all potential concerns for the subject property, and do not eliminate the possibility that the subject property is completely free of environmental concerns.

KCE Matrix has analyzed and evaluated the information collected during this investigation using what we believe to be the currently applicable assessment and engineering techniques and principles. KCE Matrix assumes no liability from other parties involved in losses sustained as a result of decisions made based on interpretations of this report. KCE Matrix makes no warranty, either expressed or implied, regarding the work conducted, except that our services were performed in accordance with the generally accepted professional principles and practices existing for such work.

There are no significant data gaps to report during this investigation.

E. Special Terms and Conditions

This report and all information obtained during this site assessment are considered confidential and will not be released without written permission by the owner of the subject property, the owner

authorized entity conducting this assessment, or as required by law. The owner of the subject property is typically responsible for mitigation of contamination, corrective or remedial action, and disclosure of any information related to environmental issues that may or may not be discovered during this site assessment.

F. User Reliance

This report was prepared for the exclusive use of the client and/or user. No other person or entity is entitled to rely upon this report without the specific written authorization of KCE Matrix. Any such reliance by any third party is at the sole risk of said third party, and such reliance is subject to the same limitations, terms and conditions as the original contract with the client. KCE Matrix specifically disclaims any responsibility for any unauthorized use of this report.

III. SITE DESCRIPTION

A. Location and Description

The subject property is located on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Street, in Farmersville, California. A Location Map, Site Plan, and Site Vicinity Map are presented in Appendix A, as Figures 1, 2 and 3, respectively.

B. Site and Vicinity General Characteristics

The subject property is located in a commercial/retail and residential area. The subject property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed through the entire western property line along Farmersville Road and through vacant land located along the southern property line.

C. Current Use of the Property

The subject property currently consists of vacant unoccupied land with no structures and has a dirt surface.

D. Description of Structures and Other Improvements

The subject property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate

elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed through the entire western property line along Farmersville Road and through the vacant land located along the southern property line.

E. Current Uses of the Adjoining Properties

The adjoining properties are comprised of the following:

- North: Residential properties, an auto repair workshop/facility, Dillon Avenue and residential property.
- East: Residential properties and vacant properties.
- South: Vacant land, commercial/retail property (Rite Aid Store), residential property and East Walnut Street.
- West: Farmersville Road, commercial property, an auto repair facility, a public storage facility and residential properties along with residential streets.

IV. USER PROVIDED INFORMATION

A user questionnaire was completed by the client and was provided to KCE Matrix during this investigation. A copy of the completed user questionnaire is presented in Appendix E of this report.

A. Title Records

The client provided KCE Matrix with a copy of a Preliminary Title Report for the subject property as prepared by First American Title Company, dated October 18, 2022. Based on review of the title report for the subject property, no environmental liens and/or Activity and Use Limitations (AUL's), which indicate a past or present release of a hazardous substance or petroleum products, were presented or recorded. A copy of the title report as prepared by First American Title Company dated October 18, 2022 is presented in Appendix E.

B. Environmental Liens or Activity and Use Limitations

The user reported that he is not aware of any environmental cleanup liens that are filed or recorded against the property under federal, tribal, state or local law. The user also reported that he is not aware of any Activity and Use Limitations (AUL's) that are filed or recorded against the property.

C. Specialized Knowledge

The user did not report any specialized knowledge related to the property or to nearby properties.

D. Commonly Known or Reasonably Ascertainable Information

The user did not report any commonly known or reasonably ascertainable information related to the property.

E. Valuation Reduction for Environmental Issues

The user reported that the purchase price of this property reasonably reflects the fair market value of the property. The user did not report any other information with regard to the value of the subject property based on environmental issues.

F. Owner, Property Manager, and Occupant Information

The user identified Mr. Don Slattery as a site contact for the subject property. The user also listed "Pacific West Communities" as a party who will rely on the Phase I report. The user did not provide any other information regarding the ownership, management or occupancy of the subject property.

G. Reason for Performing Phase I

This Phase I ESA is being performed for the client as part of a due diligence investigation of the subject site.

H. Vapor Encroachment

The user reported that the site consists of unimproved vacant land and will be developed with the construction of apartments that will have slab-on-grade floors. The user reported that the future structure(s) will use hot air circulation, hot water circulation and gas furnace as the heating system type and natural gas and electricity as the type of fuel energy. The user also reported that neither a gas station nor a dry cleaner operates or will operate on site.

I. Other

The user did not report any other knowledge or experience for the subject property with regard to environmental condition.

V. RECORDS REVIEW

A. Standard Environmental Record Sources

KCE Matrix retained Environmental Data Resources, Inc. (EDR) to conduct a search of government and regulatory databases in an attempt to locate and obtain information about the subject site and other sites in the vicinity of the subject property that may affect the environmental quality of the property. The environmental disclosure report prepared by EDR provides a summary

of the various databases searched and is presented in Appendix B of this report. The database research presents summaries for the subject site and selected adjoining properties as follows:

A1. Subject Site

The target property was not listed in any of the databases searched by EDR.

A2. Site Vicinity

With regard to the summary report prepared by EDR, KCE Matrix has prepared the following table listing other sites located in the general vicinity of the subject property up to a reported radius of approximately 500 feet. This summary table includes the site names, the reported distances from the subject property, as well as a brief summary of the information reported by the databases searched:

Facility Name	Address	Dist. (ft)	Database	Regulatory History and/or Reported Impact and Current Status
Ral Copping	28880 Rd 164	23 WNW	HIST UST	Reported one UST with a capacity of 260 gallons used for regular product.
Ralph Copping	28880 Road 164	23 WNW	HIST UST	Reported one UST with a capacity of 260 gallons used for regular product.
Claudes Buggies Inc	28813 Farmersville Blvd	75 SW	HIST UST	Reported one UST with a capacity of 1,500 gallons installed in 1977 and used for regular product.
Claudes Buggies Inc	28813 Farmersville Blvd	75 SW	SWEEPS UST	Reported one UST with a capacity of 1,500 gallons used for MV fuel. Reported the status as "Active" as of April 20, 1988.
T Young Diesel Electric	29022 Road 164	129 NNW	RCRA NonGen / NLR	Classified the facility as not being a generator of Federal RCRA waste. No violations were reported.

In addition, the EDR databases searched identified one unmapped site as follows:

Name	Address
City of Farmersville Sewerage Tr	Farmersville & Outside Creek Roads

The disclosure report prepared by EDR identified the one unmapped site as an Orphan site. Based on site vicinity reconnaissance up to an approximate radius of 0.25-mile from the subject site and based on the addresses and information provided in the Orphan Site Summary as prepared by EDR, the one unmapped site was not observed to be located in the immediate vicinity of the subject property and appears to be located in excess of 0.25-mile from the subject site.

B. Additional Environmental Record Sources

Regional Water Quality Control Board

On November 14, 2022, KCE Matrix submitted a written request to the Regional Water Quality Control Board (RWQCB), Central Valley Region – File Review Department; for information

regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. Based on an email response issued by the RWQCB dated November 23, 2022, this agency does not maintain any records for the subject property. A copy of the written request made by KCE Matrix dated November 14, 2022 copy of the RWQCB email response dated November 23, 2022 are presented in Appendix C-1.

KCE Matrix also researched the records maintained by the State Water Resources Control Board (SWRCB) – Geotracker Database online for information regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. This database typically contains records that are also maintained by the various local RWQCB's. The results of this online research indicated that the SWRCB-RWQCB does not maintain such records for the subject property.

Department of Toxic Substances Control

On November 14, 2022, KCE Matrix submitted a written request to the California State Department of Toxic Substances Control (DTSC) – Sacramento Regional Office; for information regarding hazardous materials and USTs for the subject property. Based on a letter response issued by the DTSC to KCE Matrix dated November 15, 2022, this agency was unable to provide information about the subject site based on APNs or similar geographic site data without a site address. The DTSC advised that KCE Matrix search for the requested records and information using the DTSC Envirostor Database available online. A copy of the written request made by KCE Matrix dated November 14, 2022 and a copy of the DTSC letter response dated November 15, 2022 are presented in Appendix C-2.

KCE Matrix also researched the records maintained by the DTSC Envirostor Database online for information regarding environmental assessment and remediation matters for the subject property. The results of this online research indicated that the DTSC Envirostor Database does not maintain such records for the subject property.

In addition, KCE Matrix researched the records maintained by the DTSC Hazardous Waste Tracking System database online for information regarding hazardous wastes generated and/or stored at the subject property. The results of this online research indicated that the DTSC Hazardous Waste Tracking System online database does not maintain such records for the subject property.

Tulare County – Health and Human Services Agency

On November 14, 2022, KCE Matrix submitted a written request to the Tulare County – Health and Human Services Agency (TC-HHSA); for information regarding Underground Storage Tanks (USTs) and hazardous materials for the subject property. Based on an email response issued by the TC-HHSA dated November 21, 2022, this agency does not maintain such requested records for the subject property. A copy of the written request made by KCE Matrix dated November 14, 2022 and a copy of the TC-HHSA email response dated November 21, 2022 are presented in Appendix C-3.

City of Farmersville – Clerk's Office – Fire Department

On November 14, 2022, KCE Matrix contacted the City of Farmersville Clerk's Office; regarding any records that may be maintained by the City Departments, including the Fire Department, particularly as may be related to USTs and hazardous materials. Based on an email response issued by the Clerk's Office dated November 14, 2022, the City Clerk's Office does not maintain any records regarding the subject property, and advised KCE Matrix to contact Tulare County for such records. Copies of the written request made by KCE Matrix and the City Clerk's Office email response both dated November 14, 2022 are presented in Appendix C-4.

California Geologic Energy Management Division

KCE Matrix researched the records maintained by the California Geologic Energy Management (CalGEM) Division (formerly known as the Division of Oil, Gas, and Geothermal Resources (DOGGR)) Database online for information regarding oil and natural gas wells for the subject property and the general vicinity. The results of this online research did not indicate references to any oil and/or natural gas wells as being located on the subject property.

California Environmental Protection Agency

KCE Matrix researched the records maintained by the California Environmental Protection Agency (CalEPA) Database online for information regarding environmentally regulated sites and facilities. The results of this online research indicated that the CalEPA Database does not maintain such records for the subject property.

C. Physical Setting Source(s)

C1. Topography

The site has an approximate elevation of 365 feet above mean sea level. A Location Map that shows the physical setting of the subject property and vicinity is presented in Appendix A, as Figure 1.

C2. Geology/Hydrogeology

KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on monitoring data collected from wells located at a site that is approximately 0.78-mile north of the subject site, the depth to groundwater was reported to range between 32.52 feet and 34.44 feet below the surface as monitored in May of 2012. Based on information as reported in the "Site Closure Summary" report dated April 1, 2003, for a property located approximately 0.75-mile south of the subject site, the highest depth to groundwater was reported as 13 feet below the top of well casings, and the lowest depth to groundwater was reported as 32 feet below the top of well casings, and the groundwater flow direction was reported to be

towards the west. The groundwater information obtained from the SWRCB Geotracker Database for the general site vicinity is presented in Appendix C-5.

The surface of the subject property is essentially flat and has an approximate elevation of 365 feet above mean sea level. With regard to the surrounding area, the general topographic gradient is reported to have a gradual slope down to the west based on information obtained from EDR. General subsurface soil and topographic gradient information for the site and vicinity is presented in the Physical Setting Source Summary Report prepared by EDR in Appendix B (pages A-1 through A-6).

The National Wetlands Inventory (NWI) was established by the United States (U.S.) Fish and Wildlife Service (Service) in 1974 to conduct a nationwide inventory of U.S. wetlands to provide its biologists and others with information on the distribution of wetlands to aid in wetland conservation efforts. Based on review of information obtained from the NWI as maintained by the Service online, the subject property does not appear to be a designated wetland area. The NWI map identifies the following wetland(s) as the closest designated wetland area(s) in the vicinity of the subject property:

Wetland	Distance	
Cameron Creek	0.28-mile	To the northwest of the subject site
Creek	0.34-mile	To the southeast of the subject site
Deep Creek	0.50-mile	To the southeast of the subject site
Creek	0.55-mile	To the northwest of the subject site
Davis Ditch	0.88-mile	To the east of the subject site

The NWI wetland map for the vicinity of the subject property is presented in Appendix C-6. In addition, references to the nearest wetland areas are presented in the maps presented in the Executive Summary of the EDR report presented in Appendix B.

The Federal Emergency Management Agency (FEMA) has defined geographic areas as Flood Zones according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area. Based on review of information obtained from the FEMA's National Flood Hazard Layer (NFHL) Viewer online, the subject property is located in Zone X, an area of minimal flood hazard. The NFHL map for the general vicinity of the subject property is presented in Appendix C-7.

D. Historical Use Information - Subject Property

D1. Building Records

On November 14, 2022, KCE Matrix submitted written requests to the City of Farmersville – City Clerk's Office regarding any records that may be maintained by the City Departments, including the Building Department. Based on email correspondence as issued by the City of Farmersville - City Clerk's office dated November 14, 2022; this agency does not maintain any records for the

subject property. Copies of the written request made by KCE Matrix and the City Clerk's Office email response both dated November 14, 2022 are presented in Appendix D-1.

On November 14, 2022, KCE Matrix submitted a written request to the Tulare County – Resource Management Agency (TC-RMA) for site history information including building permits, certificates of occupancy and notices of violations. In an email response issued by the TC-RMA on November 14, 2022, KCE Matrix was advised to contact Mr. Karl Schoettler, the planner contracted by the City of Farmersville for such information. As such, KCE Matrix contacted Mr. Karl Schoettler for site history information regarding the subject property. On November 16, 2022, Mr. Schoettler provided KCE Matrix with site information via email stating that the subject site consists of vacant land and that the City has no records of any permits for construction. In addition, Mr. Schoettler stated that the subject property is located inside of the city limits and is zoned C-G (General Commercial); and this zoning allows for a wide variety of commercial uses, including retail stores, restaurants and offices, among others. Mr. Schoettler also provided KCE Matrix with a brochure that summarizes permitted uses and zoning standards in Tulare County. Copies of the email requests made by KCE Matrix and the correspondence with the representatives of Tulare County dated between November 14 and November 16, 2022 are presented in Appendix D-1.

D2. Historic Maps

KCE Matrix contacted EDR in an effort to obtain historic Sanborn® Maps of the subject site and vicinity. Based on a search of the EDR historic map collection, no such historic maps were maintained by EDR for the subject property and immediate vicinity. A copy of the Sanborn® Map Report dated November 11, 2022 indicating that there is no coverage for the subject property and vicinity is presented in Appendix D-2.

D3. Aerial Photographs

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Aerial Photographs of the subject site and vicinity. Based on the Aerial Photographs for the subject property dated from 1937 through 2016 as obtained by KCE Matrix from EDR, the subject property consisted of vacant land with no structures between 1937 and 2016. The site appears to have been used as agricultural land between approximately 1952 and 1984. Copies of aerial photographs dated 1937, 1952, 1969, 1977, 1984, 1994, 2006, 2009, 2012 and 2016 for the subject property and site vicinity obtained by KCE Matrix from EDR are presented in Appendix D-3.

D4. Historical Topographic Maps

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Topographic Maps of the subject site and vicinity. Based on the historic and/or recent Topographic Maps dated 1926 through 2018 as obtained by KCE Matrix from EDR, the property appears to have been vacant land with no structures between 1926 and 1969. Detailed information regarding the subject property was not provided on the Topographic Maps dated 2012 through 2018. Copies of the Historical Topographic Maps dated 1926, 1950, 1952, 1969, 2012, 2015 and 2018 as obtained from EDR and reviewed by KCE Matrix are presented in Appendix D-4.

D5. City Directory Abstract

The target property was not listed in any of the databases searched as reported by EDR. A copy of the City Directory Abstract obtained from EDR and as reviewed by KCE Matrix is presented in Appendix D-5.

D6. Recorded Land Title Records

The client provided KCE Matrix with a copy of a Preliminary Title Report for the subject property as prepared by First American Title Company, dated October 18, 2022. Based on review of the title report for the subject property, no environmental liens and/or Activity and Use Limitations (AUL's), which indicate a past or present release of a hazardous substance or petroleum products, were presented or recorded. A copy of the title report as prepared by First American Title Company dated October 18, 2022 is presented in Appendix E.

E. Historical Use Information - Adjoining Properties

E1. Historic Maps

KCE Matrix contacted EDR in an effort to obtain historic Sanborn® Maps of the subject site and vicinity. Based on a search of the EDR historic map collection, no such historic maps were maintained by EDR for the subject property and immediate vicinity. A copy of the Sanborn® Map Report dated November 11, 2022 indicating that there is no coverage for the subject property and vicinity is presented in Appendix D-2.

E2. Aerial Photographs

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Aerial Photographs of the subject site and vicinity. Based on the Aerial Photographs for the subject property and vicinity dated from 1937 through 2016 as obtained by KCE Matrix from EDR, the general vicinity of the subject property appears to have been comprised of essentially vacant and/or agricultural land with dispersed residential properties between 1937 and 1994. As of 1952 and through 2016, gradual development of essentially residential properties is evident in the general vicinity to the north of the subject property. As of 1994 and through 2016, gradual development of essentially residential properties is evident in the general vicinity, particularly in areas to the west and southwest of the subject property. Copies of aerial photographs dated 1937, 1952, 1969, 1977, 1984, 1994, 2006, 2009, 2012 and 2016 for the subject property and site vicinity obtained by KCE Matrix from EDR are presented in Appendix D-3.

E3. Historical Topographic Maps

KCE Matrix contacted EDR in an effort to obtain historic and/or recent Topographic Maps of the subject site and vicinity. Based on the historic and/or recent Topographic Maps for the subject property and the general vicinity dated from 1926 through 2018 as obtained by KCE Matrix from EDR, the general vicinity of the subject property appears to have been essentially vacant land in

1926, and vacant and/or agricultural land with dispersed residential properties, particularly in the areas to the north of the site between 1952 and 1969. In 2012, gradual development of properties is evident in the general vicinity, particularly in areas to the west and southwest of the subject property, and the vicinity elsewhere remains essentially vacant land. Copies of the Historical Topographic Maps dated 1926, 1950, 1952, 1969, 2012, 2015 and 2018 as obtained from EDR and reviewed by KCE Matrix are presented in Appendix D-4.

E4. City Directory Abstract

Based on review of the City Directory Abstract report obtained by KCE Matrix from EDR; additional information with regard to addresses in the site vicinity is presented. Information with regard to listings that are or were located in the immediate vicinity of the subject property is presented on pages A1 through A15 of the referenced EDR City Directory Abstract report. A copy of the City Directory Abstract report obtained from EDR and reviewed by KCE Matrix is presented in Appendix D-5.

VI. SITE RECONNAISSANCE

A. Non-ASTM Scope Considerations

Site reconnaissance is limited to the areas accessible and inspected during this investigation. There were no buildings or structures observed on site during this investigation. As such, KCE Matrix did not observe any suspect Asbestos Containing Material (ACM) or Lead-Based Paint (LBP) in association with the subject property. No sampling or analysis of any building materials for asbestos content or paint for lead content was conducted during this assessment.

Exposure to asbestos is a health concern when building materials are friable. In working near, repairing or replacing materials such as these, a licensed asbestos abatement contractor, or personnel specially trained in working with or near asbestos should be employed. With regard to LBP, exposure to lead from LBP is a health concern when lead dust is created and can be inhaled or LBP chips are accessible for ingestion. In working near, assessing, repairing or replacing materials that contain LBP, certified lead professionals specially trained in working with or near LBP should be employed.

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The United States Environmental Protection Agency (EPA) and the California EPA have prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. It is important to note that the EPA has found homes with elevated levels of radon in all three designated zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. The map divides the country into three Radon Zones as follows:

- Zone 1: Highest Potential - Counties that have a predicted average indoor radon screening level greater than 4 picocuries per liter (pCi/L), the US EPA Action Limit.

- Zone 2: Moderate Potential - Counties that have a predicted average indoor radon screening level between 2 and 4 pCi/L.

- Zone 3: Low Potential - Counties that have a predicted average indoor radon screening level less than 2 pCi/L.

Radon sampling was not conducted as part of this assessment. Review of the California EPA Map of Radon Zones places the subject property in Zone 2, where average predicted radon levels are between 2.0 and 4.0 pCi/L. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

B. General Site Setting

The subject property is located in a commercial/retail and residential area on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Street, in Farmersville, California. The property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed through the entire western property line along Farmersville Road and through vacant land located along the southern property line.

A Location Map, a Site Plan and a Site Vicinity Map are presented in Appendix A, as Figures 1, 2 and 3, respectively. During site reconnaissance, KCE Matrix also obtained photographs of the subject property and vicinity. Selected photographs are presented in Appendix F.

C. Observations

On December 1, 2022, a representative of KCE Matrix inspected the subject property and recorded the following observations:

	Description	Comments
1	Industrial Use	None observed
2	Gas Station	None observed
3	Motor Repair Facility	None observed
4	Commercial Printing Facility	None observed
5	Dry Cleaning	None observed
6	Photo Development Laboratory	None observed
7	Junkyard	None observed
8	Landfill	None observed

	Description	Comments
9	Waste Treatment	None observed
10	Storage Facility	None observed
11	Disposal Facility	None observed
12	Processing Facility	None observed
13	Recycling Facility	None observed
14	Batteries	None observed
15	Pesticides or agricultural activity	None observed
16	Paints	None observed
17	HazMat storage or use	None observed
18	Potential HazMat storage or use	None observed
19	Dumping or Improper Disposal of HazMat	None observed
20	Drums and Other Containers	None observed
21	PCB's, Transformers, Capacitors or Hydraulic equipment, other equipment	None observed
22	Chemical Products	None observed
23	Asbestos, Age of Building, Blueprints	The site consists of vacant land with no structures and has a dirt surface
24	Paint Condition, LBP	The site consists of vacant land with no structures and has a dirt surface
25	Building Demolition or Renovation	None observed
26	Fill Dirt From Other Locations	None observed
27	Stained Soil or Spills	None observed
28	Oil or Gas Wells	None observed
29	Underground Storage Tanks (USTs)	None observed
30	Above-ground Storage Tanks (AST's)	None observed
31	Hydraulic Hoists	None observed
32	Clarifier/Wastewater Interceptor	None observed
33	Subsurface or Underground Pipes	The site consists of vacant land with no structures and has a dirt surface
34	Above Ground Pipes	None observed
35	Flooring, Drains or Walls Emitting Foul Odors	None observed
36	Pits, Pounds, Lagoons or Cesspools	None observed
37	Distressed Vegetation	Some distressed vegetation observed, most likely due to lack of care
38	Pools of Liquid, Drains, Sumps, Stains, Septic Tanks	None observed
39	Environmental Liens	None observed
40	Government Notifications Regarding Environmental Violation	None observed
41	HazMat Inventory	None
42	Disclosure of Hazardous Substances or Petroleum Products	None observed
43	Previously Conducted Environmental Site Assessments	None observed
44	Wastewater Generation or Disposal	None observed
45	Water Supply System, Water Usage	None observed
46	Regulated Air Emissions	None observed
47	Heating/Cooling	The site consists of vacant land with no structures and has a dirt surface
48	Potable, Irrigation, or Monitoring Wells	None observed
49	Storm water drainage	Dirt surface
50	Odors	Not perceived

	Description	Comments
51	Solid Waste	None observed

D. Site Vicinity Reconnaissance

KCE Matrix conducted a brief inspection of the immediate vicinity of the subject property. The adjoining properties are comprised of the following:

- North: Residential properties, an auto repair workshop/facility, Dillon Avenue and residential property.
- East: Residential properties and vacant properties.
- South: Vacant land, commercial/retail property (Rite Aid Store), residential property and East Walnut Street.
- West: Farmersville Road, commercial property, an auto repair facility, a public storage facility and residential properties along with residential streets.

VII. INTERVIEWS

A. Interview with Owner

KCE Matrix did not conduct an interview with the current owner of the subject property during this investigation.

B. Interview with Site Manager

KCE Matrix did not conduct an interview with the current occupant of the property during this investigation. The subject property currently consists of vacant unoccupied land with a dirt surface and no structures.

C. Interviews with Occupants

KCE Matrix did not conduct an interview with the current occupant of the property during this investigation. The subject property currently consists of vacant unoccupied land with a dirt surface and no structures.

D. Interviews with Local Government Officials

KCE Matrix did not interview any local government officials regarding the subject property during this investigation.

E. Interviews with Others

KCE Matrix did not conduct any other interviews regarding the subject property during this investigation.

VIII. VAPOR ENCROACHMENT SCREEN

During this investigation, KCE Matrix conducted a Vapor Encroachment Screen (VES) for the subject property based on the ASTM E2600-10 guideline. The goal of conducting a VES as established by the ASTM, is to identify a potential Vapor Encroachment Condition (VEC) for the subject property, which is defined as the presence or likely presence of Chemicals of Concern (COC) vapors in the subsurface of the subject property caused by the release of vapors from contaminated soil or groundwater either on or near the subject site. Detailed information with regard to the VES evaluation conducted, the methodology used, and the information for other sites located in the immediate vicinity of the subject property as provided to KCE Matrix by EDR is presented in a VES summary report presented in Appendix G of this report.

A. Subject Property - VES

Based on the research conducted during this investigation, the subject property consisted of vacant unoccupied land with no structures from 1937 through the present. The site appears to have been used as agricultural land between approximately 1952 and 1984. As of 1994 and through the present, a private road has been and continues to be located in the central portion of the property that connects Farmersville Road along the western perimeter of the site to the properties located adjacent to and east of the subject site.

On December 1, 2022, a representative of KCE Matrix conducted site inspection of the subject property and confirmed that the property currently consists vacant land with no structures and has a dirt surface. Based on the site history of the subject property which has included agricultural use over an extended period of time, a VEC originating from the subject site could not be ruled out.

B. Site Vicinity - VES

Based on the research conducted during this investigation for other sites located in the general vicinity of the subject property, three other sites were evaluated during this VES. The evaluation of this other site located closest to the subject property includes the following:

Facility Name	Facility Address	Database
Ral Copping	28880 Rd 164	HIST UST
Ralph Copping	28880 Road 164	HIST UST
Claudes Buggies Inc	28813 Farmersville Blvd	SWEEPS UST, HIST UST
T Young Diesel Electric	29022 Road 164	RCRA NONGEN / NLR

Based on the review of the nearby sites as listed by EDR report, two of these other sites have and/or have had at least one Underground Storage Tank (UST) used for regular product. The one

other site identified as being located in the general vicinity of the subject property was listed on the RCRA NONGEN / NLR database. This facility has been identified as a non-generator with no reported violations.

More specifically with regard to the site identified as Ralph Copping, it is reported that this other site is located in the immediate site vicinity. The site is reported as having had a 260-gallon UST used to store regular motor vehicle fuel for private use on a property with the address of 28880 Road 164, Visalia, California in June of 1988. A copy of the SWRCB Hazardous Substance Storage Container Information report for Tulare County dated June 1, 1988 is presented in Appendix G. Given the fact that this UST is reported as having been located in the immediate site vicinity, a VEC originating from this other nearby site for the subject property cannot be ruled out. Furthermore, the immediate site vicinity, particularly to the areas west across Farmersville Road, south and east of the subject property, were used for agricultural purposes for an extended period of time, at least from 1937 through 1984.

Based on the information provided above, a VEC originating from other nearby sites for the subject property could not be ruled out. Detailed information with regard to the VES evaluation conducted is presented in a VES summary report presented in Appendix G of this report.

IX. FINDINGS

The following presents our findings based on the work performed during this Phase I ESA:

- The subject property is located in a commercial/retail and residential area on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Street, in Farmersville, California. The property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property currently consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed through the entire western property line along Farmersville Road and through vacant land located along the southern property line.

- Based on the historic information obtained during this investigation (including research of Sanborn Maps, Aerial Photographs, regulatory records and city directories), the subject property consisted of vacant unoccupied land with no structures from 1937 through the present. The site appears to have been used as agricultural land between approximately 1952 and 1984. As of 1994 and through the present, a private road has been and continues to be located in the central portion of the property that connects Farmersville Road along the western perimeter of the site to the properties located adjacent to and east of the subject site. On December 1, 2022, a representative of KCE

Matrix conducted site inspection of the subject property and confirmed that the property currently consists vacant land with no structures and has a dirt surface.

- The environmental disclosure report obtained by KCE Matrix from EDR presents information with regard to other sites in the immediate and general site vicinity of the subject property. Based on review of the report as provided by EDR, only three other sites were identified as being located in the general vicinity of the subject property. Two of these other sites have and/or have had at least one Underground Storage Tank (UST) used for regular product. The one other site identified as being located in the general vicinity of the subject property was listed on the RCRA NONGEN / NLR database. This facility has been identified as a non-generator with no reported violations. Based on the information obtained during this investigation and the site vicinity reconnaissance performed, KCE Matrix did not discover or observe subsurface environmental site assessment activity that would indicate potential migration of contamination from other nearby sites towards the subject property.

- Based on the VES conducted during this investigation, a VEC originating from the subject property could not be ruled out. Furthermore, based on the research conducted during this investigation, a VEC originating from other nearby sites in the vicinity for the subject property could not be ruled out.

- KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on monitoring data collected from wells located at a site that is approximately 0.78-mile north of the subject site, the depth to groundwater was reported to range between 32.52 feet and 34.44 feet below the surface as monitored in May of 2012. Based on information as reported in the "Site Closure Summary" report dated April 1, 2003, for a property located approximately 0.75-mile south of the subject site, the highest depth to groundwater was reported as 13 feet below the top of well casings, and the lowest depth to groundwater was reported as 32 feet below the top of well casings, and the groundwater flow direction was reported to be towards the west.

X. SIGNATURE

KCE Matrix appreciates the opportunity to have provided services for this project. Should you have any questions regarding this report and the assessment work performed, please do not hesitate to contact our office at 818-559-5500.

Sincerely,

KCE Matrix, Inc.

Aram B. Kaloustian, P.E.
Project Manager

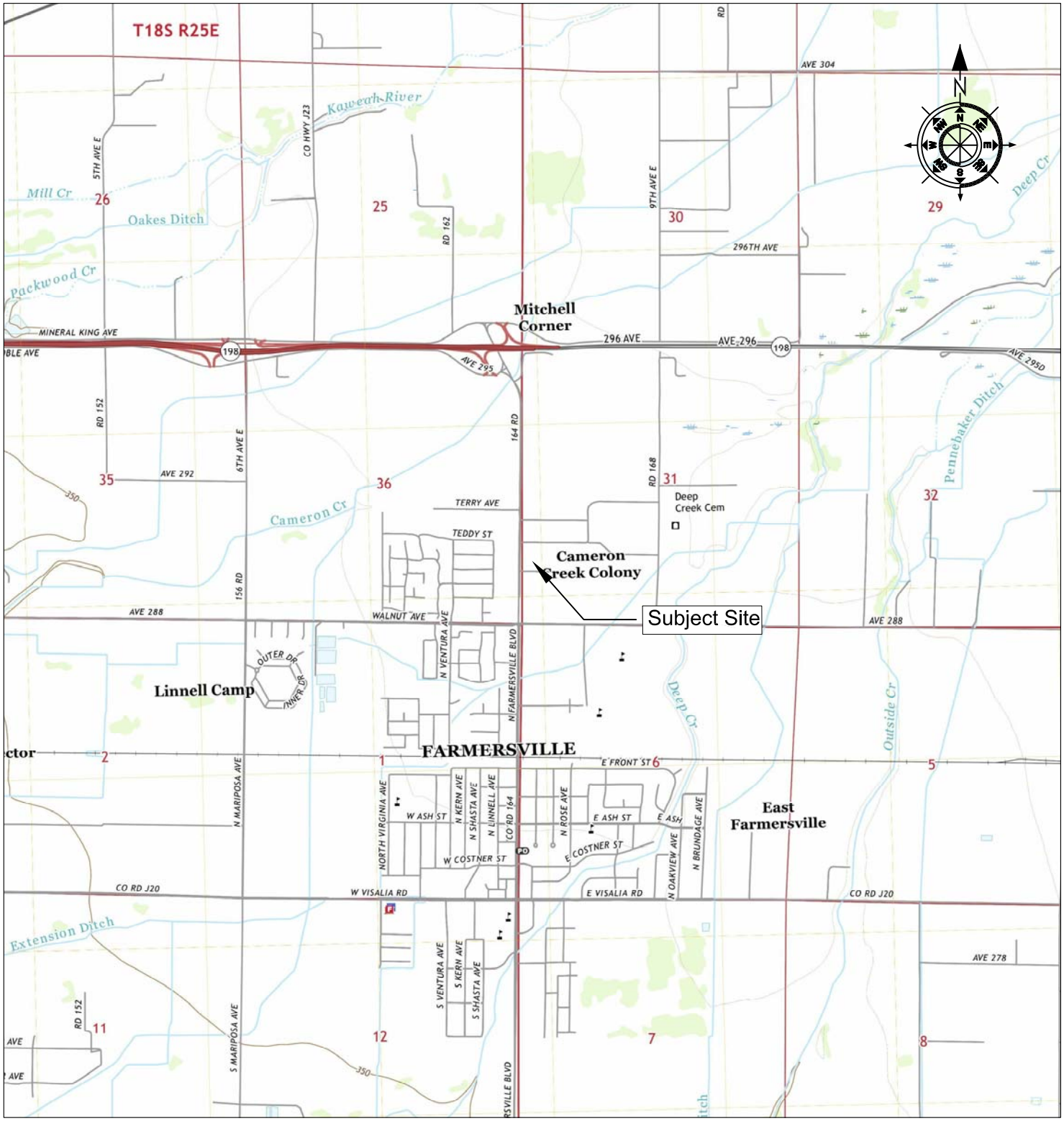
License No. C52428
Expiration Date: 12/31/2022

XI. QUALIFICATIONS

KCE Matrix declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 Code of Federal Regulations (CFR) 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Detailed information with regard to the qualifications of the personnel who have worked on this project is presented in Appendix H of this report.

APPENDIX A

(FIGURES 1 THROUGH 3)



Map Center: Latitude 36.3153, Longitude -119.2059
Subject site is located on the Exeter quadrangle (Map Source Year: 2021)

0 0.5 1.0
Approx. scale Mile

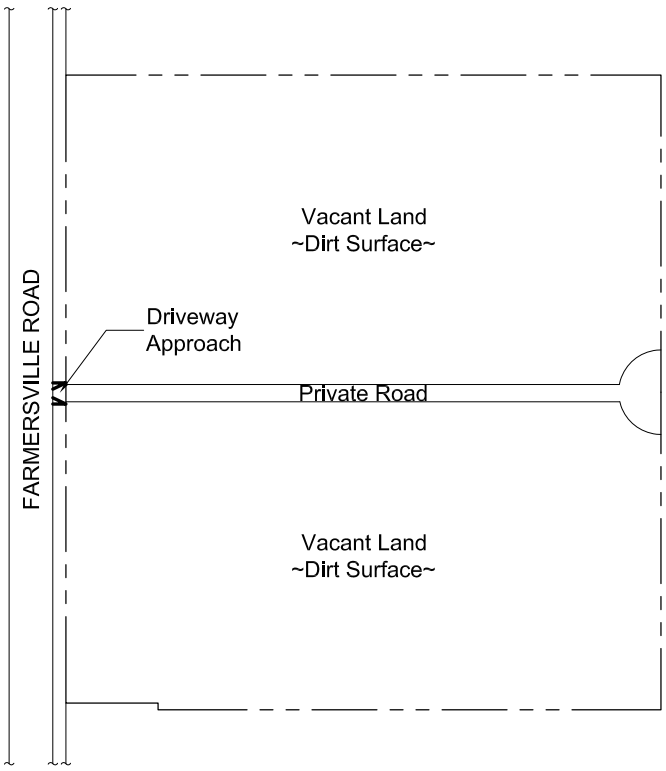
LOCATION MAP

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

FIGURE 1



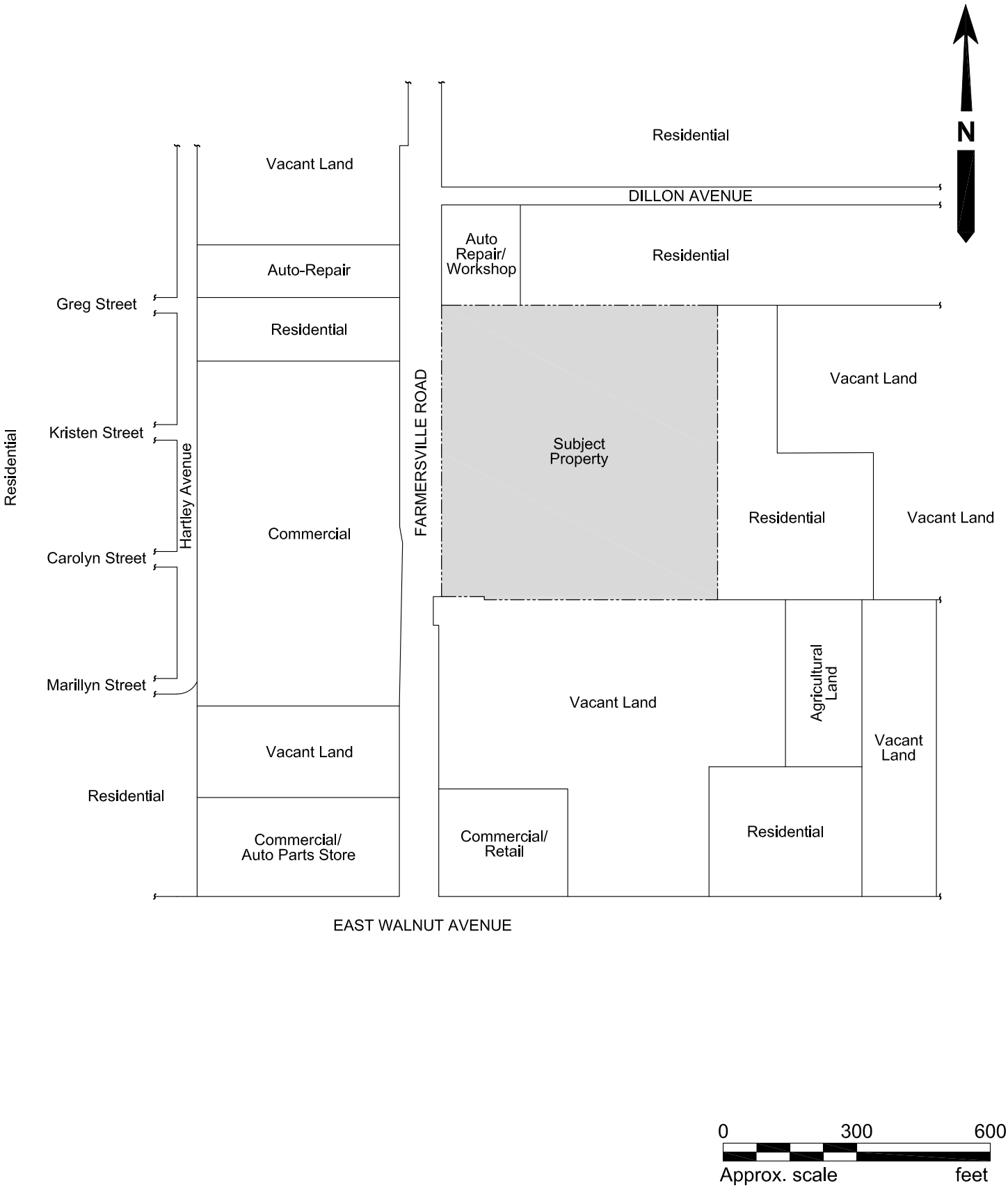
SITE PLAN

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

FIGURE 2



SITE VICINITY MAP

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

FIGURE 3

APPENDIX B

ENVIRONMENTAL DATA RESOURCES, INC. (EDR)
RADIUS MAP REPORT

Vacant Land
APN 111-290-015-000
Visalia, CA 93292

Inquiry Number: 7176734.2s
November 11, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

APN 111-290-015-000
VISALIA, CA 93292

COORDINATES

Latitude (North):	36.3149800 - 36ˆ 18' 53.92''
Longitude (West):	119.2058010 - 119ˆ 12' 20.88''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	301970.5
UTM Y (Meters):	4020942.0
Elevation:	365 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12012165 EXETER, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140617, 20140618
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
APN 111-290-015-000
VISALIA, CA 93292

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	RAL COPPING	28880 RD 164	HIST UST	Lower	23, 0.004, WNW
A2	RALPH COPPING	28880 ROAD 164	HIST UST	Lower	23, 0.004, WNW
3	CLAUDES BUGGIES INC	28813 FARMERSVILLE B	SWEEPS UST, HIST UST	Lower	75, 0.014, SW
4	T YOUNG DIESEL ELECT	29022 ROAD 164	RCRA NonGen / NLR	Higher	129, 0.024, NNW
B5	CB PERFORMANCE PRODU	1715 N FARMERSVILLE	CUPA Listings	Lower	653, 0.124, SW
B6	KAWEAH DELTA WTR CON	2975 N FARMERSVILLE	CERS HAZ WASTE, CERS TANKS, CUPA Listings, CERS	Lower	669, 0.127, SSW
B7	KAWEAH DELTA WATER C	2975 N FARMERSVILLE	RCRA NonGen / NLR	Lower	669, 0.127, SSW
B8		2975 N FARMERSVILLE	AST	Lower	669, 0.127, SSW
B9	KAWEAH DELTA WTR CON	2975 N FARMERSVILLE	AST	Lower	669, 0.127, SSW
C10	ROBLES AUTO REPAIR	16446 AVE 291	RCRA NonGen / NLR	Lower	715, 0.135, North
C11	PHILLIPS PROPERTY	16410 AVENUE 291	SWEEPS UST, HIST UST, CA FID UST	Lower	733, 0.139, NNW
C12	MARION D. PHILLIPS	16410 AVENUE 291	HIST UST	Lower	733, 0.139, NNW
D13	JACK IN THE BOX #540	1662 N FARMERSVILLE	CUPA Listings, CERS	Lower	824, 0.156, SSW
D14	RITE AID #6764	1710 N FARMERSVILLE	CERS HAZ WASTE, NPDES	Lower	852, 0.161, SSW
D15	RITE AID # 6764	1710 N FARMERSVILLE	RCRA-SQG	Lower	852, 0.161, SSW
D16	RITE AID #6764 - HAZ	1710 N FARMERSVILLE	CUPA Listings, HAZNET, HWTS	Lower	852, 0.161, SSW
E17	R GAS LLC TRUCK YARD	251 TERRY AVE	CUPA Listings	Lower	880, 0.167, NNW
E18	ARTESIA READY MIX CO	300 TERRY AVE	RCRA-SQG, FINDS, ECHO	Lower	995, 0.188, NW
19	CURIEL AUTO REPAIR	16632 AVE 288 UNIT C	RCRA NonGen / NLR	Higher	1026, 0.194, SE
F20	AUTOZONE #3711	1555 N FARMERSVILLE	CERS HAZ WASTE, CERS	Lower	1100, 0.208, SSW
F21	DOLLAR TREE #03493	1555 N FARMERSVILLE	RCRA NonGen / NLR	Lower	1100, 0.208, SSW
F22	DOLLAR TREE #03493	1555 N FARMERSVILLE	CERS HAZ WASTE, HAZNET, CERS, HWTS	Lower	1100, 0.208, SSW
F23	AUTO ZONE #3711	1555 N FARMERSVILLE	RCRA NonGen / NLR	Lower	1100, 0.208, SSW
F24	DOLLAR TREE #03493	1555 N FARMERSVILLE	CUPA Listings, HAZNET, HWTS	Lower	1100, 0.208, SSW
F25	AUTOZONE #3711	1555 N FARMERSVILLE	CUPA Listings	Lower	1100, 0.208, SSW
26	KINGS PETROLEUM LLC	361 TERRY ST	CUPA Listings, CERS	Lower	1117, 0.212, NW
27	FARMERSVILLE MINI MA	1456 FARMERSVILLE	LUST, Cortese, HIST CORTESE, CERS	Lower	2088, 0.395, South
28	NEW ELEMENTARY SCHOO	CITRUS DRIVE/FARMERS	ENVIROSTOR, SCH	Lower	2392, 0.453, South
29	PROPOSED MIDDLE SCHO	SOUTHEAST CORNER OF	ENVIROSTOR, SCH	Lower	3198, 0.606, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List

US INST CONTROLS ..... Institutional Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE ..... State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF ..... Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC ..... Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST ..... Underground Storage Tank Listing
UST ..... Active UST Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

VCP ..... Voluntary Cleanup Program Properties
INDIAN VCP ..... Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
ODI ..... Open Dump Inventory
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites ..... Historical Calsites Database

SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
RADINFO ..... Radiation Information Database
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ..... Incident and Accident Data
CONSENT ..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV ..... Indian Reservations
FUSRAP ..... Formerly Utilized Sites Remedial Action Program
UMTRA ..... Uranium Mill Tailings Sites
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem
US MINES ..... Mines Master Index File
ABANDONED MINES ..... Abandoned Mines
FINDS ..... Facility Index System/Facility Registry System
UXO ..... Unexploded Ordnance Sites

DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
ECHO ---- Enforcement & Compliance History Information
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
PFAS NPL ---- Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES ---- Federal Sites PFAS Information
PFAS TSCA ---- PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST ---- PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR ---- PFAS Contamination Site Location Listing
PFAS WQP ---- Ambient Environmental Sampling for PFAS
PFAS NPDES ---- Clean Water Act Discharge Monitoring Information
PFAS ECHO ---- Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO ---- Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO ---- All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC ---- Aqueous Foam Related Incidents Listing
PFAS ---- PFAS Contamination Site Location Listing
AQUEOUS FOAM ---- Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN ---- Bond Expenditure Plan
DRYCLEANERS ---- Cleaner Facilities
EMI ---- Emissions Inventory Data
ENF ---- Enforcement Action Listing
Financial Assurance ---- Financial Assurance Information Listing
ICE ---- ICE
HWP ---- EnviroStor Permitted Facilities Listing
HWT ---- Registered Hazardous Waste Transporter Database
HAZNET ---- Facility and Manifest Data
MINES ---- Mines Site Location Listing
MWMP ---- Medical Waste Management Program Listing
NPDES ---- NPDES Permits Listing
PEST LIC ---- Pesticide Regulation Licenses Listing
PROC ---- Certified Processors Database
Notify 65 ---- Proposition 65 Records
UIC ---- UIC Listing
UIC GEO ---- UIC GEO (GEOTRACKER)
WASTEWATER PITS ---- Oil Wastewater Pits Listing
WDS ---- Waste Discharge System
WIP ---- Well Investigation Program Case List
MILITARY PRIV SITES ---- MILITARY PRIV SITES (GEOTRACKER)
PROJECT ---- PROJECT (GEOTRACKER)
WDR ---- Waste Discharge Requirements Listing
CIWQS ---- California Integrated Water Quality System
CERS ---- CERS
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)
MINES MRDS ---- Mineral Resources Data System
HWTS ---- Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto ---------- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---------- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/20/2022 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RITE AID # 6764 EPA ID:: CAR000270843	1710 N FARMERSVILLE	SSW 1/8 - 1/4 (0.161 mi.)	D15	34
ARTESIA READY MIX CO EPA ID:: CAD983650631	***300 TERRY AVE***	***NW 1/8 - 1/4 (0.188 mi.)***	***E18***	***46***

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal

Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/25/2022 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NEW ELEMENTARY SCHOO	***CITRUS DRIVE/FARMERS***	***S 1/4 - 1/2 (0.453 mi.)***	***28***	***172***
Facility Id: 54010011				
Status: No Further Action				
PROPOSED MIDDLE SCHO	***SOUTHEAST CORNER OF***	***SSE 1/2 - 1 (0.606 mi.)***	***29***	***175***
Facility Id: 60000793				
Status: No Further Action				

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FARMERSVILLE MINI MA	***1456 FARMERSVILLE***	***S 1/4 - 1/2 (0.395 mi.)***	***27***	***170***
Database: LUST REG 5, Date of Government Version: 07/01/2008				
Database: LUST, Date of Government Version: 05/23/2022				
Status: Completed - Case Closed				
Status: Case Closed				
Global Id: T0610700393				

Lists of state and tribal registered storage tanks

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	2975 N FARMERSVILLE	SSW 1/8 - 1/4 (0.127 mi.)	B8	22
Database: AST, Date of Government Version: 07/06/2016				
KAWEAH DELTA WTR CON	2975 N FARMERSVILLE	SSW 1/8 - 1/4 (0.127 mi.)	B9	23
Database: AST, Date of Government Version: 07/06/2016				

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 07/18/2022 has revealed that there are 4 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KAWEAH DELTA WTR CON	***2975 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.127 mi.)***	***B6***	***14***
RITE AID #6764	***1710 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.161 mi.)***	***D14***	***31***
AUTOZONE #3711	***1555 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.208 mi.)***	***F20***	***51***
DOLLAR TREE #03493	***1555 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.208 mi.)***	***F22***	***57***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CLAUDES BUGGIES INC Status: A Tank Status: A Comp Number: 57012	***28813 FARMERSVILLE B***	***SW 0 - 1/8 (0.014 mi.)***	***3***	***10***
PHILLIPS PROPERTY Status: A Tank Status: A Comp Number: 418	***16410 AVENUE 291***	***NNW 1/8 - 1/4 (0.139 mi.)***	***C11***	***26***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 5 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RAL COPPING	28880 RD 164	WNW 0 - 1/8 (0.004 mi.)	A1	9
RALPH COPPING Facility Id: 00000045349	28880 ROAD 164	WNW 0 - 1/8 (0.004 mi.)	A2	9
CLAUDES BUGGIES INC Facility Id: 00000057012	***28813 FARMERSVILLE B***	***SW 0 - 1/8 (0.014 mi.)***	***3***	***10***
PHILLIPS PROPERTY	***16410 AVENUE 291***	***NNW 1/8 - 1/4 (0.139 mi.)***	***C11***	***26***

Lower Elevation	Address	Direction / Distance	Map ID	Page
MARION D. PHILLIPS Facility Id: 00000040397	16410 AVENUE 291	NNW 1/8 - 1/4 (0.139 mi.)	C12	27

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PHILLIPS PROPERTY Facility Id: 54002171 Status: A	***16410 AVENUE 291***	***NNW 1/8 - 1/4 (0.139 mi.)***	***C11***	***26***

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 07/18/2022 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KAWEAH DELTA WTR CON	***2975 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.127 mi.)***	***B6***	***14***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/20/2022 has revealed that there are 6 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
T YOUNG DIESEL ELECT EPA ID:: CAL000130104	29022 ROAD 164	NNW 0 - 1/8 (0.024 mi.)	4	11
CURIEL AUTO REPAIR EPA ID:: CAL000449585	16632 AVE 288 UNIT C	SE 1/8 - 1/4 (0.194 mi.)	19	48

Lower Elevation	Address	Direction / Distance	Map ID	Page
KAWEAH DELTA WATER C EPA ID:: CAL920434170	2975 N FARMERSVILLE	SSW 1/8 - 1/4 (0.127 mi.)	B7	20
ROBLES AUTO REPAIR	16446 AVE 291	N 1/8 - 1/4 (0.135 mi.)	C10	23

EPA ID:: CAL000444001				
DOLLAR TREE #03493 EPA ID:: CAL000388066	1555 N FARMERSVILLE	SSW 1/8 - 1/4 (0.208 mi.)	F21	55
AUTO ZONE #3711 EPA ID:: CAL000315765	1555 N FARMERSVILLE	SSW 1/8 - 1/4 (0.208 mi.)	F23	102

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 06/21/2022 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FARMERSVILLE MINI MA	***1456 FARMERSVILLE***	***S 1/4 - 1/2 (0.395 mi.)***	***27***	***170***
Cleanup Status: COMPLETED - CASE CLOSED				

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 8 CUPA Listings sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CB PERFORMANCE PRODU	1715 N FARMERSVILLE	SW 0 - 1/8 (0.124 mi.)	B5	13
Database: CUPA TULARE, Date of Government Version: 04/26/2021				
KAWEAH DELTA WTR CON	***2975 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.127 mi.)***	***B6***	***14***
Database: CUPA TULARE, Date of Government Version: 04/26/2021				
JACK IN THE BOX #540	***1662 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.156 mi.)***	***D13***	***28***
Database: CUPA TULARE, Date of Government Version: 04/26/2021				
RITE AID #6764 - HAZ	***1710 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.161 mi.)***	***D16***	***40***
Database: CUPA TULARE, Date of Government Version: 04/26/2021				
R GAS LLC TRUCK YARD	251 TERRY AVE	NNW 1/8 - 1/4 (0.167 mi.)	E17	45
Database: CUPA TULARE, Date of Government Version: 04/26/2021				
DOLLAR TREE #03493	***1555 N FARMERSVILLE***	***SSW 1/8 - 1/4 (0.208 mi.)***	***F24***	***104***
Database: CUPA TULARE, Date of Government Version: 04/26/2021				
AUTOZONE #3711	1555 N FARMERSVILLE	SSW 1/8 - 1/4 (0.208 mi.)	F25	166
Database: CUPA TULARE, Date of Government Version: 04/26/2021				
KINGS PETROLEUM LLC	***361 TERRY ST***	***NW 1/8 - 1/4 (0.212 mi.)***	***26***	***167***
Database: CUPA TULARE, Date of Government Version: 04/26/2021				

EXECUTIVE SUMMARY

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

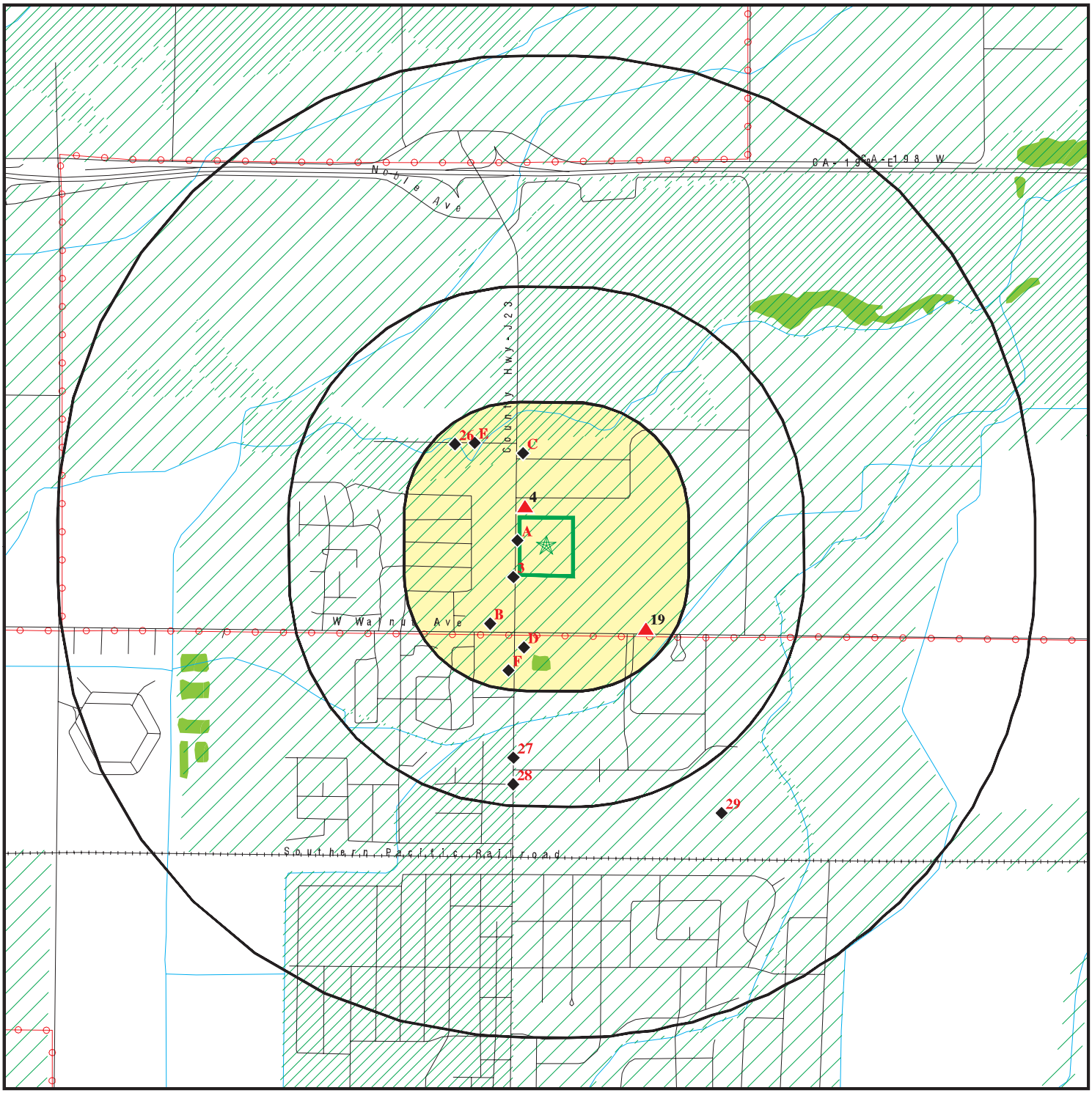
Lower Elevation	Address	Direction / Distance	Map ID	Page
FARMERSVILLE MINI MA Reg Id: 5T54000419	***1456 FARMERSVILLE***	***S 1/4 - 1/2 (0.395 mi.)***	***27***	***170***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
CITY OF FARMERSVILLE SEWERAGE TRMT	ENVIROSTOR

OVERVIEW MAP - 7176734.2S



0 1/4 1/2 1 Miles

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Vacant Land	CLIENT:	KCE Matrix
ADDRESS:	APN 111-290-015-000 Visalia CA 93292	CONTACT:	Aram Kaloustian
		INQUIRY #:	7176734.2s
LAT/LONG:	36.31498 / 119.205801	DATE:	November 11, 2022 4:46 pm

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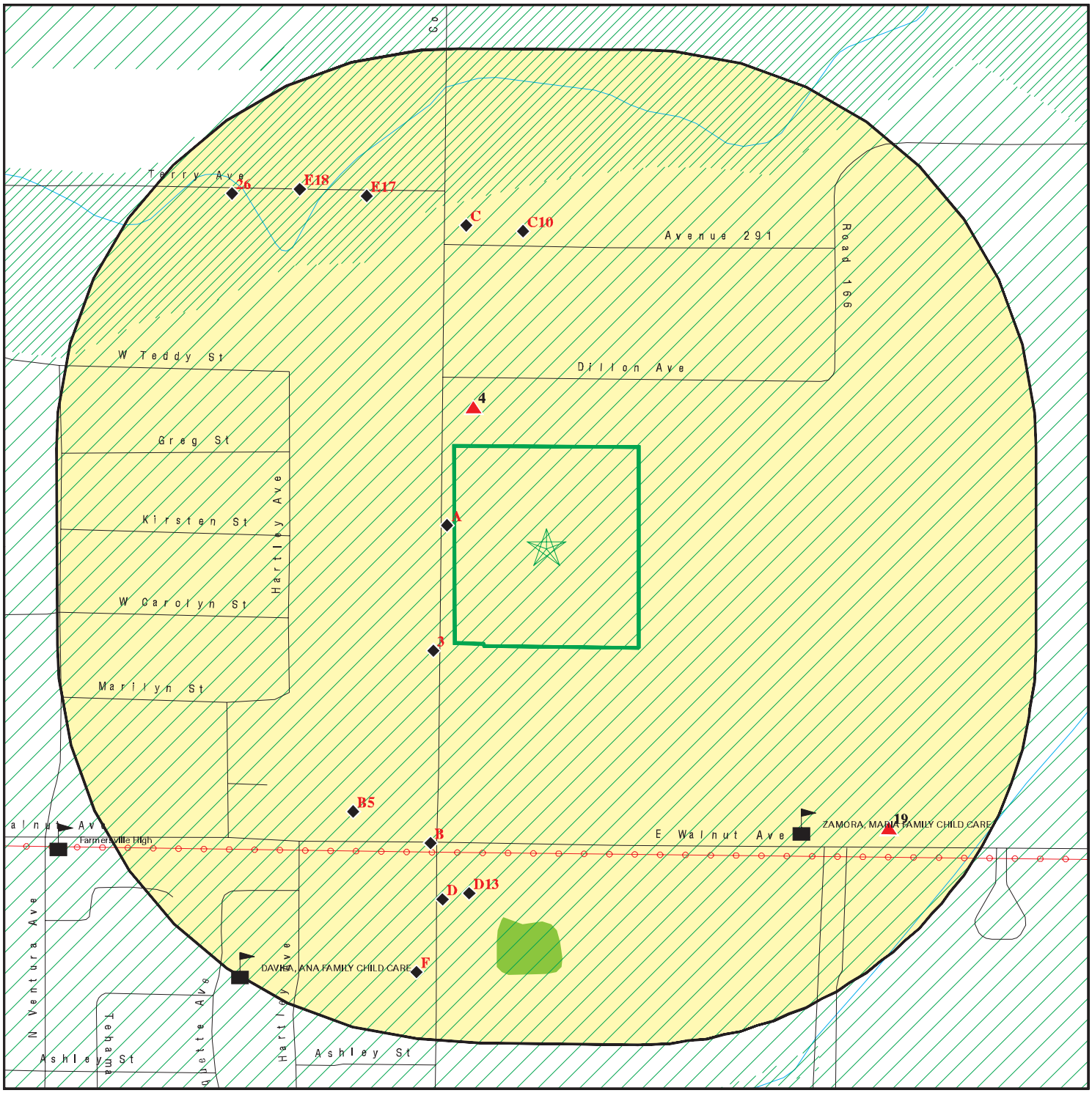
DETAIL MAP - 7176734.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Vacant Land	CLIENT:	KCE Matrix
ADDRESS:	APN 111-290-015-000 Visalia CA 93292	CONTACT:	Aram Kaloustian
		INQUIRY #:	7176734.2s
LAT/LONG:	36.31498 / 119.205801	DATE:	November 11, 2022 4:47 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	2	NR	NR	NR	2
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	1	1	NR	2
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	1	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	2	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	4	NR	NR	NR	4
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	1	NR	NR	NR	2
HIST UST	0.250		3	2	NR	NR	NR	5
CA FID UST	0.250		0	1	NR	NR	NR	1
CERS TANKS	0.250		0	1	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	5	NR	NR	NR	6
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	1	NR	NR	1
CUPA Listings	0.250		1	7	NR	NR	NR	8
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	6	25	4	1	0	36

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **RAL COPPING** **HIST UST** **S118414367**
WNW **28880 RD 164** **N/A**
< 1/8 **VISALIA, CA 93277**
0.004 mi.
23 ft. **Site 1 of 2 in cluster A**

Relative: HIST UST:
Lower

Actual:
364 ft.

Name:	RAL COPPING
Address:	28880 RD 164
City,State,Zip:	VISALIA, CA 93277
File Number:	0002BCC2
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002BCC2.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

A2 **RALPH COPPING** **HIST UST** **U001583452**
WNW **28880 ROAD 164** **N/A**
< 1/8 **VISALIA, CA 93277**
0.004 mi.
23 ft. **Site 2 of 2 in cluster A**

Relative: HIST UST:
Lower

Actual:
364 ft.

Name:	RALPH COPPING
Address:	28880 ROAD 164
City,State,Zip:	VISALIA, CA 93277
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000045349
Facility Type:	Other
Other Type:	PRIVATE
Contact Name:	Not reported
Telephone:	2097470070
Owner Name:	RALPH COPPING
Owner Address:	28880 RD. 164
Owner City,St,Zip:	VISALIA, CA 93277
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not reported

RALPH COPPING (Continued) **U001583452**

Tank Capacity:	00000260
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

---

3 **CLAUDES BUGGIES INC** **SWEEPS UST** **U001581412**
SW **28813 FARMERSVILLE BLVD** **HIST UST** **N/A**
< 1/8 **FARMERSVILLE, CA 93223**
0.014 mi.
75 ft.

Relative:
Lower

Actual:
364 ft.

SWEEPS UST:

Name:	CLAUDES BUGGIES INC
Address:	28813 FARMERSVILLE
City:	FARMERSVILLE
Status:	Active
Comp Number:	57012
Number:	9
Board Of Equalization:	44-030297
Referral Date:	04-20-88
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1237-987
SWRCB Tank Id:	54-000-057012-000001
Tank Status:	A
Capacity:	1500
Active Date:	04-20-88
Tank Use:	M.V. FUEL
STG:	P
Content:	UNKNOWN
Number Of Tanks:	1

HIST UST:

Name:	CLAUDES BUGGIES INC
Address:	28813 FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
File Number:	0002377E
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002377E.pdf
Region:	STATE
Facility ID:	00000057012
Facility Type:	Other
Other Type:	AUTO PARTS DIST.
Contact Name:	R. TOMLINSON
Telephone:	2097338222
Owner Name:	CLAUDES BUGGIES INC.
Owner Address:	28813 FARMERSVILLE BLVD.
Owner City,St,Zip:	FARMERSVILLE, CA 93223
Total Tanks:	0001
Tank Num:	001
Container Num:	001237-987
Year Installed:	1977
Tank Capacity:	00001500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported

CLAUDES BUGGIES INC (Continued) **U001581412**

Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

4
NNW
< 1/8
0.024 mi.
129 ft.

T YOUNG DIESEL ELECTRIC **RCRA NonGen / NLR** **1024793181**
29022 ROAD 164 **CAL000130104**
VISALIA, CA 93292

Relative:
Higher

Actual:
365 ft.

RCRA Listings:

Date Form Received by Agency:		19950111
Handler Name:	T YOUNG DIESEL ELECTRIC	
Handler Address:		29022 ROAD 164
Handler City,State,Zip:		VISALIA, CA 93292-0000
EPA ID:		CAL000130104
Contact Name:		THAD YOUNG OWNER
Contact Address:		29022 ROAD 164
Contact City,State,Zip:		VISALIA, CA 93292
Contact Telephone:		559-747-5502
Contact Fax:		000-000-0000
Contact Email:		TYDEOFCA@YAHOO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		29022 ROAD 164
Mailing City,State,Zip:		VISALIA, CA 93292-9258
Owner Name:	THAD YOUNG	
Owner Type:		Other
Operator Name:	THAD YOUNG OWNER	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported

T YOUNG DIESEL ELECTRIC (Continued) **1024793181**

Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required: Not reported	
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: THAD YOUNG	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	29022 ROAD 164
Owner/Operator City,State,Zip:	VISALIA, CA 93292-9258
Owner/Operator Telephone:	559-747-5502
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: THAD YOUNG OWNER	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	29022 ROAD 164
Owner/Operator City,State,Zip:	VISALIA, CA 93292

T YOUNG DIESEL ELECTRIC (Continued) **1024793181**

Owner/Operator Telephone: 559-747-5502
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19950111
Handler Name: T YOUNG DIESEL ELECTRIC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811412
NAICS Description: APPLIANCE REPAIR AND MAINTENANCE

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B5 **CB PERFORMANCE PRODUCTS INC** **CUPA Listings** **S120051214**
SW **1715 N FARMERSVILLE BLVD** **N/A**
< 1/8 **FARMERSVILLE, CA 93223**
0.124 mi.
653 ft. **Site 1 of 5 in cluster B**

Relative: **Lower**
Actual: **363 ft.**

CUPA TULARE:
Name: CB PERFORMANCE PRODUCTS INC
Address: 1715 N FARMERSVILLE BLVD
City,State,Zip: FARMERSVILLE, CA 93223
CERS ID: Not reported
Facility ID: FA1349367
APN: 128-210-057
Latitude: Not reported
Longitude: Not reported
PE: 2254
TB Fin Fees Description: HW - SMALL GENERATOR
Current Status: 2
CD Fin billing Status Description: Inactive, non-billable

B6 **KAWEAH DELTA WTR CONSERVATION DISTRICT** **CERS HAZ WASTE** **S120051781**
SSW **2975 N FARMERSVILLE BLVD** **CERS TANKS** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223** **CUPA Listings**
0.127 mi. **CERS**
669 ft. **Site 2 of 5 in cluster B**

Relative:
Lower

Actual:
363 ft.

CERS HAZ WASTE:

Name:	KAWEAH DELTA WTR CONSERVATION DIST
Address:	2975 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	182905
CERS ID:	10606534
CERS Description:	Hazardous Waste Generator

CERS TANKS:

Name:	KAWEAH DELTA WTR CONSERVATION DIST
Address:	2975 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	182905
CERS ID:	10606534
CERS Description:	Aboveground Petroleum Storage

CUPA TULARE:

Name:	KAWEAH DELTA WTR CONSERVATION DISTRICT
Address:	2975 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10606534
Facility ID:	FA1346628
APN:	128-250-013
Latitude:	36.324194833
Longitude:	-119.20756673
PE:	2224
TB Fin Fees Description:	HM - LARGE FACILITY - > 5 CHEMICALS
Current Status:	1
CD Fin billing Status Description:	Active, billable

Name:	KAWEAH DELTA WTR CONSERVATION DISTRICT
Address:	2975 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10606534
Facility ID:	FA1346628
APN:	128-250-013
Latitude:	36.324194833
Longitude:	-119.20756673
PE:	2258
TB Fin Fees Description:	HW - LARGE GENERATOR
Current Status:	1
CD Fin billing Status Description:	Active, billable

Name:	KAWEAH DELTA WTR CONSERVATION DISTRICT
Address:	2975 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10606534
Facility ID:	FA1346628
APN:	128-250-013
Latitude:	36.324194833
Longitude:	-119.20756673
PE:	2313

KAWEAH DELTA WTR CONSERVATION DISTRICT (Continued) **S120051781**

TB Fin Fees Description: TANK FA >1,320 AND <10,000 GAL
Current Status: 1
CD Fin billing Status Description: Active, billable

CERS:
Name: KAWEAH DELTA WTR CONSERVATION DIST
Address: 2975 N FARMERSVILLE BLVD
City,State,Zip: FARMERSVILLE, CA 93223
Site ID: 182905
CERS ID: 10606534
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 182905
Site Name: KAWEAH DELTA WTR CONSERVATION DIST
Violation Date: 09-17-2018
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Did not observe a start date on waste coolant. Provide start date to all hazardous waste container with waste in them.
Violation Division: Tulare County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 182905
Site Name: KAWEAH DELTA WTR CONSERVATION DIST
Violation Date: 10-13-2015
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 12/01/2015.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 182905
Site Name: KAWEAH DELTA WTR CONSERVATION DIST
Violation Date: 09-17-2018
Citation: HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Description: Failure to complete a review and evaluation of the SPCC Plan at least once every five years, document the completion of the review, and sign a statement as to whether the SPCC Plan will be amended.
Violation Notes: 5 year review has not been completed. Review and certify 5 year review on SPCC Plan.
Violation Division: Tulare County Environmental Health
Violation Program: APSA
Violation Source: CERS,

Site ID: 182905

KAWEAH DELTA WTR CONSERVATION DISTRICT (Continued) **S120051781**

Site Name: KAWEAH DELTA WTR CONSERVATION DIST
Violation Date: 10-13-2015
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 12/01/2015.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 182905
Site Name: KAWEAH DELTA WTR CONSERVATION DIST
Violation Date: 09-17-2018
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes: Emergency response plan has not been submitted electronically. Submit emergency response plan and submit electronically.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-17-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Shane
Eval Division: Tulare County Environmental Health
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-17-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Shane
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-17-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Shane
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-13-2015
Violations Found: Yes

KAWEAH DELTA WTR CONSERVATION DISTRICT (Continued) **S120051781**

Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-22-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: APSA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-13-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 182905
Site Name: KAWEAH DELTA WTR CONSERVATION DIST
Site Address: 2975 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 09-17-2018
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: APSA
Enf Action Source: CERS,

Site ID: 182905
Site Name: KAWEAH DELTA WTR CONSERVATION DIST
Site Address: 2975 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 09-17-2018
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 182905
Site Name: KAWEAH DELTA WTR CONSERVATION DIST
Site Address: 2975 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 09-17-2018

KAWEAH DELTA WTR CONSERVATION DISTRICT (Continued) **S120051781**

Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Tulare County Environmental Health
Enf Action Program:	HW
Enf Action Source:	CERS,
Site ID:	182905
Site Name:	KAWEAH DELTA WTR CONSERVATION DIST
Site Address:	2975 N FARMERSVILLE BLVD
Site City:	FARMERSVILLE
Site Zip:	93223
Enf Action Date:	10-13-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Tulare County Environmental Health
Enf Action Program:	HMRRP
Enf Action Source:	CERS,

Coordinates:

Site ID:	182905
Facility Name:	KAWEAH DELTA WTR CONSERVATION DIST
Env Int Type Code:	APSA
Program ID:	10606534
Coord Name:	Not reported
Ref Point Type Desc:	Entrance point of a facility or station,
Latitude:	36.324195
Longitude:	-119.207560

Affiliation:

Affiliation Type Desc:	Document Preparer
Entity Name:	SHANE SMITH
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	MARK LARSEN
Entity Title:	KRPA MANAGER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	KAWEAH DELTA WTR CONSERVATION DISTRICT
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported

KAWEAH DELTA WTR CONSERVATION DISTRICT (Continued) **S120051781**

Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(559) 747-5601,
Affiliation Type Desc:	Parent Corporation
Entity Name:	KAWEAH DELTA WTR CONSERVATION DIST
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	Tulare County Environmental Health
Entity Title:	Not reported
Affiliation Address:	5957 South Mooney Boulevard
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93277
Affiliation Phone:	(559) 624-7400,
Affiliation Type Desc:	Environmental Contact
Entity Name:	SHANE SMITH
Entity Title:	Not reported
Affiliation Address:	2975 N FARMERSVILLE BLVD
Affiliation City:	FARMERSVILLE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93223
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	2975 N FARMERSVILLE BLVD
Affiliation City:	FARMERSVILLE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93223
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	KAWEAH DELTA W.C.D.
Entity Title:	Not reported
Affiliation Address:	2975 N FARMERSVILLE BLVD
Affiliation City:	FARMERSVILLE
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93223
Affiliation Phone:	(559) 584-6412,

B7 **KAWEAH DELTA WATER CONSERVATION DIST** **RCRA NonGen / NLR** **1024875657**
SSW **2975 N FARMERSVILLE BLVD** **CAL920434170**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.127 mi.
669 ft. **Site 3 of 5 in cluster B**

Relative: **Lower**

Actual: **363 ft.**

RCRA Listings:

Date Form Received by Agency:	19920212
Handler Name:	KAWEAH DELTA WATER CONSERVATION DIST
Handler Address:	2975 N FARMERSVILLE BLVD
Handler City,State,Zip:	FARMERSVILLE, CA 93223-0000
EPA ID:	CAL920434170
Contact Name:	SHAWN CRISWELL
Contact Address:	2975 N FARMERSVILLE BLVD
Contact City,State,Zip:	FARMERSVILLE, CA 93279
Contact Telephone:	559-747-5601
Contact Fax:	559-747-1989
Contact Email:	TSTAFFORD@KDWCD.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	2975 N FARMERSVILLE BLVD
Mailing City,State,Zip:	FARMERSVILLE, CA 93223-0000
Owner Name:	KAWEAH DELTA WATER CONSERV DIS
Owner Type:	Other
Operator Name:	SHAWN CRISWELL
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

KAWEAH DELTA WATER CONSERVATION DIST (Continued) **1024875657**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required: Not reported	
Handler Date of Last Change:	20180907
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: KAWEAH DELTA WATER CONSERV DIS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2975 N FARMERSVILLE BLVD
Owner/Operator City,State,Zip:	FARMERSVILLE, CA 93223-0000
Owner/Operator Telephone:	559-747-5601
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: SHAWN CRISWELL	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	2975 N FARMERSVILLE BLVD
Owner/Operator City,State,Zip:	FARMERSVILLE, CA 93279
Owner/Operator Telephone:	559-747-5601
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

KAWEAH DELTA WATER CONSERVATION DIST (Continued) **1024875657**

Historic Generators:
- Receive Date: 19920212
- Handler Name: KAWEAH DELTA WATER CONSERVATION DIST
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Code: 56299
- NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

B8 **AST** **A100344932**
SSW **2975 N FARMERSVILLE** **N/A**
1/8-1/4 **FARMERSVILLE, CA**
0.127 mi.
669 ft. **Site 4 of 5 in cluster B**

Relative: **Lower**

Actual: **363 ft.**

AST:
- Name: Not reported
- Address: 2975 N FARMERSVILLE
- City/Zip: FARMERSVILLE,
- Certified Unified Program Agencies: Tulare
- Owner: KAWEAH DELTA WTR CONSERVATION DIST
- Total Gallons: 3800
- CERSID: Not reported
- Facility ID: Not reported
- Business Name: Not reported
- Phone: Not reported
- Fax: Not reported
- Mailing Address: Not reported
- Mailing Address City: Not reported
- Mailing Address State: Not reported
- Mailing Address Zip Code: Not reported
- Operator Name: Not reported
- Operator Phone: Not reported
- Owner Phone: Not reported
- Owner Mail Address: Not reported
- Owner State: Not reported
- Owner Zip Code: Not reported
- Owner Country: Not reported
- Property Owner Name: Not reported
- Property Owner Phone: Not reported

(Continued) **A100344932**

Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

B9 **KAWEAH DELTA WTR CONSERVATION DIST** **AST** **A100421384**
SSW **2975 N FARMERSVILLE BLVD** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.127 mi.
669 ft. **Site 5 of 5 in cluster B**

Relative: **Lower**
Actual: **363 ft.**

AST:

Name:	KAWEAH DELTA WTR CONSERVATION DIST
Address:	2975 N FARMERSVILLE BLVD
City/Zip:	FARMERSVILLE,93223
Certified Unified Program Agencies:	Not reported
Owner:	Not reported
Total Gallons:	Not reported
CERSID:	10606534
Facility ID:	FA1346628
Business Name:	KAWEAH DELTA WTR CONSERVATION DIST
Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported
Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported
Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	CAL920434170

C10 **ROBLES AUTO REPAIR** **RCRA NonGen / NLR** **1025870892**
North **16446 AVE 291** **CAL000444001**
1/8-1/4 **VISALIA, CA 93292**
0.135 mi.
715 ft. **Site 1 of 3 in cluster C**

Relative: **Lower**
Actual: **363 ft.**

RCRA Listings:

Date Form Received by Agency:		20190301
Handler Name:	ROBLES AUTO REPAIR	
Handler Address:		16446 AVE 291
Handler City,State,Zip:		VISALIA, CA 93292

ROBLES AUTO REPAIR (Continued) **1025870892**

EPA ID:		CAL000444001
Contact Name:		FRANCISCA RAMOS
Contact Address:		16446 AVE 291
Contact City,State,Zip:		VISALIA, CA 93292
Contact Telephone:		559-750-1867
Contact Fax:		Not reported
Contact Email:		FRRAMOSA@ICLOUD.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		16446 AVE 291
Mailing City,State,Zip:		VISALIA, CA 93292
Owner Name:	FRANCISCO RAMOS	
Owner Type:		Other
Operator Name:	FRANCISCA RAMOS	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		Yes
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Not reported
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported
202 GPRA Corrective Action Baseline:		No
Corrective Action Workload Universe:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:		No

ROBLES AUTO REPAIR (Continued) **1025870892**

TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required: Not reported	
Handler Date of Last Change:	20190628
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: FRANCISCA RAMOS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	16446 AVE 291
Owner/Operator City,State,Zip:	VISALIA, CA 93292
Owner/Operator Telephone:	559-750-1867
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: FRANCISCO RAMOS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	16446 AVE 291
Owner/Operator City,State,Zip:	VISALIA, CA 93292
Owner/Operator Telephone:	559-750-8676
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20190301
Handler Name: ROBLES AUTO REPAIR	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No

ROBLES AUTO REPAIR (Continued) **1025870892**

Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C11 **PHILLIPS PROPERTY** **SWEEPS UST** **S101596144**
NNW **16410 AVENUE 291** **HIST UST** **N/A**
1/8-1/4 **VISALIA, CA 93277** **CA FID UST**
0.139 mi.
733 ft. **Site 2 of 3 in cluster C**

Relative: **Lower**
Actual: **363 ft.**

SWEEPS UST:
Name: PHILLIPS PROPERTY
Address: 16410 AVENUE 291
City: VISALIA
Status: Active
Comp Number: 418
Number: 9
Board Of Equalization: 44-029727
Referral Date: 04-20-88
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 54-000-000418-000001
Tank Status: A
Capacity: 2000
Active Date: 04-20-88
Tank Use: CHEMICAL
STG: P
Content: Not reported
Number Of Tanks: 1

HIST UST:
Name: MARION D PHILLIPS
Address: 16410 AVE 291
City,State,Zip: VISALIA, CA 93277
File Number: 0002BA44
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002BA44.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported

PHILLIPS PROPERTY (Continued) **S101596144**

Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	54002171
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2095944111
Mail To:	Not reported
Mailing Address:	16410 AVENUE 291
Mailing Address 2:	Not reported
Mailing City,St,Zip:	VISALIA 93277
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

C12 **MARION D. PHILLIPS** **HIST UST** **U001583420**
NNW **16410 AVENUE 291** **N/A**
1/8-1/4 **VISALIA, CA 93277**
0.139 mi.
733 ft. **Site 3 of 3 in cluster C**

Relative: **Lower**

Actual: **363 ft.**

HIST UST:

Name:	MARION D. PHILLIPS
Address:	16410 AVENUE 291
City,State,Zip:	VISALIA, CA 93277
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000040397
Facility Type:	Other
Other Type:	CONTRACTOR
Contact Name:	MARION D. PHILLIPS
Telephone:	2095944111
Owner Name:	MARION D. PHILLIPS
Owner Address:	16410 AVE. 291
Owner City,St,Zip:	VISALIA, CA 93277
Total Tanks:	0001

MARION D. PHILLIPS (Continued) **U001583420**

Tank Num:	001
Container Num:	001
Year Installed:	1969
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	None

D13 **JACK IN THE BOX #5401** **CUPA Listings** **S123530938**
SSW **1662 N FARMERSVILLE BLVD** **CERS** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.156 mi.
824 ft. **Site 1 of 4 in cluster D**

Relative:
Lower

Actual:
363 ft.

CUPA TULARE:

Name:	JACK IN THE BOX #5401
Address:	1662 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10781323
Facility ID:	FA1354143
APN:	129-010-076
Latitude:	36.311892
Longitude:	-119.206723
PE:	2223
TB Fin Fees Description:	HM - SMALL FACILITY - < 5 CHEMICALS
Current Status:	1
CD Fin billing Status Description:	Active, billable

CERS:

Name:	JACK IN THE BOX #5401
Address:	1662 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	513985
CERS ID:	10781323
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	513985
Site Name:	Jack in the Box #5401
Violation Date:	05-14-2019
Citation:	HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description:	Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes:	Did not observe annual employee training logs/records during the inspection. Provide and maintain annual hazardous material employee training records on site.
Violation Division:	Tulare County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-14-2019

JACK IN THE BOX #5401 (Continued) **S123530938**

Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Blanka Avendano.
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 513985
Site Name: Jack in the Box #5401
Site Address: 1662 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 05-14-2019
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Coordinates:
Site ID: 513985
Facility Name: Jack in the Box #5401
Env Int Type Code: HMBP
Program ID: 10781323
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 36.311880
Longitude: -119.206610

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Penny Rodriguez
Entity Title: Not reported
Affiliation Address: 1660 N Farmersville Blvd
Affiliation City: Farmersville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93223
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1660 N Farmersville Blvd
Affiliation City: Farmersville
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93223
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: VTP Enterprises
Entity Title: Not reported
Affiliation Address: 1660 N Farmersville Blvd

JACK IN THE BOX #5401 (Continued) **S123530938**

Affiliation City:	Farmersville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93223
Affiliation Phone:	(559) 625-4887,
Affiliation Type Desc:	Operator
Entity Name:	VTP Enterprises
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(559) 625-4887,
Affiliation Type Desc:	Property Owner
Entity Name:	VTP Enterprises
Entity Title:	Not reported
Affiliation Address:	1660 N Farmersville Blvd
Affiliation City:	Farmersville
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93223
Affiliation Phone:	(559) 625-4887,
Affiliation Type Desc:	CUPA District
Entity Name:	Tulare County Environmental Health
Entity Title:	Not reported
Affiliation Address:	5957 South Mooney Boulevard
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93277
Affiliation Phone:	(559) 624-7400,
Affiliation Type Desc:	Document Preparer
Entity Name:	Steve Skanderson, Stantec
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	VTP/YBR Enterprises, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer

JACK IN THE BOX #5401 (Continued) **S123530938**

Entity Name:	Jodi Fabrizio
Entity Title:	Office Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

D14 **RITE AID #6764** **CERS HAZ WASTE** **S120052172**
SSW **1710 N FARMERSVILLE BLVD** **NPDES** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.161 mi.
852 ft. **Site 2 of 4 in cluster D**

Relative:
Lower

Actual:
363 ft.

CERS HAZ WASTE:

Name:	RITE AID #6764
Address:	1710 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	418891
CERS ID:	10710487
CERS Description:	Hazardous Waste Generator

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-25-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Daniel
Eval Division:	Tulare County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-25-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Daniel
Eval Division:	Tulare County Environmental Health
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-31-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Tulare County Environmental Health
Eval Program:	HW
Eval Source:	CERS,

Coordinates:

Site ID:	418891
Facility Name:	Rite Aid #6764
Env Int Type Code:	HWG
Program ID:	10710487
Coord Name:	Not reported

RITE AID #6764 (Continued) **S120052172**

Ref Point Type Desc: Center of a facility or station.,
Latitude: 36.311370
Longitude: -119.206970

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Jordan Anderson
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: THRIFTY PAYLESS INC.
Entity Title: Not reported
Affiliation Address: 30 Hunter Lane
Affiliation City: Camp Hill
Affiliation State: PA
Affiliation Country: United States
Affiliation Zip: 17011
Affiliation Phone: (717) 761-2633,

Affiliation Type Desc: CUPA District
Entity Name: Tulare County Environmental Health
Entity Title: Not reported
Affiliation Address: 5957 South Mooney Boulevard
Affiliation City: Visalia
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93277
Affiliation Phone: (559) 624-7400,

Affiliation Type Desc: Environmental Contact
Entity Name: Joseph A. Chest
Entity Title: Not reported
Affiliation Address: 30 Hunter Lane
Affiliation City: Camp Hill
Affiliation State: PA
Affiliation Country: Not reported
Affiliation Zip: 17011
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 30 Hunter Lane
Affiliation City: Camp Hill
Affiliation State: PA
Affiliation Country: Not reported
Affiliation Zip: 17011
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Rite Aid #6764

RITE AID #6764 (Continued) **S120052172**

Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (559) 594-5656,

Affiliation Type Desc: Identification Signer
Entity Name: Joseph A. Chest
Entity Title: Manager, EHS
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Parent Corporation
Entity Name: RITE AID CORPORATION
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Property Owner
Entity Name: DCTN3 474 Farmersville CA, LLC
Entity Title: Not reported
Affiliation Address: 620 E. Southlake Blvd.
Affiliation City: Southlake
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 76092
Affiliation Phone: (717) 761-2633,

NPDES:
Name: RITE AID FARMERSVILLE
Address: 1710 NORTH FARMERSVILLE BOULEVARD
City,State,Zip: FARMERSVILLE, CA 93223
Facility Status: Not reported
NPDES Number: Not reported
Region: Not reported
Agency Number: Not reported
Regulatory Measure ID: Not reported
Place ID: Not reported
Order Number: Not reported
WDID: 5F54W002527
Regulatory Measure Type: Construction
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported

RITE AID #6764 (Continued) **S120052172**

Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Expired
Status Date:	09/02/2016
Operator Name:	DCTN3 474 Farmersville CA LLC
Operator Address:	620 Southlake Blvd
Operator City:	Southlake
Operator State:	Texas
Operator Zip:	76092

D15 **RITE AID # 6764** **RCRA-SQG** **1023675114**
SSW **1710 N FARMERSVILLE BLVD** **CAR000270843**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.161 mi.
852 ft. **Site 3 of 4 in cluster D**

Relative: RCRA Listings:
Lower

Date Form Received by Agency:		20220315
Handler Name:	RITE AID # 6764	
Handler Address:		1710 N FARMERSVILLE BLVD
Handler City,State,Zip:		FARMERSVILLE, CA 93223
EPA ID:		CAR000270843
Contact Name:		JOSEPH A CHEST
Contact Address:		HUNTER LANE
Contact City,State,Zip:		CAMP HILL, PA 17011
Contact Telephone:		717-975-8643
Contact Fax:		717-972-3989
Contact Email:		EHS@RITEAID.COM
Contact Title:		MANAGER ENVIRONMENTAL HEALTH SERVICES
EPA Region:		09
Land Type:		Private
Federal Waste Generator Description:		Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		HUNTER LANE
Mailing City,State,Zip:		CAMP HILL, PA 17011
Owner Name:	DCTN3 474 FARMERSVILLE CA LLC	
Owner Type:		Private
Operator Name:	THRIFTY PAYLESS INC	
Operator Type:		Private
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No

Actual:
363 ft.

RITE AID # 6764 (Continued) **1023675114**

Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required: Not reported	
Handler Date of Last Change:	20220316
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years
Year: 2019

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: D002
Waste Description: CORROSIVE WASTE

RITE AID # 6764 (Continued) **1023675114**

Waste Code: D007
Waste Description: CHROMIUM

Waste Code: D009
Waste Description: MERCURY

Waste Code: D010
Waste Description: SELENIUM

Waste Code: D011
Waste Description: SILVER

Waste Code: D022
Waste Description: CHLOROFORM

Waste Code: D024
Waste Description: M-CRESOL

Waste Code: D026
Waste Description: CRESOL

Waste Code: P001
Waste Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste Code: P075
Waste Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U122
Waste Description: FORMALDEHYDE

Waste Code: U165
Waste Description: NAPHTHALENE

Waste Code: U188
Waste Description: PHENOL

Waste Code: U201
Waste Description: 1,3-BENZENEDIOL (OR) RESORCINOL

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

RITE AID # 6764 (Continued) **1023675114**

Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: THRIFTY PAYLESS INC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 30 HUNTER LANE
Owner/Operator City,State,Zip: CAMP HILL, PA 17011
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: EHS@RITEAID.COM

Owner/Operator Indicator: Operator
Owner/Operator Name: THRIFTY PAYLESS INC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: THRIFTY PAYLESS INC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported

RITE AID # 6764 (Continued) **1023675114**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: THRIFTY PAYLESS INC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 30 HUNTER LANE
Owner/Operator City,State,Zip: CAMP HILL, PA 17011
Owner/Operator Telephone: 717-761-2633
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: EHS@RITEAID.COM

Owner/Operator Indicator: Operator
Owner/Operator Name: THRIFTY PAYLESS INC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 30 HUNTER LANE
Owner/Operator City,State,Zip: CAMP HILL, PA 17011
Owner/Operator Telephone: 717-761-2633
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: EHS@RITEAID.COM

Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: DCTN3 474 FARMERSVILLE CA LLC
Legal Status: Private
Date Became Current: 20161020
Date Ended Current: Not reported
Owner/Operator Address: 620 E SOUTHLAKE BLVD
Owner/Operator City,State,Zip: SOUTHLAKE, TX 76092
Owner/Operator Telephone: 817-552-6796
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: EHS@RITEAID.COM

Historic Generators:
Receive Date: 20200204
Handler Name: RITE AID # 6764
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No

RITE AID # 6764 (Continued) **1023675114**

Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

Receive Date:	20220126
Handler Name: RITE AID # 6764	
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

Receive Date:	20170308
Handler Name: RITE AID # 6764	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	20190429
Handler Name: RITE AID # 6764	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

Receive Date:	20220315
Handler Name: RITE AID # 6764	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

RITE AID # 6764 (Continued) **1023675114**

Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 44611
NAICS Description: PHARMACIES AND DRUG STORES

NAICS Code: 446110
NAICS Description: PHARMACIES AND DRUG STORES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

D16 **RITE AID #6764 - HAZMAT** **CUPA Listings** **S123634885**
SSW **1710 N FARMERSVILLE BLVD** **HAZNET** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223** **HWTS**
0.161 mi.
852 ft. **Site 4 of 4 in cluster D**

Relative: **Lower**
Actual: **363 ft.**

CUPA TULARE:
Name: RITE AID #6764 - HAZMAT
Address: 1710 N FARMERSVILLE BLVD
City,State,Zip: FARMERSVILLE, CA 93223
CERS ID: 10710487
Facility ID: FA1352581
APN: 111-290-013
Latitude: 36.312655
Longitude: -119.206332
PE: 2254
TB Fin Fees Description: HW - SMALL GENERATOR
Current Status: 1
CD Fin billing Status Description: Active, billable

Name: RITE AID #6764 - HAZMAT
Address: 1710 N FARMERSVILLE BLVD
City,State,Zip: FARMERSVILLE, CA 93223
CERS ID: 10710487
Facility ID: FA1352581
APN: 111-290-013
Latitude: 36.312655
Longitude: -119.206332
PE: 2223
TB Fin Fees Description: HM - SMALL FACILITY - < 5 CHEMICALS
Current Status: 4
CD Fin billing Status Description: Active, exempt from billing

HAZNET:
Name: RITE AID #6764
Address: 1710 N FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE, CA 93223
Contact: DAVID CROZIER

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Telephone:	7179758643
Mailing Name:	Not reported
Mailing Address:	30 HUNTER LN
Year:	2017
Gepaid:	CAL000420736
TSD EPA ID:	CAD980884183
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.001
Year:	2017
Gepaid:	CAL000420736
TSD EPA ID:	CAD980884183
CA Waste Code:	311 - Pharmaceutical waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.001
Year:	2017
Gepaid:	CAL000420736
TSD EPA ID:	CAD980884183
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0005
Year:	2016
Gepaid:	CAL000420736
TSD EPA ID:	CAD980884183
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.001
Year:	2016
Gepaid:	CAL000420736
TSD EPA ID:	CAD980884183
CA Waste Code:	311 - Pharmaceutical waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0005
Year:	2016
Gepaid:	CAL000420736
TSD EPA ID:	CAD980884183
CA Waste Code:	122 - Alkaline solution without metals pH >= 12.5
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0005
Year:	2016
Gepaid:	CAL000420736
TSD EPA ID:	CAD980884183
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No

RITE AID #6764 - HAZMAT (Continued) **S123634885**

	Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0005

Additional Info:

Year:	2017
Gen EPA ID:	CAL000420736
Shipment Date:	20170124
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0105
Waste Quantity:	21
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20170124
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0075
Waste Quantity:	15
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Shipment Date:	20170124
Creation Date:	3/23/2017 18:30:37
Receipt Date:	20170208
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	311 - Pharmaceutical waste
RCRA Code:	D011
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	D010
Additional Code 2:	D007
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20170124
Creation Date:	3/23/2017 18:30:37
Receipt Date:	20170208
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20170124
Creation Date:	3/23/2017 18:30:37
Receipt Date:	20170208
Manifest ID:	009343623FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Trans 2 Name: 21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID: CAD980884183
Trans Name: GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 311 - Pharmaceutical waste
RCRA Code: P001
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.0005
Waste Quantity: 1
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20170124
Creation Date: 3/23/2017 18:30:37
Receipt Date: 20170208
Manifest ID: 009343623FLE
Trans EPA ID: MNS000110924
Trans Name: STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID: CAR000210617
Trans 2 Name: 21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID: CAD980884183
Trans Name: GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 214 - Unspecified solvent mixture
RCRA Code: D001
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.0005
Waste Quantity: 1
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

HWTS:
Name: RITE AID #6764
Address: 1710 N FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE, CA 93223
EPA ID: CAL000420736
Inactive Date: 05/05/2017
Create Date: 10/06/2016
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 30 HUNTER LN
Mailing Address 2: Not reported
Mailing City,State,Zip: CAMP HILL, PA 17011
Owner Name: THRIFTY PAYLESS INC

RITE AID #6764 - HAZMAT (Continued) **S123634885**

Owner Address:	30 HUNTER LN
Owner Address 2:	Not reported
Owner City,State,Zip:	CAMP HILL, PA 17011
Contact Name:	DAVID CROZIER
Contact Address:	30 HUNTER LANE
Contact Address 2:	Not reported
City,State,Zip:	CAMP HILL, PA 17011
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	36.31195916
Longitude:	-119.2069632

NAICS:

EPA ID:	CAL000420736
Create Date:	2016-10-06 16:25:40.963
NAICS Code:	44611
NAICS Description:	Pharmacies and Drug Stores
Issued EPA ID Date:	2016-10-06 16:25:40.93700
Inactive Date:	2017-05-05 00:00:00
Facility Name:	RITE AID #6764
Facility Address:	1710 N FARMERSVILLE BLVD
Facility Address 2:	Not reported
Facility City:	FARMERSVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	93223

E17 **R GAS LLC TRUCK YARD** **CUPA Listings** **S122517709**
NNW **251 TERRY AVE** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.167 mi.
880 ft. **Site 1 of 2 in cluster E**

Relative:
Lower

Actual:
358 ft.

CUPA TULARE:

Name:	R GAS LLC TRUCK YARD
Address:	251 TERRY AVE
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10773985
Facility ID:	FA1353692
APN:	128-280-007
Latitude:	36.317699
Longitude:	-119.21067
PE:	2223
TB Fin Fees Description:	HM - SMALL FACILITY - < 5 CHEMICALS
Current Status:	1
CD Fin billing Status Description:	Active, billable

E18 **ARTESIA READY MIX CONCRETE INC** **RCRA-SQG** **1000819096**
NW **300 TERRY AVE** **FINDS** **CAD983650631**
1/8-1/4 **FARMERSVILLE, CA 93223** **ECHO**
0.188 mi.
995 ft. **Site 2 of 2 in cluster E**

Relative: **Lower**
Actual: **359 ft.**

RCRA Listings:

Date Form Received by Agency:		19921020
Handler Name:	ARTESIA READY MIX CONCRETE INC	
Handler Address:		300 TERRY AVE
Handler City,State,Zip:		FARMERSVILLE, CA 93223
EPA ID:		CAD983650631
Contact Name:		AL OLIVER
Contact Address:		P O BOX 2823
Contact City,State,Zip:		SANTA FE SPRINGS, CA 90670
Contact Telephone:		310-404-4125
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Private
Federal Waste Generator Description:		Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		P O BOX 1436
Mailing City,State,Zip:		TULARE, CA 93275
Owner Name:	OLIVER FAMILY TRUST	
Owner Type:		Private
Operator Name:	Not reported	
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		NN
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

ARTESIA READY MIX CONCRETE INC (Continued) **1000819096**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required: Not reported	
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: OLIVER FAMILY TRUST	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P O BOX 2823
Owner/Operator City,State,Zip:	SANTA FE SPRINGS, CA 90670
Owner/Operator Telephone:	310-404-4125
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19921020
Handler Name: ARTESIA READY MIX CONCRETE INC	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

ARTESIA READY MIX CONCRETE INC (Continued) **1000819096**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002886173

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000819096
Registry ID: 110002886173
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002886173
Name: ARTESIA READY MIX CONCRETE INC
Address: 300 TERRY AVE
City,State,Zip: FARMERSVILLE, CA 93223

19
SE
1/8-1/4
0.194 mi.
1026 ft.

CURIEL AUTO REPAIR **RCRA NonGen / NLR** **1025876449**
16632 AVE 288 UNIT C **CAL000449585**
EXETER, CA 93221

Relative: Higher
Actual: 366 ft.

RCRA Listings:
Date Form Received by Agency: 20191003
Handler Name: CURIEL AUTO REPAIR
Handler Address: 16632 AVE 288 UNIT C
Handler City,State,Zip: EXETER, CA 93221
EPA ID: CAL000449585
Contact Name: CARLOS CURIEL
Contact Address: 16632 AVE 288 UNIT C
Contact City,State,Zip: EXETER, CA 93221
Contact Telephone: 559-339-7731
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09

CURIEL AUTO REPAIR (Continued) **1025876449**

Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		16632 AVE 288 UNIT C
Mailing City,State,Zip:		EXETER, CA 93221
Owner Name:	CARLOS CURIEL	
Owner Type:		Other
Operator Name:	CARLOS CURIEL	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported
Permit Workload Universe:		Not reported
Permit Progress Universe:		Not reported
Post-Closure Workload Universe:		Not reported
Closure Workload Universe:		Not reported
202 GPRA Corrective Action Baseline:		No
Corrective Action Workload Universe:		No
Subject to Corrective Action Universe:		No
Non-TSDFs Where RCRA CA has Been Imposed Universe:		No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:		No
TSDFs Only Subject to CA under Discretionary Auth Universe:		No
Corrective Action Priority Ranking:		No NCAPS ranking
Environmental Control Indicator:		No
Institutional Control Indicator:		No
Human Exposure Controls Indicator:		N/A
Groundwater Controls Indicator:		N/A
Operating TSDF Universe:		Not reported
Full Enforcement Universe:		Not reported
Significant Non-Complier Universe:		No

CURIEL AUTO REPAIR (Continued) **1025876449**

Unaddressed Significant Non-Complier Universe: No
Addressed Significant Non-Complier Universe: No
Significant Non-Complier With a Compliance Schedule Universe: No
Financial Assurance Required: Not reported
Handler Date of Last Change: 20191004
Recognized Trader-Importer: No
Recognized Trader-Exporter: No
Importer of Spent Lead Acid Batteries: No
Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: CARLOS CURIEL
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 16632 AVE 288 UNIT C
Owner/Operator City,State,Zip: EXETER, CA 93221
Owner/Operator Telephone: 559-339-7731
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: CARLOS CURIEL
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 16632 AVE 288 UNIT C
Owner/Operator City,State,Zip: EXETER, CA 93221
Owner/Operator Telephone: 559-339-7731
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20191003
Handler Name: CURIEL AUTO REPAIR
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 811111
NAICS Description: GENERAL AUTOMOTIVE REPAIR

CURIEL AUTO REPAIR (Continued) **1025876449**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

F20 **AUTOZONE #3711** **CERS HAZ WASTE** **S121795385**
SSW **1555 N FARMERSVILLE BLVD** **CERS** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.208 mi.
1100 ft. **Site 1 of 6 in cluster F**

Relative:
Lower

Actual:
363 ft.

CERS HAZ WASTE:
Name: AUTOZONE #3711
Address: 1555 N FARMERSVILLE BLVD
City,State,Zip: FARMERSVILLE, CA 93223
Site ID: 9902
CERS ID: 10140137
CERS Description: Hazardous Waste Generator

CERS:
Name: AUTOZONE #3711
Address: 1555 N FARMERSVILLE BLVD
City,State,Zip: FARMERSVILLE, CA 93223
Site ID: 9902
CERS ID: 10140137
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 9902
Site Name: AutoZone #3711
Violation Date: 10-22-2013
Citation: HSC 6.95 25504(b) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(b)
Violation Description: Failure to include adequate emergency response procedures in the business plan for a release or threatened release.
Violation Notes: Returned to compliance on 10/28/2013.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 9902
Site Name: AutoZone #3711
Violation Date: 10-26-2016
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes: Returned to compliance on 11/01/2016.
Violation Division: Tulare County Environmental Health
Violation Program: HW
Violation Source: CERS,

AUTOZONE #3711 (Continued) **S121795385**

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-22-2013
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	HWG inspection with Lisa Whitlow
Eval Division:	Tulare County Environmental Health
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-26-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Tulare County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-26-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Tulare County Environmental Health
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-22-2013
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	HM inspection with Lisa Whitlow
Eval Division:	Tulare County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-12-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Anthony
Eval Division:	Tulare County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-12-2019
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Anthony
Eval Division:	Tulare County Environmental Health
Eval Program:	HW
Eval Source:	CERS,

Enforcement Action:

AUTOZONE #3711 (Continued) **S121795385**

Site ID: 9902
Site Name: AutoZone #3711
Site Address: 1555 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 10-22-2013
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 9902
Site Name: AutoZone #3711
Site Address: 1555 N FARMERSVILLE BLVD
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 10-26-2016
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: Document Preparer
Entity Name: Deborah Williams
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: Dept 8190, 123 South Front Street
Affiliation City: Memphis
Affiliation State: TN
Affiliation Country: Not reported
Affiliation Zip: 38103
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Autozone
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (559) 229-8076,

AUTOZONE #3711 (Continued) **S121795385**

Affiliation Type Desc:	Environmental Contact
Entity Name:	Andrew Beaven
Entity Title:	Not reported
Affiliation Address:	Dept 8190, 123 South Front Street
Affiliation City:	Memphis
Affiliation State:	TN
Affiliation Country:	Not reported
Affiliation Zip:	38103
Affiliation Phone:	,

Affiliation Type Desc:	Identification Signer
Entity Name:	Deborah Williams
Entity Title:	Environmental Coordinator
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	Auto Zone
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Property Owner
Entity Name:	Farmersville Red Rock Plaza LLC
Entity Title:	Not reported
Affiliation Address:	PO Box 9440
Affiliation City:	Fresno
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93792-9440
Affiliation Phone:	(559) 256-4003,

Affiliation Type Desc:	CUPA District
Entity Name:	Tulare County Environmental Health
Entity Title:	Not reported
Affiliation Address:	5957 South Mooney Boulevard
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93277
Affiliation Phone:	(559) 624-7400,

Affiliation Type Desc:	Legal Owner
Entity Name:	AutoZone Stores Inc
Entity Title:	Not reported
Affiliation Address:	123 South Front Street
Affiliation City:	Memphis
Affiliation State:	TN
Affiliation Country:	United States

AUTOZONE #3711 (Continued) **S121795385**

Affiliation Zip: 38103
Affiliation Phone: (901) 495-6500,

F21 **DOLLAR TREE #03493** **RCRA NonGen / NLR** **1024839775**
SSW **1555 N FARMERSVILLE BLVD STE 201** **CAL000388066**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.208 mi.
1100 ft. **Site 2 of 6 in cluster F**

Relative: **Lower**
Actual: **363 ft.**

RCRA Listings:

Date Form Received by Agency:		20130805
Handler Name:	DOLLAR TREE #03493	
Handler Address:		1555 N FARMERSVILLE BLVD STE 201
Handler City,State,Zip:		FARMERSVILLE, CA 93223
EPA ID:		CAL000388066
Contact Name:		ANGELA JONES
Contact Address:		500 VOLVO PKWY
Contact City,State,Zip:		CHESAPEAKE, VA 23320-1604
Contact Telephone:		757-321-5761
Contact Fax:		757-321-5160
Contact Email:		AJONES@DOLLARTREE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		500 VOLVO PKWY
Mailing City,State,Zip:		CHESAPEAKE, VA 23320-1604
Owner Name:	DOLLAR TREE STORES, INC.	
Owner Type:		Other
Operator Name:	ANGELA JONES	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported

DOLLAR TREE #03493 (Continued) **1024839775**

Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required: Not reported	
Handler Date of Last Change:	20180906
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: DOLLAR TREE STORES, INC.	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	500 VOLVO PKWY
Owner/Operator City,State,Zip:	CHESAPEAKE, VA 23320-1604
Owner/Operator Telephone:	757-321-5000
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: ANGELA JONES	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	500 VOLVO PKWY
Owner/Operator City,State,Zip:	CHESAPEAKE, VA 23320-1604

DOLLAR TREE #03493 (Continued) **1024839775**

Owner/Operator Telephone: 757-321-5761
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20130805
Handler Name: DOLLAR TREE #03493
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 45299
NAICS Description: ALL OTHER GENERAL MERCHANDISE STORES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

F22 **DOLLAR TREE #03493** **CERS HAZ WASTE** **S118233660**
SSW **1555 N FARMERSVILLE BLVD STE 201** **HAZNET** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223** **CERS**
0.208 mi. **HWTS**
1100 ft. **Site 3 of 6 in cluster F**

Relative: **Lower**
Actual: **363 ft.**

CERS HAZ WASTE:
Name: DOLLAR TREE #03493
Address: 1555 N FARMERSVILLE BLVD STE 201
City,State,Zip: FARMERSVILLE, CA 93223
Site ID: 25852
CERS ID: 10457425
CERS Description: Hazardous Waste Generator

HAZNET:
Name: DOLLAR TREE #03493
Address: 1555 N FARMERSVILLE BLVD STE 201
Address 2: Not reported
City,State,Zip: FARMERSVILLE, CA 93223
Contact: JESSICA DUBUQUE
Telephone: 7573215458
Mailing Name: Not reported
Mailing Address: 500 VOLVO PKWY

Year: 2021

DOLLAR TREE #03493 (Continued) **S118233660**

Gepaid: CAL000388066
TSD EPA ID: NVD980895338
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.005

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: NVD980895338
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.001

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: AZR000515924
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.16

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: NVD980895338
CA Waste Code: 122 - Alkaline solution without metals pH >= 12.5
Disposal Method: H121 - Neutralization Only
Tons: 0.021

Year: 2021
Gepaid: CAL000388066
TSD EPA ID: CAD980884183
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.001

Year: 2020
Gepaid: CAL000388066
TSD EPA ID: CAD008364432
CA Waste Code: 122 - Alkaline solution without metals pH >= 12.5
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0035

Year: 2020
Gepaid: CAL000388066
TSD EPA ID: AZR000515924
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.1285

Year: 2020
Gepaid: CAL000388066
TSD EPA ID: CAD980884183

DOLLAR TREE #03493 (Continued) **S118233660**

CA Waste Code:	331 - Off-specification, aged or surplus organics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.072
Year:	2020
Gepaid:	CAL000388066
TSD EPA ID:	CAD008364432
CA Waste Code:	331 - Off-specification, aged or surplus organics
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0035
Year:	2020
Gepaid:	CAL000388066
TSD EPA ID:	CAD008364432
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0035

Click this hyperlink while viewing on your computer to access
36 additional CA HAZNET: record(s) in the EDR Site Report.

Detail Two:

Year:	2020
EM Manifest ID:	c70c79de-cb64-4bea-afd6-b7965bab51bd
Shipment Date:	9/13/2019
Receipt Date:	10/15/2019
Manifest Number:	013433945FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223-1175
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	916-351-0980
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC
TSDF Address 1:	11855 White Rock Road
TSDF Address 2:	Not reported
TSDF City:	Rancho Cordova
TSDF Zip:	95742
TSDF Telephone:	Not reported

Federal:

Year:	2020
EM Manifest ID:	c70c79de-cb64-4bea-afd6-b7965bab51bd
Generator EPA ID:	CAL000388066
Shipment Date:	2019-09-13

DOLLAR TREE #03493 (Continued) **S118233660**

Manifest Number:	013433945FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00400
Quantity Waste:	8.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D001

Year:	2020
EM Manifest ID:	c70c79de-cb64-4bea-afd6-b7965bab51bd
Generator EPA ID:	CAL000388066
Shipment Date:	2019-09-13
Manifest Number:	013433945FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.01500
Quantity Waste:	30.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D001

Year:	2020
EM Manifest ID:	c70c79de-cb64-4bea-afd6-b7965bab51bd
Generator EPA ID:	CAL000388066
Shipment Date:	2019-09-13
Manifest Number:	013433945FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.01500
Quantity Waste:	30.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D035

State:

Year:	2020
EM Manifest ID:	c70c79de-cb64-4bea-afd6-b7965bab51bd
Generator EPA ID:	CAL000388066
Shipment Date:	2019-09-13
Manifest Number:	013433945FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00400
Quantity Waste:	8.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331

DOLLAR TREE #03493 (Continued) **S118233660**

Year:	2020
EM Manifest ID:	c70c79de-cb64-4bea-afd6-b7965bab51bd
Generator EPA ID:	CAL000388066
Shipment Date:	2019-09-13
Manifest Number:	013433945FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.01500
Quantity Waste:	30.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	214

Year:	2020
EM Manifest ID:	c70c79de-cb64-4bea-afd6-b7965bab51bd
Generator EPA ID:	CAL000388066
Shipment Date:	2019-09-13
Manifest Number:	013433945FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	122

Year:	2020
EM Manifest ID:	8bd4d94a-6e68-44f0-9d41-99ad44058a40
Shipment Date:	5/8/2020
Receipt Date:	5/22/2020
Manifest Number:	014359301FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223-1175
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	559-747-1065
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City:	YUMA
TSDF Zip:	85365-1901
TSDF Telephone:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

State:

Year:	2020
EM Manifest ID:	8bd4d94a-6e68-44f0-9d41-99ad44058a40
Generator EPA ID:	CAL000388066
Shipment Date:	2020-05-08
Manifest Number:	014359301FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00900
Quantity Waste:	18.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331

Year:	2020
EM Manifest ID:	8bd4d94a-6e68-44f0-9d41-99ad44058a40
Generator EPA ID:	CAL000388066
Shipment Date:	2020-05-08
Manifest Number:	014359301FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.03400
Quantity Waste:	68.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	331

Year:	2020
EM Manifest ID:	59854772-3591-4eb1-8a7d-60189ea3b417
Shipment Date:	5/8/2020
Receipt Date:	5/27/2020
Manifest Number:	014359300FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223-1175
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City:	Inglewood
TSDF Zip:	90301
TSDF Telephone:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Federal:

Year:	2020
EM Manifest ID:	59854772-3591-4eb1-8a7d-60189ea3b417
Generator EPA ID:	CAL000388066
Shipment Date:	2020-05-08
Manifest Number:	014359300FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D001

Year:	2020
EM Manifest ID:	59854772-3591-4eb1-8a7d-60189ea3b417
Generator EPA ID:	CAL000388066
Shipment Date:	2020-05-08
Manifest Number:	014359300FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D001

Year:	2020
EM Manifest ID:	59854772-3591-4eb1-8a7d-60189ea3b417
Generator EPA ID:	CAL000388066
Shipment Date:	2020-05-08
Manifest Number:	014359300FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D035

State:

Year:	2020
EM Manifest ID:	59854772-3591-4eb1-8a7d-60189ea3b417
Generator EPA ID:	CAL000388066
Shipment Date:	2020-05-08
Manifest Number:	014359300FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331
Year:	2020
EM Manifest ID:	59854772-3591-4eb1-8a7d-60189ea3b417
Generator EPA ID:	CAL000388066
Shipment Date:	2020-05-08
Manifest Number:	014359300FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	214
Year:	2020
EM Manifest ID:	59854772-3591-4eb1-8a7d-60189ea3b417
Generator EPA ID:	CAL000388066
Shipment Date:	2020-05-08
Manifest Number:	014359300FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	122
Year:	2020
EM Manifest ID:	1053376
Shipment Date:	1/7/2020
Receipt Date:	1/30/2020
Manifest Number:	013036123FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	559-747-1065
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Address 1: 2730 E 13TH ST
TSDF Address 2: Not reported
TSDF City: YUMA
TSDF Zip: 85365-1901
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: 1053376
Generator EPA ID: CAL000388066
Shipment Date: 2020-01-07
Manifest Number: 013036123FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.08550
Quantity Waste: 171.000000
Quantity Unit: P
Number of Containers: 2
Type of Container: Fiberboard or plastic drums, barrels, kegs
Quantity Type: Pounds
State Code: 331

Detail Two:
Year: 2019
EM Manifest ID: 745657
Shipment Date: 7/6/2018
Receipt Date: 7/23/2018
Manifest Number: 010208445FLE
Generator EPA ID: CAL000388066
Name: DOLLAR TREE #03493
Address: 1555 N FARMERSVILLE BLVD STE 201
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 757-321-5761
Transporter 1 EPA ID: MNS000110924
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MOD095038998
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000515924
TSDF Name: YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1: 2730 E 13TH ST
TSDF Address 2: Not reported
TSDF City: YUMA
TSDF Zip: 85365-1901
TSDF Telephone: Not reported

State:
Year: 2019
EM Manifest ID: 745657
Generator EPA ID: CAL000388066
Shipment Date: 2018-07-06
Manifest Number: 010208445FLE
Line Number: 1
Method Code: H141

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Tons: 0.07550
Quantity Waste: 151.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiberboard or plastic drums, barrels, kegs
Quantity Type: Pounds
State Code: 331

Year: 2019
EM Manifest ID: 745657
Generator EPA ID: CAL000388066
Shipment Date: 2018-07-06
Manifest Number: 010208445FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.04300
Quantity Waste: 86.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiberboard or plastic drums, barrels, kegs
Quantity Type: Pounds
State Code: 331

Year: 2019
EM Manifest ID: 370758
Shipment Date: 4/13/2019
Receipt Date: 5/6/2019
Manifest Number: 013056273FLE
Generator EPA ID: CAL000388066
Name: DOLLAR TREE #03493
Address: 1555 N FARMERSVILLE BLVD STE 201
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 559-747-1065
Transporter 1 EPA ID: MNS000110924
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: CAR000217554
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000515924
TSDF Name: YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1: 2730 E 13TH ST
TSDF Address 2: Not reported
TSDF City: YUMA
TSDF Zip: 85365-1901
TSDF Telephone: Not reported

State:
Year: 2019
EM Manifest ID: 370758
Generator EPA ID: CAL000388066
Shipment Date: 2019-04-13
Manifest Number: 013056273FLE
Line Number: 1
Method Code: H141

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Tons:	0.08150
Quantity Waste:	163.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	331

Year:	2019
EM Manifest ID:	370758
Generator EPA ID:	CAL000388066
Shipment Date:	2019-04-13
Manifest Number:	013056273FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.05100
Quantity Waste:	102.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	331

Year:	2019
EM Manifest ID:	370757
Shipment Date:	4/13/2019
Receipt Date:	5/16/2019
Manifest Number:	013056271FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223-1175
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City:	Inglewood
TSDF Zip:	90301
TSDF Telephone:	Not reported

State:

Year:	2019
EM Manifest ID:	370757
Generator EPA ID:	CAL000388066
Shipment Date:	2019-04-13
Manifest Number:	013056271FLE
Line Number:	1
Method Code:	H141

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Tons:	0.01250
Quantity Waste:	25.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	122

Year:	2019
EM Manifest ID:	222526
Shipment Date:	12/7/2018
Receipt Date:	1/4/2019
Manifest Number:	011315179FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223-1175
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City:	Inglewood
TSDF Zip:	90301
TSDF Telephone:	Not reported

Federal:

Year:	2019
EM Manifest ID:	222526
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315179FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D002

State:

Year:	2019
EM Manifest ID:	222526
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315179FLE

DOLLAR TREE #03493 (Continued) **S118233660**

Line Number:	1
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	791

Year:	2019
EM Manifest ID:	222526
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315179FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.09800
Quantity Waste:	196.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiberboard or plastic drums, barrels, kegs
Quantity Type:	Pounds
State Code:	122

Year:	2019
EM Manifest ID:	239231
Shipment Date:	12/7/2018
Receipt Date:	1/9/2019
Manifest Number:	011315181FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	559-747-1065
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MOD095038998
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1:	2730 E 13TH ST
TSDF Address 2:	Not reported
TSDF City:	YUMA
TSDF Zip:	85365-1901
TSDF Telephone:	Not reported

State:

Year:	2019
EM Manifest ID:	239231
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315181FLE

DOLLAR TREE #03493 (Continued) **S118233660**

Line Number: 1
Method Code: H141
Quantity Tons: 0.04050
Quantity Waste: 81.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiberboard or plastic drums, barrels, kegs
Quantity Type: Pounds
State Code: 331

Year: 2019
EM Manifest ID: 239231
Generator EPA ID: CAL000388066
Shipment Date: 2018-12-07
Manifest Number: 011315181FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.05050
Quantity Waste: 101.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiberboard or plastic drums, barrels, kegs
Quantity Type: Pounds
State Code: 331

Year: 2019
EM Manifest ID: 251983
Shipment Date: 12/7/2018
Receipt Date: 1/2/2019
Manifest Number: 011315180FLE
Generator EPA ID: CAL000388066
Name: DOLLAR TREE
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223-1175
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 775-575-2760
Transporter 1 EPA ID: MNS000110924
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MNS000110924
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: NVD980895338
TSDF Name: 21st Century Environmental Management of Nevada, LLC
TSDF Address 1: 2095 Newlands Drive East
TSDF Address 2: Not reported
TSDF City: Fernley
TSDF Zip: 89408
TSDF Telephone: Not reported

Federal:
Year: 2019
EM Manifest ID: 251983
Generator EPA ID: CAL000388066
Shipment Date: 2018-12-07
Manifest Number: 011315180FLE

DOLLAR TREE #03493 (Continued) **S118233660**

Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
Federal Code:	D001
Year:	2019
EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
Federal Code:	D001
Year:	2019
EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
Federal Code:	D035

State:

Year:	2019
EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
State Code:	331
Year:	2019

DOLLAR TREE #03493 (Continued) **S118233660**

EM Manifest ID:	251983
Generator EPA ID:	CAL000388066
Shipment Date:	2018-12-07
Manifest Number:	011315180FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Burlap, cloth, paper, or plastic bags
Quantity Type:	Pounds
State Code:	214

Detail Two:

Year:	2018
EM Manifest ID:	010077335FLE20180316_D_1
Shipment Date:	3/16/2018
Receipt Date:	4/24/2018
Manifest Number:	010077335FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	RHO CHEM LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

Federal:

Year:	2018
EM Manifest ID:	010077335FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077335FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D002

DOLLAR TREE #03493 (Continued) **S118233660**

State:

Year:	2018
EM Manifest ID:	010077335FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077335FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	122

Year:	2018
EM Manifest ID:	010077336FLE20180316_D_1
Shipment Date:	3/16/2018
Receipt Date:	5/11/2018
Manifest Number:	010077336FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21ST CENTURY EMN LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

Federal:

Year:	2018
EM Manifest ID:	010077336FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077336FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL

DOLLAR TREE #03493 (Continued) **S118233660**

Federal Code: D001

Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16
Manifest Number: 010077336FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16
Manifest Number: 010077336FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D035

State:
Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16
Manifest Number: 010077336FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00350
Quantity Waste: 7.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 331

Year: 2018
EM Manifest ID: 010077336FLE20180316_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2018-03-16
Manifest Number: 010077336FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	214
Year:	2018
EM Manifest ID:	010077337FLE20180316_D_1
Shipment Date:	3/16/2018
Receipt Date:	5/16/2018
Manifest Number:	010077337FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

State:

Year:	2018
EM Manifest ID:	010077337FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077337FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.01150
Quantity Waste:	23.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331
Year:	2018
EM Manifest ID:	010077337FLE20180316_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2018-03-16
Manifest Number:	010077337FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.05050
Quantity Waste:	101.000000

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Shipment Date:	12/18/2017
Receipt Date:	1/25/2018
Manifest Number:	010209401FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	RHO CHEM LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

Federal:

Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00650
Quantity Waste:	13.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000

DOLLAR TREE #03493 (Continued) **S118233660**

Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

Year: 2018
EM Manifest ID: 010209401FLE20171218_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2017-12-18
Manifest Number: 010209401FLE
Line Number: 3
Method Code: H141
Quantity Tons: 0.02000
Quantity Waste: 40.000000
Quantity Unit: P
Number of Containers: 2
Type of Container: NULL
Quantity Type: NULL
Federal Code: D002

Year: 2018
EM Manifest ID: 010209401FLE20171218_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2017-12-18
Manifest Number: 010209401FLE
Line Number: 4
Method Code: H141
Quantity Tons: 0.00100
Quantity Waste: 2.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

Year: 2018
EM Manifest ID: 010209401FLE20171218_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2017-12-18
Manifest Number: 010209401FLE
Line Number: 4
Method Code: H141
Quantity Tons: 0.00100
Quantity Waste: 2.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D035

State:
Year: 2018
EM Manifest ID: 010209401FLE20171218_D_1
Generator EPA ID: CAL000388066
Shipment Date: 2017-12-18
Manifest Number: 010209401FLE

DOLLAR TREE #03493 (Continued) **S118233660**

Line Number:	1
Method Code:	H141
Quantity Tons:	0.00650
Quantity Waste:	13.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331
Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00050
Quantity Waste:	1.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331
Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.02000
Quantity Waste:	40.000000
Quantity Unit:	P
Number of Containers:	2
Type of Container:	NULL
Quantity Type:	NULL
State Code:	122
Year:	2018
EM Manifest ID:	010209401FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209401FLE
Line Number:	4
Method Code:	H141
Quantity Tons:	0.00100
Quantity Waste:	2.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	214
Year:	2018

DOLLAR TREE #03493 (Continued) **S118233660**

EM Manifest ID:	010209402FLE20171218_D_1
Shipment Date:	12/18/2017
Receipt Date:	1/27/2018
Manifest Number:	010209402FLE
Generator EPA ID:	CAL000388066
Name:	DOLLAR TREE #3493
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000515924
TSDF Name:	YUMA YES LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

State:

Year:	2018
EM Manifest ID:	010209402FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209402FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.03800
Quantity Waste:	76.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	010209402FLE20171218_D_1
Generator EPA ID:	CAL000388066
Shipment Date:	2017-12-18
Manifest Number:	010209402FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.02700
Quantity Waste:	54.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

DOLLAR TREE #03493 (Continued) **S118233660**

Additional Info:

Year:	2017
Gen EPA ID:	CAL000388066
Shipment Date:	20171218
Creation Date:	10/27/2018 18:30:26
Receipt Date:	20180127
Manifest ID:	010209402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	AZR000515924
Trans Name:	YUMA YES LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.038
Waste Quantity:	76
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171218
Creation Date:	10/27/2018 18:30:26
Receipt Date:	20180127
Manifest ID:	010209402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	AZR000515924
Trans Name:	YUMA YES LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.027
Waste Quantity:	54
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171218
Creation Date:	9/14/2018 18:31:06
Receipt Date:	20180125

DOLLAR TREE #03493 (Continued) **S118233660**

Manifest ID:	010209401FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0065
Waste Quantity:	13
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20171218
Creation Date:	9/14/2018 18:31:06
Receipt Date:	20180125
Manifest ID:	010209401FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20171218
Creation Date:	9/14/2018 18:31:06
Receipt Date:	20180125
Manifest ID:	010209401FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.02
Waste Quantity:	40
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171218
Creation Date:	9/14/2018 18:31:06
Receipt Date:	20180125
Manifest ID:	010209401FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170929
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	010159301FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.029

DOLLAR TREE #03493 (Continued) **S118233660**

Waste Quantity:	58
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170929
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	010159301FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.032
Waste Quantity:	64
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170929
Creation Date:	7/17/2018 18:30:18
Receipt Date:	20171020
Manifest ID:	010159301FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0055
Waste Quantity:	11
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Shipment Date:	20170929
Creation Date:	7/17/2018 18:30:18
Receipt Date:	20171020
Manifest ID:	010159301FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2016
Gen EPA ID:	CAL000388066
Shipment Date:	20151124
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0365
Waste Quantity:	73
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	Not reported
Receipt Date:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0145
Waste Quantity:	29
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0095
Waste Quantity:	19
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015

DOLLAR TREE #03493 (Continued) **S118233660**

Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.004
Waste Quantity:	8
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.063
Waste Quantity:	126
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000388066

Shipment Date:	20151124
Creation Date:	Not reported
Receipt Date:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0365
Waste Quantity:	73
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0095
Waste Quantity:	19
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0005
Waste Quantity:	1
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	3/2/2016 22:15:14
Receipt Date:	20151219
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015

DOLLAR TREE #03493 (Continued) **S118233660**

Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151124
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007186809FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0145
Waste Quantity:	29
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150730
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0275
Waste Quantity:	55
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.063
Waste Quantity:	126
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150730
Creation Date:	10/1/2015 22:15:34
Receipt Date:	20150817
Manifest ID:	007352171FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617

DOLLAR TREE #03493 (Continued) **S118233660**

Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.004
Waste Quantity:	8
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2014
Gen EPA ID:	CAL000388066
Shipment Date:	20141020
Creation Date:	1/15/2015 22:14:55
Receipt Date:	20141107
Manifest ID:	007226766FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0155
Waste Quantity:	31
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141020
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	007226766FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC

DOLLAR TREE #03493 (Continued) **S118233660**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.088
Waste Quantity:	176
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141020
Creation Date:	1/15/2015 22:14:55
Receipt Date:	20141107
Manifest ID:	007226766FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141020
Creation Date:	1/15/2015 22:14:55
Receipt Date:	20141107
Manifest ID:	007226766FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015

DOLLAR TREE #03493 (Continued) **S118233660**

Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20141020
Creation Date:	1/15/2015 22:14:55
Receipt Date:	20141107
Manifest ID:	007226766FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	131 - Aqueous solution (2 < pH < 12.5) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions
RCRA Code:	D001
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.004
Waste Quantity:	8
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140625
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0475
Waste Quantity:	95
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

DOLLAR TREE #03493 (Continued) **S118233660**

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140625
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0285
Waste Quantity:	57
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140625
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140625
Creation Date:	12/16/2014 22:15:17
Receipt Date:	20140710
Manifest ID:	004704402FLE

DOLLAR TREE #03493 (Continued) **S118233660**

Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	141 - Off-specification, aged, or surplus inorganics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20140625
Creation Date:	12/16/2014 22:15:17
Receipt Date:	20140710
Manifest ID:	004704402FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSPORTATION INC
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0125
Waste Quantity:	25
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	25852
CERS ID:	10457425
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	25852
Site Name:	Dollar Tree #03493

DOLLAR TREE #03493 (Continued) **S118233660**

Violation Date: 08-07-2017
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 01/25/2018. Did not observe Helium on hazardous material inventory. Add Helium to hazardous material inventory and submit electronically.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 25852
Site Name: Dollar Tree #03493
Violation Date: 08-07-2017
Citation: 22 CCR 15 66265.192(k) - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.192(k)
Violation Description: Failure to include all required information in the tank system assessment.
Violation Notes: Returned to compliance on 08/07/2017. Did not observe start date on hazardous waste container. Corrected onsite by Bryce.
Violation Division: Tulare County Environmental Health
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-16-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-07-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Bryce
Eval Division: Tulare County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-16-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-07-2017
Violations Found: Yes

DOLLAR TREE #03493 (Continued) **S118233660**

Eval Type: Routine done by local agency
Eval Notes: Bryce
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 25852
Site Name: Dollar Tree #03493
Site Address: 1555 N FARMERSVILLE BLVD STE 201
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 08-07-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 25852
Site Name: Dollar Tree #03493
Site Address: 1555 N FARMERSVILLE BLVD STE 201
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 08-07-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Tulare County Environmental Health
Entity Title: Not reported
Affiliation Address: 5957 South Mooney Boulevard
Affiliation City: Visalia
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 93277
Affiliation Phone: (559) 624-7400,

Affiliation Type Desc: Document Preparer
Entity Name: JOSE FIGUEROA
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address

DOLLAR TREE #03493 (Continued) **S118233660**

Entity Title:	Not reported
Affiliation Address:	500 Volvo Pkwy
Affiliation City:	Chesapeake
Affiliation State:	VA
Affiliation Country:	Not reported
Affiliation Zip:	23320
Affiliation Phone:	,
Affiliation Type Desc:	Property Owner
Entity Name:	Farmersville Red Rock Plaza, LLC
Entity Title:	Not reported
Affiliation Address:	5743 W. Sunnyview Avenue
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93291
Affiliation Phone:	(559) 435-1756,
Affiliation Type Desc:	Legal Owner
Entity Name:	Dollar Tree Stores, Inc.
Entity Title:	Not reported
Affiliation Address:	500 Volvo Pkwy
Affiliation City:	Chesapeake
Affiliation State:	VA
Affiliation Country:	United States
Affiliation Zip:	23320
Affiliation Phone:	(757) 321-5000,
Affiliation Type Desc:	Operator
Entity Name:	Dollar Tree Stores, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(757) 321-5000,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Dollar Tree Stores, Inc.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Sherry Aebersold
Entity Title:	Not reported
Affiliation Address:	1122 Runway Drive
Affiliation City:	Stockton
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95206
Affiliation Phone:	,

DOLLAR TREE #03493 (Continued) **S118233660**

Affiliation Type Desc:	Identification Signer
Entity Name:	Jose Figueroa
Entity Title:	EH&S Specialist
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

HWTS:

Name:	DOLLAR TREE #03493
Address:	1555 N FARMERSVILLE BLVD STE 201
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
EPA ID:	CAL000388066
Inactive Date:	Not reported
Create Date:	08/05/2013
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	500 VOLVO PKWY
Mailing Address 2:	Not reported
Mailing City,State,Zip:	CHESAPEAKE, VA 233201604
Owner Name:	DOLLAR TREE STORES, INC.
Owner Address:	500 VOLVO PKWY
Owner Address 2:	Not reported
Owner City,State,Zip:	CHESAPEAKE, VA 233201604
Contact Name:	JESSICA DUBUQUE
Contact Address:	500 VOLVO PKWY
Contact Address 2:	Not reported
City,State,Zip:	CHESAPEAKE, VA 233201604
Facility Status:	Active
Facility Type:	PERMANENT
Category:	STATE
Latitude:	36.31118
Longitude:	-119.20773

NAICS:

EPA ID:	CAL000388066
Create Date:	2013-08-05 08:38:15.207
NAICS Code:	45299
NAICS Description:	All Other General Merchandise Stores
Issued EPA ID Date:	2013-08-05 08:38:15.20300
Inactive Date:	Not reported
Facility Name:	DOLLAR TREE #03493
Facility Address:	1555 N FARMERSVILLE BLVD STE 201
Facility Address 2:	Not reported
Facility City:	FARMERSVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	93223

F23 **AUTO ZONE #3711** **RCRA NonGen / NLR** **1024815951**
SSW **1555 N FARMERSVILLE BLVD** **CAL000315765**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.208 mi.
1100 ft. **Site 4 of 6 in cluster F**

Relative: **Lower**
Actual: **363 ft.**

RCRA Listings:

Date Form Received by Agency:		20070126
Handler Name:	AUTO ZONE #3711	
Handler Address:		1555 N FARMERSVILLE BLVD
Handler City,State,Zip:		FARMERSVILLE, CA 93223-1029
EPA ID:		CAL000315765
Contact Name:		BRYAN BLAIR
Contact Address:		DEPT 8190, 123 SOUTH FRONT STREET
Contact City,State,Zip:		MEMPHIS, TN 38103
Contact Telephone:		901-495-7217
Contact Fax:		901-495-8399
Contact Email:		BRYAN.BLAIR@AUTOZONE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		DEPT 8190, 123 S FRONT ST
Mailing City,State,Zip:		MEMPHIS, TN 38103-3607
Owner Name:	AUTO ZONE CORPORTATION	
Owner Type:		Other
Operator Name:	BRYAN BLAIR	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		Yes
Universal Waste Destination Facility:		Yes
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		N
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

AUTO ZONE #3711 (Continued) **1024815951**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required: Not reported	
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: BRYAN BLAIR	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	DEPT 8190, 123 SOUTH FRONT STREET
Owner/Operator City,State,Zip:	MEMPHIS, TN 38103
Owner/Operator Telephone:	901-495-7217
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: AUTO ZONE CORPORTATION	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	123 S FRONT ST
Owner/Operator City,State,Zip:	MEMPHIS, TN 38103-3607
Owner/Operator Telephone:	901-495-6500
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

AUTO ZONE #3711 (Continued) **1024815951**

Historic Generators:
- Receive Date: 20070126
- Handler Name: AUTO ZONE #3711
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Code: 45299
- NAICS Description: ALL OTHER GENERAL MERCHANDISE STORES

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

F24 **DOLLAR TREE #03493** **CUPA Listings** **S113146066**
SSW **1555 N FARMERSVILLE BLVD 201** **HAZNET** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223** **HWTS**
0.208 mi.
1100 ft. **Site 5 of 6 in cluster F**

Relative: **Lower**

Actual: **363 ft.**

CUPA TULARE:
- Name: DOLLAR TREE #03493
- Address: 1555 N FARMERSVILLE BLVD 201
- City,State,Zip: FARMERSVILLE, CA 93223
- CERS ID: 10457425
- Facility ID: FA1351363
- APN: 128-200-053
- Latitude: 36.31119
- Longitude: -119.207745
- PE: 2223
- TB Fin Fees Description: HM - SMALL FACILITY - < 5 CHEMICALS
- Current Status: 1
- CD Fin billing Status Description: Active, billable

- Name: DOLLAR TREE #03493
- Address: 1555 N FARMERSVILLE BLVD 201
- City,State,Zip: FARMERSVILLE, CA 93223
- CERS ID: 10457425
- Facility ID: FA1351363
- APN: 128-200-053
- Latitude: 36.31119
- Longitude: -119.207745
- PE: 2254
- TB Fin Fees Description: HW - SMALL GENERATOR
- Current Status: 1

DOLLAR TREE #03493 (Continued) **S113146066**

CD Fin billing Status Description: Active, billable

HAZNET:
Name: AUTO ZONE #3711
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported
City,State,Zip: FARMERSVILLE, CA 932231029
Contact: BRYAN BLAIR
Telephone: 9014957217
Mailing Name: Not reported
Mailing Address: DEPT 8190 123 SOUTH FRONT STREET

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: AZR000515924
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.029

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: AZR000521146
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.175

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: NVD980895338
CA Waste Code: 181 - Other inorganic solid waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.003

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: CAD008364432
CA Waste Code: 214 - Unspecified solvent mixture
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.002

Year: 2021
Gepaid: CAL000315765
TSD EPA ID: NVD980895338
CA Waste Code: 331 - Off-specification, aged or surplus organics
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0065

Year: 2020
Gepaid: CAL000315765
TSD EPA ID: CAT080013352
CA Waste Code: 221 - Waste oil and mixed oil
Disposal Method: H039 - Other Recovery Of Reclamation For Reuse Including Acid

DOLLAR TREE #03493 (Continued) **S113146066**

	Regeneration, Organics Recovery Ect
Tons:	0.019
Year:	2020
Gepaid:	CAL000315765
TSD EPA ID:	AZR000521146
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.175
Year:	2020
Gepaid:	CAL000315765
TSD EPA ID:	CAT080013352
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.02919
Year:	2020
Gepaid:	CAL000315765
TSD EPA ID:	NVD980895338
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0015
Year:	2020
Gepaid:	CAL000315765
TSD EPA ID:	CAD980884183
CA Waste Code:	214 - Unspecified solvent mixture
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.007

Click this hyperlink while viewing on your computer to access
54 additional CA HAZNET: record(s) in the EDR Site Report.

Detail Two:

Year:	2020
EM Manifest ID:	1099995
Shipment Date:	9/12/2019
Receipt Date:	10/14/2019
Manifest Number:	013433933FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	916-351-0980
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAD980884183
TSDF Name: GEM Rancho Cordova LLC
TSDF Address 1: 11855 White Rock Road
TSDF Address 2: Not reported
TSDF City: Rancho Cordova
TSDF Zip: 95742
TSDF Telephone: Not reported

Federal:
Year: 2020
EM Manifest ID: 1099995
Generator EPA ID: CAL000315765
Shipment Date: 2019-09-12
Manifest Number: 013433933FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00550
Quantity Waste: 11.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D001

Year: 2020
EM Manifest ID: 1099995
Generator EPA ID: CAL000315765
Shipment Date: 2019-09-12
Manifest Number: 013433933FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00550
Quantity Waste: 11.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D005

Year: 2020
EM Manifest ID: 1099995
Generator EPA ID: CAL000315765
Shipment Date: 2019-09-12
Manifest Number: 013433933FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00550
Quantity Waste: 11.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D007

Year: 2020
EM Manifest ID: 1099995
Generator EPA ID: CAL000315765

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	2019-09-12
Manifest Number:	013433933FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D035

State:

Year:	2020
EM Manifest ID:	1099995
Generator EPA ID:	CAL000315765
Shipment Date:	2019-09-12
Manifest Number:	013433933FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	214

Year:	2020
EM Manifest ID:	868467
Shipment Date:	9/12/2019
Receipt Date:	10/10/2019
Manifest Number:	013433934FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	775-575-2760
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City:	Fernley
TSDF Zip:	89408
TSDF Telephone:	Not reported

Federal:

Year:	2020

DOLLAR TREE #03493 (Continued) **S113146066**

EM Manifest ID: 868467
Generator EPA ID: CAL000315765
Shipment Date: 2019-09-12
Manifest Number: 013433934FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D001

Year: 2020
EM Manifest ID: 868467
Generator EPA ID: CAL000315765
Shipment Date: 2019-09-12
Manifest Number: 013433934FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D035

State:
Year: 2020
EM Manifest ID: 868467
Generator EPA ID: CAL000315765
Shipment Date: 2019-09-12
Manifest Number: 013433934FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00150
Quantity Waste: 3.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
State Code: 331

Year: 2020
EM Manifest ID: 868467
Generator EPA ID: CAL000315765
Shipment Date: 2019-09-12
Manifest Number: 013433934FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00550
Quantity Waste: 11.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Type: Pounds
State Code: 331

Year: 2020
EM Manifest ID: bb1516a0-759d-4b1b-a520-6892ee74120f
Shipment Date: 8/24/2020
Receipt Date: 8/31/2020
Manifest Number: 021253777JJK
Generator EPA ID: CAL000315765
Name: AUTO ZONE #3711
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223
Telephone: 800-424-9300
Contact: Not reported
Contact Telephone: 559-747-0472
Transporter 1 EPA ID: CAD028277036
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: CAR000175422
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000521146
TSDF Name: YUMA YES 2 WASTE TRANSFER STATION
TSDF Address 1: 6500 S US HIGHWAY 95
TSDF Address 2: Not reported
TSDF City: YUMA
TSDF Zip: 85365
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: bb1516a0-759d-4b1b-a520-6892ee74120f
Generator EPA ID: CAL000315765
Shipment Date: 2020-08-24
Manifest Number: 021253777JJK
Line Number: 1
Method Code: H141
Quantity Tons: 0.07500
Quantity Waste: 150.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2020
EM Manifest ID: 42a846ba-343e-4f0e-a698-243636632881
Shipment Date: 7/28/2020
Receipt Date: 8/13/2020
Manifest Number: 013669786FLE
Generator EPA ID: CAL000315765
Name: AUTOZONE
Address: 1555 N. FARMERSVILLE BLVD
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223

DOLLAR TREE #03493 (Continued) **S113146066**

Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	775-575-2760
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City:	Fernley
TSDF Zip:	89408
TSDF Telephone:	Not reported

Federal:

Year:	2020
EM Manifest ID:	42a846ba-343e-4f0e-a698-243636632881
Generator EPA ID:	CAL000315765
Shipment Date:	2020-07-28
Manifest Number:	013669786FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D008

State:

Year:	2020
EM Manifest ID:	42a846ba-343e-4f0e-a698-243636632881
Generator EPA ID:	CAL000315765
Shipment Date:	2020-07-28
Manifest Number:	013669786FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	181

Year:	2020
EM Manifest ID:	42a846ba-343e-4f0e-a698-243636632881
Generator EPA ID:	CAL000315765
Shipment Date:	2020-07-28
Manifest Number:	013669786FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.01050
Quantity Waste:	21.000000
Quantity Unit:	P

DOLLAR TREE #03493 (Continued) **S113146066**

Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
State Code: 331

Year: 2020
EM Manifest ID: 840eb3e4-2605-4f18-b2ba-765fa98e5bff
Shipment Date: 7/28/2020
Receipt Date: 8/10/2020
Manifest Number: 013669785FLE
Generator EPA ID: CAL000315765
Name: AUTOZONE
Address: 1555 N. FARMERSVILLE BLVD
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 916-351-0980
Transporter 1 EPA ID: MNS000110924
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MNS000110924
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAD980884183
TSDF Name: GEM Rancho Cordova LLC
TSDF Address 1: 11855 White Rock Road
TSDF Address 2: Not reported
TSDF City: Rancho Cordova
TSDF Zip: 95742
TSDF Telephone: Not reported

Federal:
Year: 2020
EM Manifest ID: 840eb3e4-2605-4f18-b2ba-765fa98e5bff
Generator EPA ID: CAL000315765
Shipment Date: 2020-07-28
Manifest Number: 013669785FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00500
Quantity Waste: 10.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D001

Year: 2020
EM Manifest ID: 840eb3e4-2605-4f18-b2ba-765fa98e5bff
Generator EPA ID: CAL000315765
Shipment Date: 2020-07-28
Manifest Number: 013669785FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00500
Quantity Waste: 10.000000
Quantity Unit: P

DOLLAR TREE #03493 (Continued) **S113146066**

Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D005

Year: 2020
EM Manifest ID: 840eb3e4-2605-4f18-b2ba-765fa98e5bff
Generator EPA ID: CAL000315765
Shipment Date: 2020-07-28
Manifest Number: 013669785FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00500
Quantity Waste: 10.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D007

Year: 2020
EM Manifest ID: 840eb3e4-2605-4f18-b2ba-765fa98e5bff
Generator EPA ID: CAL000315765
Shipment Date: 2020-07-28
Manifest Number: 013669785FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00500
Quantity Waste: 10.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D035

State:
Year: 2020
EM Manifest ID: 840eb3e4-2605-4f18-b2ba-765fa98e5bff
Generator EPA ID: CAL000315765
Shipment Date: 2020-07-28
Manifest Number: 013669785FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00500
Quantity Waste: 10.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
State Code: 214

Year: 2020
EM Manifest ID: 1148130
Shipment Date: 3/2/2020
Receipt Date: 3/9/2020
Manifest Number: 020814690JJK

DOLLAR TREE #03493 (Continued) **S113146066**

Generator EPA ID:	CAL000315765
Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	800-424-9300
Contact:	Not reported
Contact Telephone:	559-747-0472
Transporter 1 EPA ID:	CAD028277036
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000521146
TSDF Name:	YUMA YES 2 WASTE TRANSFER STATION
TSDF Address 1:	6500 S US HIGHWAY 95
TSDF Address 2:	Not reported
TSDF City:	YUMA
TSDF Zip:	85365
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	1148130
Generator EPA ID:	CAL000315765
Shipment Date:	2020-03-02
Manifest Number:	020814690JJK
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

Year:	2020
EM Manifest ID:	1100036
Shipment Date:	2/13/2020
Receipt Date:	3/6/2020
Manifest Number:	013440875FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	916-351-0980
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GEM Rancho Cordova LLC

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Address 1: 11855 White Rock Road
TSDF Address 2: Not reported
TSDF City: Rancho Cordova
TSDF Zip: 95742
TSDF Telephone: Not reported

Federal:
Year: 2020
EM Manifest ID: 1100036
Generator EPA ID: CAL000315765
Shipment Date: 2020-02-13
Manifest Number: 013440875FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00200
Quantity Waste: 4.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D001

Year: 2020
EM Manifest ID: 1100036
Generator EPA ID: CAL000315765
Shipment Date: 2020-02-13
Manifest Number: 013440875FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00200
Quantity Waste: 4.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D005

Year: 2020
EM Manifest ID: 1100036
Generator EPA ID: CAL000315765
Shipment Date: 2020-02-13
Manifest Number: 013440875FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00200
Quantity Waste: 4.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D007

Year: 2020
EM Manifest ID: 1100036
Generator EPA ID: CAL000315765
Shipment Date: 2020-02-13
Manifest Number: 013440875FLE
Line Number: 1

DOLLAR TREE #03493 (Continued) **S113146066**

Method Code: H141
Quantity Tons: 0.00200
Quantity Waste: 4.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D035

State:
Year: 2020
EM Manifest ID: 1100036
Generator EPA ID: CAL000315765
Shipment Date: 2020-02-13
Manifest Number: 013440875FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00200
Quantity Waste: 4.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
State Code: 214

Year: 2020
EM Manifest ID: 1131848
Shipment Date: 2/13/2020
Receipt Date: 2/28/2020
Manifest Number: 013440877FLE
Generator EPA ID: CAL000315765
Name: AUTO ZONE #3711
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 559-747-0472
Transporter 1 EPA ID: MNS000110924
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: CAR000175422
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: AZR000515924
TSDF Name: YUMA YES WASTE TRANSFER FACILITY
TSDF Address 1: 2730 E 13TH ST
TSDF Address 2: Not reported
TSDF City: YUMA
TSDF Zip: 85365-1901
TSDF Telephone: Not reported

State:
Year: 2020
EM Manifest ID: 1131848
Generator EPA ID: CAL000315765
Shipment Date: 2020-02-13

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest Number:	013440877FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00500
Quantity Waste:	10.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331

Year:	2020
EM Manifest ID:	1104456
Shipment Date:	2/13/2020
Receipt Date:	3/5/2020
Manifest Number:	013440876FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	775-575-2760
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NVD980895338
TSDF Name:	21st Century Environmental Management of Nevada, LLC
TSDF Address 1:	2095 Newlands Drive East
TSDF Address 2:	Not reported
TSDF City:	Fernley
TSDF Zip:	89408
TSDF Telephone:	Not reported

State:

Year:	2020
EM Manifest ID:	1104456
Generator EPA ID:	CAL000315765
Shipment Date:	2020-02-13
Manifest Number:	013440876FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.01000
Quantity Waste:	20.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
State Code:	331

Detail Two:

Year:	2019

DOLLAR TREE #03493 (Continued) **S113146066**

EM Manifest ID:	9e17dee4-ee6e-4345-854f-f8771bfb233b
Shipment Date:	9/13/2019
Receipt Date:	9/18/2019
Manifest Number:	020387658JJK
Generator EPA ID:	CAL000315765
Name:	AUTOZONE #3711
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	800-424-9300
Contact:	Not reported
Contact Telephone:	559-747-0472
Transporter 1 EPA ID:	CAD028277036
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000175422
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	AZR000521146
TSDF Name:	YUMA YES 2 WASTE TRANSFER STATION
TSDF Address 1:	6500 S US HIGHWAY 95
TSDF Address 2:	Not reported
TSDF City:	YUMA
TSDF Zip:	85365
TSDF Telephone:	Not reported

State:

Year:	2019
EM Manifest ID:	9e17dee4-ee6e-4345-854f-f8771bfb233b
Generator EPA ID:	CAL000315765
Shipment Date:	2019-09-13
Manifest Number:	020387658JJK
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	352

Year:	2019
EM Manifest ID:	06f14ea3-5c47-4cae-83d3-70804fbc1f47
Shipment Date:	4/30/2019
Receipt Date:	5/17/2019
Manifest Number:	007042259SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	800-483-3718
Contact:	Bryan Blair
Contact Telephone:	559-747-0472
Transporter 1 EPA ID:	TXR000081205
Transporter 1 Emergency Number:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Transporter 2 EPA ID: MAD039322250
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAD059494310
TSDF Name: Clean Harbors San Jose LLC
TSDF Address 1: 1021 Berryessa Road
TSDF Address 2: Not reported
TSDF City: San Jose
TSDF Zip: 95133
TSDF Telephone: 800-483-3718

State:
Year: 2019
EM Manifest ID: 06f14ea3-5c47-4cae-83d3-70804fbc1f47
Generator EPA ID: CAL000315765
Shipment Date: 2019-04-30
Manifest Number: 007042259SKS
Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2019
EM Manifest ID: 309453
Shipment Date: 3/11/2019
Receipt Date: 3/21/2019
Manifest Number: 013127741FLE
Generator EPA ID: CAL000315765
Name: AUTOZONE
Address: 1555 N. FARMERSVILLE BLVD
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223
Telephone: 877-577-2669
Contact: Not reported
Contact Telephone: 775-575-2760
Transporter 1 EPA ID: MNS000110924
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MNS000110924
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: NVD980895338
TSDF Name: 21st Century Environmental Management of Nevada, LLC
TSDF Address 1: 2095 Newlands Drive East
TSDF Address 2: Not reported
TSDF City: Fernley
TSDF Zip: 89408
TSDF Telephone: Not reported

Federal:
Year: 2019
EM Manifest ID: 309453
Generator EPA ID: CAL000315765
Shipment Date: 2019-03-11

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D001
Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D005
Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D007
Year:	2019
EM Manifest ID:	309453
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127741FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D035
Year:	2019

DOLLAR TREE #03493 (Continued) **S113146066**

EM Manifest ID: 309453
Generator EPA ID: CAL000315765
Shipment Date: 2019-03-11
Manifest Number: 013127741FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00450
Quantity Waste: 9.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D001

Year: 2019
EM Manifest ID: 309453
Generator EPA ID: CAL000315765
Shipment Date: 2019-03-11
Manifest Number: 013127741FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00450
Quantity Waste: 9.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
Federal Code: D035

State:
Year: 2019
EM Manifest ID: 309453
Generator EPA ID: CAL000315765
Shipment Date: 2019-03-11
Manifest Number: 013127741FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00200
Quantity Waste: 4.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
State Code: 214

Year: 2019
EM Manifest ID: 309453
Generator EPA ID: CAL000315765
Shipment Date: 2019-03-11
Manifest Number: 013127741FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00450
Quantity Waste: 9.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Type:	Pounds
State Code:	331
Year:	2019
EM Manifest ID:	309452
Shipment Date:	3/11/2019
Receipt Date:	3/21/2019
Manifest Number:	013127740FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE
Address:	1555 N. FARMERSVILLE BLVD
Address 2:	Not reported
City:	FARMERSVILLE
Zip:	93223
Telephone:	877-577-2669
Contact:	Not reported
Contact Telephone:	323-776-6233
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MNS000110924
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	Rho Chem LLC
TSDF Address 1:	425 Isis Ave.
TSDF Address 2:	Not reported
TSDF City:	Inglewood
TSDF Zip:	90301
TSDF Telephone:	Not reported

Federal:

Year:	2019
EM Manifest ID:	309452
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127740FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00450
Quantity Waste:	9.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Fiber or plastic boxes, cartons, cases
Quantity Type:	Pounds
Federal Code:	D008

State:

Year:	2019
EM Manifest ID:	309452
Generator EPA ID:	CAL000315765
Shipment Date:	2019-03-11
Manifest Number:	013127740FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00450
Quantity Waste:	9.000000
Quantity Unit:	P

DOLLAR TREE #03493 (Continued) **S113146066**

Number of Containers: 1
Type of Container: Fiber or plastic boxes, cartons, cases
Quantity Type: Pounds
State Code: 181

Year: 2019
EM Manifest ID: 4d267f8e-ee3e-4978-9dc4-c55517cfba14
Shipment Date: 1/8/2019
Receipt Date: 1/21/2019
Manifest Number: 006721084SKS
Generator EPA ID: CAL000315765
Name: AUTOZONE # 3711
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported
City: FARMERSVILLE
Zip: 93223
Telephone: 800-483-3718
Contact: Bryan Blair
Contact Telephone: 559-747-0472
Transporter 1 EPA ID: TXR000081205
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: MAD039322250
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAD059494310
TSDF Name: Clean Harbors San Jose LLC
TSDF Address 1: 1021 Berryessa Road
TSDF Address 2: Not reported
TSDF City: San Jose
TSDF Zip: 95133
TSDF Telephone: 800-483-3718

State:
Year: 2019
EM Manifest ID: 4d267f8e-ee3e-4978-9dc4-c55517cfba14
Generator EPA ID: CAL000315765
Shipment Date: 2019-01-08
Manifest Number: 006721084SKS
Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: Metal drums, barrels, kegs
Quantity Type: Pounds
State Code: 352

Year: 2019
EM Manifest ID: 491830
Shipment Date: 1/8/2019
Receipt Date: 1/31/2019
Manifest Number: 006721083SKS
Generator EPA ID: CAL000315765
Name: AUTOZONE # 3711
Address: 1555 N FARMERSVILLE BLVD
Address 2: Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

City:	FARMERSVILLE
Zip:	93223
Telephone:	800-483-3718
Contact:	Bryan Blair
Contact Telephone:	559-747-0472
Transporter 1 EPA ID:	TXR000081205
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NED981723513
TSDF Name:	Clean Harbors Environmental Services, Inc.
TSDF Address 1:	2247 South Highway 71
TSDF Address 2:	Not reported
TSDF City:	Kimball
TSDF Zip:	69145
TSDF Telephone:	800-483-3718

Federal:

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D001

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D005

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P

DOLLAR TREE #03493 (Continued) **S113146066**

Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D007
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D008
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D018
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D035
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	D039
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	F001
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	F002
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	F003
Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08

DOLLAR TREE #03493 (Continued) **S113146066**

Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
Federal Code:	F005

State:

Year:	2019
EM Manifest ID:	491830
Generator EPA ID:	CAL000315765
Shipment Date:	2019-01-08
Manifest Number:	006721083SKS
Line Number:	2
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	Metal drums, barrels, kegs
Quantity Type:	Pounds
State Code:	223

Detail Two:

Year:	2018
EM Manifest ID:	006012322SKS20170801_D_1
Shipment Date:	8/1/2017
Receipt Date:	8/25/2017
Manifest Number:	006012322SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

State:

Year:	2018

DOLLAR TREE #03493 (Continued) **S113146066**

EM Manifest ID:	006012322SKS20170801_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-08-01
Manifest Number:	006012322SKS
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

Year:	2018
EM Manifest ID:	006236242SKS20180501_D_1
Shipment Date:	5/1/2018
Receipt Date:	5/25/2018
Manifest Number:	006236242SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

State:

Year:	2018
EM Manifest ID:	006236242SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236242SKS
Line Number:	1
Method Code:	H141
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

DOLLAR TREE #03493 (Continued) **S113146066**

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Shipment Date:	5/1/2018
Receipt Date:	5/25/2018
Manifest Number:	006236243SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	NED981723513
TSDF Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES IN
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

Federal:

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236243SKS
Line Number:	1
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236243SKS
Line Number:	1
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	F001

Year: 2018

DOLLAR TREE #03493 (Continued) **S113146066**

EM Manifest ID:	006236243SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236243SKS
Line Number:	1
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	F002

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236243SKS
Line Number:	1
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	F003

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236243SKS
Line Number:	1
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	F005

State:

Year:	2018
EM Manifest ID:	006236243SKS20180501_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-05-01
Manifest Number:	006236243SKS
Line Number:	1
Method Code:	H040
Quantity Tons:	0.10000
Quantity Waste:	200.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Type:	NULL
State Code:	223
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Shipment Date:	4/24/2017
Receipt Date:	5/9/2017
Manifest Number:	009343905FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	CAR000210617
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD980884183
TSDF Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

Federal:

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Type:	NULL
Federal Code:	D005
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D007
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D035

Year: 2018
EM Manifest ID: 009343905FLE20170424_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-04-24
Manifest Number: 009343905FLE
Line Number: 3
Method Code: H141
Quantity Tons: 0.00100
Quantity Waste: 2.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

Year: 2018
EM Manifest ID: 009343905FLE20170424_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-04-24
Manifest Number: 009343905FLE
Line Number: 3
Method Code: H141
Quantity Tons: 0.00100
Quantity Waste: 2.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D035

Year: 2018
EM Manifest ID: 009343905FLE20170424_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-04-24
Manifest Number: 009343905FLE
Line Number: 4
Method Code: H141
Quantity Tons: 0.00200
Quantity Waste: 4.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D008

State:
Year: 2018
EM Manifest ID: 009343905FLE20170424_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-04-24
Manifest Number: 009343905FLE

DOLLAR TREE #03493 (Continued) **S113146066**

Line Number:	1
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	214
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00100
Quantity Waste:	2.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	4
Method Code:	H141
Quantity Tons:	0.00200
Quantity Waste:	4.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	181
Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1

DOLLAR TREE #03493 (Continued) **S113146066**

Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	5
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	009343905FLE20170424_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-04-24
Manifest Number:	009343905FLE
Line Number:	6
Method Code:	H141
Quantity Tons:	0.00850
Quantity Waste:	17.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	005961783SKS20170317_D_1
Shipment Date:	3/17/2017
Receipt Date:	4/3/2017
Manifest Number:	005961783SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

State:

Year:	2018
EM Manifest ID:	005961783SKS20170317_D_1

DOLLAR TREE #03493 (Continued) **S113146066**

Generator EPA ID:	CAL000315765
Shipment Date:	2017-03-17
Manifest Number:	005961783SKS
Line Number:	1
Method Code:	H141
Quantity Tons:	0.05000
Quantity Waste:	100.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	352

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Shipment Date:	2/27/2018
Receipt Date:	3/29/2018
Manifest Number:	010209667FLE
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	MNS000110924
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	NED986382133
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD008364432
TSDF Name:	RHO CHEM LLC
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported
TSDF City:	Not reported
TSDF Zip:	Not reported
TSDF Telephone:	Not reported

Federal:

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1

DOLLAR TREE #03493 (Continued) **S113146066**

Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D005

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D007

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00300
Quantity Waste:	6.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001

DOLLAR TREE #03493 (Continued) **S113146066**

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00300
Quantity Waste:	6.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D008

State:

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00350
Quantity Waste:	7.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	214

Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00300
Quantity Waste:	6.000000
Quantity Unit:	P
Number of Containers:	1

DOLLAR TREE #03493 (Continued) **S113146066**

Type of Container:	NULL
Quantity Type:	NULL
State Code:	331
Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00150
Quantity Waste:	3.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	181
Year:	2018
EM Manifest ID:	010209667FLE20180227_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2018-02-27
Manifest Number:	010209667FLE
Line Number:	4
Method Code:	H141
Quantity Tons:	0.00600
Quantity Waste:	12.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331
Year:	2018
EM Manifest ID:	006323250SKS20171215_D_1
Shipment Date:	12/15/2017
Receipt Date:	1/17/2018
Manifest Number:	006323250SKS
Generator EPA ID:	CAL000315765
Name:	AUTOZONE # 3711
Address:	Not reported
Address 2:	Not reported
City:	Not reported
Zip:	Not reported
Telephone:	Not reported
Contact:	Not reported
Contact Telephone:	Not reported
Transporter 1 EPA ID:	TXR000081205
Transporter 1 Emergency Number:	Not reported
Transporter 2 EPA ID:	MAD039322250
Transporter 2 Emergency Number:	Not reported
TSDF EPA ID:	CAD059494310
TSDF Name:	CLEAN HARBORS SAN JOSE
TSDF Address 1:	Not reported
TSDF Address 2:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF City: Not reported
TSDF Zip: Not reported
TSDF Telephone: Not reported

State:
Year: 2018
EM Manifest ID: 006323250SKS20171215_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-12-15
Manifest Number: 006323250SKS
Line Number: 1
Method Code: H141
Quantity Tons: 0.10000
Quantity Waste: 200.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 352

Year: 2018
EM Manifest ID: 010159347FLE20171009_D_1
Shipment Date: 10/9/2017
Receipt Date: 10/30/2017
Manifest Number: 010159347FLE
Generator EPA ID: CAL000315765
Name: AUTOZONE # 3711
Address: Not reported
Address 2: Not reported
City: Not reported
Zip: Not reported
Telephone: Not reported
Contact: Not reported
Contact Telephone: Not reported
Transporter 1 EPA ID: MNS000110924
Transporter 1 Emergency Number: Not reported
Transporter 2 EPA ID: NED986382133
Transporter 2 Emergency Number: Not reported
TSDF EPA ID: CAD008364432
TSDF Name: RHO CHEM LLC
TSDF Address 1: Not reported
TSDF Address 2: Not reported
TSDF City: Not reported
TSDF Zip: Not reported
TSDF Telephone: Not reported

Federal:
Year: 2018
EM Manifest ID: 010159347FLE20171009_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-10-09
Manifest Number: 010159347FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00250
Quantity Waste: 5.000000
Quantity Unit: P

DOLLAR TREE #03493 (Continued) **S113146066**

Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D001
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D005
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D007
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	1
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
Federal Code:	D035
Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	2
Method Code:	H141

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Tons: 0.00550
Quantity Waste: 11.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D001

Year: 2018
EM Manifest ID: 010159347FLE20171009_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-10-09
Manifest Number: 010159347FLE
Line Number: 2
Method Code: H141
Quantity Tons: 0.00550
Quantity Waste: 11.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D035

Year: 2018
EM Manifest ID: 010159347FLE20171009_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-10-09
Manifest Number: 010159347FLE
Line Number: 3
Method Code: H141
Quantity Tons: 0.00250
Quantity Waste: 5.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
Federal Code: D008

State:
Year: 2018
EM Manifest ID: 010159347FLE20171009_D_1
Generator EPA ID: CAL000315765
Shipment Date: 2017-10-09
Manifest Number: 010159347FLE
Line Number: 1
Method Code: H141
Quantity Tons: 0.00250
Quantity Waste: 5.000000
Quantity Unit: P
Number of Containers: 1
Type of Container: NULL
Quantity Type: NULL
State Code: 214

Year: 2018
EM Manifest ID: 010159347FLE20171009_D_1
Generator EPA ID: CAL000315765

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	2
Method Code:	H141
Quantity Tons:	0.00550
Quantity Waste:	11.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	3
Method Code:	H141
Quantity Tons:	0.00250
Quantity Waste:	5.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	181

Year:	2018
EM Manifest ID:	010159347FLE20171009_D_1
Generator EPA ID:	CAL000315765
Shipment Date:	2017-10-09
Manifest Number:	010159347FLE
Line Number:	4
Method Code:	H141
Quantity Tons:	0.01050
Quantity Waste:	21.000000
Quantity Unit:	P
Number of Containers:	1
Type of Container:	NULL
Quantity Type:	NULL
State Code:	331

Additional Info:

Year:	2017
Gen EPA ID:	CAL000315765

Shipment Date:	20171215
Creation Date:	8/28/2018 18:30:25
Receipt Date:	20180117
Manifest ID:	006323250SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171009
Creation Date:	7/16/2018 18:30:36
Receipt Date:	20171030
Manifest ID:	010159347FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0105
Waste Quantity:	21
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171009
Creation Date:	7/16/2018 18:30:36
Receipt Date:	20171030
Manifest ID:	010159347FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025

DOLLAR TREE #03493 (Continued) **S113146066**

Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171009
Creation Date:	7/16/2018 18:30:36
Receipt Date:	20171030
Manifest ID:	010159347FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0055
Waste Quantity:	11
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20171009
Creation Date:	7/16/2018 18:30:36
Receipt Date:	20171030
Manifest ID:	010159347FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS TRANSP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	20170801
Creation Date:	6/13/2018 18:31:39
Receipt Date:	20170825
Manifest ID:	006012322SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	MAD039322250
Trans 2 Name:	CLEAN HARBORS ENVIRONMENTAL SVC INC
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20170424
Creation Date:	6/27/2018 18:30:27
Receipt Date:	20170509
Manifest ID:	009343905FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D008
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20170424
Creation Date:	6/27/2018 18:30:27
Receipt Date:	20170509
Manifest ID:	009343905FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617

DOLLAR TREE #03493 (Continued) **S113146066**

Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.001
Waste Quantity:	2
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170424
Creation Date:	6/27/2018 18:30:27
Receipt Date:	20170509
Manifest ID:	009343905FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0015
Waste Quantity:	3
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170424
Creation Date:	6/27/2018 18:30:27
Receipt Date:	20170509
Manifest ID:	009343905FLE
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAR000210617
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL OF CALIFORNIA
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035

DOLLAR TREE #03493 (Continued) **S113146066**

Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2016
Gen EPA ID:	CAL000315765
Shipment Date:	20151215
Creation Date:	6/8/2016 18:31:29
Receipt Date:	20151221
Manifest ID:	005101246SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151111
Creation Date:	1/11/2016 22:16:27
Receipt Date:	20151117
Manifest ID:	001143749PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035

DOLLAR TREE #03493 (Continued) **S113146066**

Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151111
Creation Date:	1/11/2016 22:16:27
Receipt Date:	20151117
Manifest ID:	001143749PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150929
Creation Date:	12/22/2015 22:15:38
Receipt Date:	20151009
Manifest ID:	004784926SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	20150526
Creation Date:	1/19/2016 22:15:27
Receipt Date:	20150617
Manifest ID:	001020823PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.006
Waste Quantity:	12
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150526
Creation Date:	8/20/2015 22:15:27
Receipt Date:	20150609
Manifest ID:	004789966SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150526
Creation Date:	1/19/2016 22:15:27
Receipt Date:	20150617
Manifest ID:	001020823PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0025
Waste Quantity:	5
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035

DOLLAR TREE #03493 (Continued) **S113146066**

Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2015
Gen EPA ID:	CAL000315765
Shipment Date:	20151215
Creation Date:	6/8/2016 18:31:29
Receipt Date:	20151221
Manifest ID:	005101246SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05

DOLLAR TREE #03493 (Continued) **S113146066**

Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151111
Creation Date:	1/11/2016 22:16:27
Receipt Date:	20151117
Manifest ID:	001143749PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20151111
Creation Date:	1/11/2016 22:16:27
Receipt Date:	20151117
Manifest ID:	001143749PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	20150929
Creation Date:	12/22/2015 22:15:38
Receipt Date:	20151009
Manifest ID:	004784926SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150526
Creation Date:	8/20/2015 22:15:27
Receipt Date:	20150609
Manifest ID:	004789966SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20150526
Creation Date:	1/19/2016 22:15:27
Receipt Date:	20150617
Manifest ID:	001020823PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150526
Creation Date:	1/19/2016 22:15:27
Receipt Date:	20150617
Manifest ID:	001020823PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.006
Waste Quantity:	12
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035

DOLLAR TREE #03493 (Continued) **S113146066**

Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20150107
Creation Date:	8/21/2015 22:15:14
Receipt Date:	20150119
Manifest ID:	000922045PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005

DOLLAR TREE #03493 (Continued) **S113146066**

Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2014
Gen EPA ID:	CAL000315765
Shipment Date:	20141107
Creation Date:	3/27/2015 22:15:05
Receipt Date:	20141117
Manifest ID:	004524336SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140820
Creation Date:	Not reported
Receipt Date:	Not reported
Manifest ID:	000102201DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.005
Waste Quantity:	10
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Shipment Date:	20140820
Creation Date:	3/4/2015 8:54:13
Receipt Date:	20140902
Manifest ID:	000102201DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	791 - Liquids with pH < 2 792 Liquids with pH < 2 with metals
RCRA Code:	D002
Meth Code:	H121 - Neutralization Only
Quantity Tons:	0.003
Waste Quantity:	6
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20140818
Creation Date:	10/31/2014 22:14:51
Receipt Date:	20140902
Manifest ID:	004397987SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.035
Waste Quantity:	70
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20140326
Creation Date:	8/19/2014 22:15:10
Receipt Date:	20140402
Manifest ID:	000723090PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERVICE

DOLLAR TREE #03493 (Continued) **S113146066**

TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140326
Creation Date:	8/19/2014 22:15:10
Receipt Date:	20140402
Manifest ID:	000723090PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERVICE
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20140326
Creation Date:	8/19/2014 22:15:10
Receipt Date:	20140402
Manifest ID:	000723090PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERVICE
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	122 - Alkaline solution without metals (pH > 12.5
RCRA Code:	D002
Meth Code:	H121 - Neutralization Only

DOLLAR TREE #03493 (Continued) **S113146066**

Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2013
Gen EPA ID:	CAL000315765
Shipment Date:	20131120
Creation Date:	3/1/2014 22:15:07
Receipt Date:	20131221
Manifest ID:	003947440SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	AZR000508515
Trans 2 Name:	SLT
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.03
Waste Quantity:	60
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131022
Creation Date:	3/12/2014 22:15:10
Receipt Date:	20131101
Manifest ID:	000626409PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	331 - Off-specification, aged, or surplus organics
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P

DOLLAR TREE #03493 (Continued) **S113146066**

Additional Code 1:	D001
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131022
Creation Date:	3/12/2014 22:15:10
Receipt Date:	20131101
Manifest ID:	000626409PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	791 - Liquids with pH < 2 792 Liquids with pH < 2 with metals
RCRA Code:	D002
Meth Code:	H121 - Neutralization Only
Quantity Tons:	0.0035
Waste Quantity:	7
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131022
Creation Date:	3/12/2014 22:15:10
Receipt Date:	20131101
Manifest ID:	000626409PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	214 - Unspecified solvent mixture
RCRA Code:	D035
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0045
Waste Quantity:	9
Quantity Unit:	P
Additional Code 1:	D007
Additional Code 2:	D005
Additional Code 3:	D001
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20131022
Creation Date:	3/12/2014 22:15:10

DOLLAR TREE #03493 (Continued) **S113146066**

Receipt Date:	20131101
Manifest ID:	000626409PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVD980895338
Trans 2 Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0055
Waste Quantity:	11
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20130503
Creation Date:	9/28/2013 22:15:06
Receipt Date:	Not reported
Manifest ID:	003564311SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20130111
Creation Date:	6/29/2013 22:15:06
Receipt Date:	20130128
Manifest ID:	003478083SKS
Trans EPA ID:	TXR000081205
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	NVT330010000

DOLLAR TREE #03493 (Continued) **S113146066**

Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.0275
Waste Quantity:	55
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2012
Gen EPA ID:	CAL000315765
Shipment Date:	20120424
Creation Date:	7/16/2012 20:30:20
Receipt Date:	20120510
Manifest ID:	000053348DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	791 - Liquids with pH < 2 792 Liquids with pH < 2 with metals
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20120411
Creation Date:	10/19/2012 22:15:22
Receipt Date:	20120423
Manifest ID:	003179563SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported

DOLLAR TREE #03493 (Continued) **S113146066**

Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20120313
Creation Date:	4/30/2012 20:30:14
Receipt Date:	20120320
Manifest ID:	004759708FLE
Trans EPA ID:	CAT982507154
Trans Name:	PARC ENVIRONMENTAL
Trans 2 EPA ID:	CAD983649880
Trans 2 Name:	PSC ENVIRONMENTAL SERVICE OF POMONA LP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.238
Waste Quantity:	70
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20120313
Creation Date:	4/30/2012 20:30:14
Receipt Date:	20120320
Manifest ID:	004759708FLE
Trans EPA ID:	CAT982507154
Trans Name:	PARC ENVIRONMENTAL
Trans 2 EPA ID:	CAD983649880
Trans 2 Name:	PSC ENVIRONMENTAL SERVICE OF POMONA LP
TSDF EPA ID:	CAD008364432
Trans Name:	RHO CHEM LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P

DOLLAR TREE #03493 (Continued) **S113146066**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20120210
Creation Date:	7/16/2012 20:30:17
Receipt Date:	20120223
Manifest ID:	002870744SKS
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	OKD981588791
Trans 2 Name:	TRIAD TRANSPORT INC
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY NEVADA
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	AUTO ZONE #3711
Address:	1555 N FARMERSVILLE BLVD
Address 2:	Not reported
City,State,Zip:	FARMERSVILLE, CA 93223
EPA ID:	CAL000315765
Inactive Date:	Not reported
Create Date:	01/26/2007
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	DEPT 8190, 123 SOUTH FRONT STREET
Mailing Address 2:	Not reported
Mailing City,State,Zip:	MEMPHIS, TN 38103
Owner Name:	AUTOZONE INC
Owner Address:	123 SOUTH FRONT ST
Owner Address 2:	Not reported
Owner City,State,Zip:	MEMPHIS, TN 381033607
Contact Name:	BRYAN BLAIR
Contact Address:	DEPT 8190, 123 SOUTH FRONT STREET
Contact Address 2:	Not reported
City,State,Zip:	MEMPHIS, TN 38103
Facility Status:	Active
Facility Type:	PERMANENT
Category:	STATE
Latitude:	36.308571
Longitude:	-119.207076

DOLLAR TREE #03493 (Continued) **S113146066**

NAICS:

EPA ID:	CAL000315765
Create Date:	2009-12-03 12:41:18.000
NAICS Code:	45299
NAICS Description:	All Other General Merchandise Stores
Issued EPA ID Date:	2007-01-26 09:43:54.73000
Inactive Date:	Not reported
Facility Name:	AUTO ZONE #3711
Facility Address:	1555 N FARMERSVILLE BLVD
Facility Address 2:	Not reported
Facility City:	FARMERSVILLE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	932231029

F25 **AUTOZONE #3711** **CUPA Listings** **S120051010**
SSW **1555 N FARMERSVILLE BLVD 221** **N/A**
1/8-1/4 **FARMERSVILLE, CA 93223**
0.208 mi.
1100 ft. **Site 6 of 6 in cluster F**

Relative: **Lower**

Actual: **363 ft.**

CUPA TULARE:

Name:	AUTOZONE #3711
Address:	1555 N FARMERSVILLE BLVD 221
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10140137
Facility ID:	FA1348329
APN:	128-200-053
Latitude:	36.309669804
Longitude:	-119.20777868
PE:	2223
TB Fin Fees Description:	HM - SMALL FACILITY - < 5 CHEMICALS
Current Status:	1
CD Fin billing Status Description:	Active, billable

Name:	AUTOZONE #3711
Address:	1555 N FARMERSVILLE BLVD 221
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10140137
Facility ID:	FA1348329
APN:	128-200-053
Latitude:	36.309669804
Longitude:	-119.20777868
PE:	2258
TB Fin Fees Description:	HW - LARGE GENERATOR
Current Status:	1
CD Fin billing Status Description:	Active, billable

26
NW
1/8-1/4
0.212 mi.
1117 ft.

KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE
361 TERRY ST
FARMERSVILLE, CA 93223

CUPA Listings **S120051495**
CERS **N/A**

Relative:
Lower

Actual:
358 ft.

CUPA TULARE:

Name:	KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE
Address:	361 TERRY ST
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	10605985
Facility ID:	FA0003328
APN:	128-270-008
Latitude:	36.317742427
Longitude:	-119.21197176
PE:	2223
TB Fin Fees Description:	HM - SMALL FACILITY - < 5 CHEMICALS
Current Status:	1
CD Fin billing Status Description:	Active, billable

CERS:

Name:	KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE
Address:	361 TERRY ST
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	177352
CERS ID:	10605985
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	177352
Site Name:	KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE
Violation Date:	12-09-2014
Citation:	HSC 6.95 25508.1(a)-(e) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(e)
Violation Description:	Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name.
Violation Notes:	Returned to compliance on 12/29/2014.
Violation Division:	Tulare County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	177352
Site Name:	KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE
Violation Date:	12-09-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 12/29/2014.
Violation Division:	Tulare County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	177352

KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE (Continued) **S120051495**

Site Name: KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE
Violation Date: 12-09-2014
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to establish and electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material.
Violation Notes: Returned to compliance on 12/29/2014.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 177352
Site Name: KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE
Violation Date: 12-09-2014
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.
Violation Notes: Returned to compliance on 12/29/2014.
Violation Division: Tulare County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-09-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-10-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Mark
Eval Division: Tulare County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Enforcement Action:
Site ID: 177352
Site Name: KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE
Site Address: 361 TERRY ST
Site City: FARMERSVILLE
Site Zip: 93223
Enf Action Date: 12-09-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Tulare County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE (Continued) **S120051495**

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Tulare County Environmental Health
Entity Title:	Not reported
Affiliation Address:	5957 South Mooney Boulevard
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93277
Affiliation Phone:	(559) 624-7400,

Affiliation Type Desc:	Document Preparer
Entity Name:	WENDY MELDRUM
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Identification Signer
Entity Name:	KEN ALLISON
Entity Title:	GENERAL MANAGER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	DON ROSE OIL CO-PROPANE
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	DON ROSE
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(559) 733-4717,

Affiliation Type Desc:	Environmental Contact
Entity Name:	MARK SCHAUDRA
Entity Title:	Not reported
Affiliation Address:	PO BOX 508
Affiliation City:	VISALIA
Affiliation State:	CA

KINGS PETROLEUM LLC DBA DON ROSE OIL CO - PROPANE (Continued) **S120051495**

Affiliation Country:	Not reported
Affiliation Zip:	93279
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	PO BOX 508
Affiliation City:	VISALIA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	93279
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	ALNOOR HIRANI
Entity Title:	Not reported
Affiliation Address:	205 N BEN MADDOX WY
Affiliation City:	VISALIA
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	93291
Affiliation Phone:	(559) 733-4717,

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27 **FARMERSVILLE MINI MARKET** **LUST** **S104404674**
South **1456 FARMERSVILLE** **Cortese** **N/A**
1/4-1/2 **FARMERSVILLE, CA 93223** **HIST CORTESE**
0.395 mi. **CERS**
2088 ft.

Relative:
Lower

Actual:
363 ft.

LUST:

Name:	FARMERSVILLE MINI MARKET
Address:	1456 FARMERSVILLE BLVD N
City,State,Zip:	FARMERSVILLE, CA 93223
Lead Agency:	TULARE COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0610700393
Global Id:	T0610700393
Latitude:	36.3100669
Longitude:	-119.206732
Status:	Completed - Case Closed
Status Date:	07/09/1998
Case Worker:	JOE
RB Case Number:	5T54000419
Local Agency:	TULARE COUNTY
File Location:	Not reported
Local Case Number:	743
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0610700393
Contact Type:	Local Agency Caseworker
Contact Name:	JOEL MARTENS
Organization Name:	TULARE COUNTY
Address:	5957 So. Mooney Blvd

FARMERSVILLE MINI MARKET (Continued) **S104404674**

City: Visalia
Email: jmartens@tularehhsa.org
Phone Number: 5596247419

LUST:
Global Id: T0610700393
Action Type: Other
Date: 06/11/1997
Action: Leak Discovery

Global Id: T0610700393
Action Type: Other
Date: 09/05/1997
Action: Leak Reported

LUST:
Global Id: T0610700393
Status: Open - Case Begin Date
Status Date: 06/11/1997

Global Id: T0610700393
Status: Completed - Case Closed
Status Date: 07/09/1998

LUST REG 5:
Name: FARMERSVILLE MINI MARKET
Address: 1456 FARMERSVILLE BLVD N
City: FARMERSVILLE
Region: 5
Status: Case Closed
Case Number: 5T54000419
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: DAM
Lead Agency: Local
Program: LUST
MTBE Code: 1

CORTESE:
Name: FARMERSVILLE MINI MARKET
Address: 1456 FARMERSVILLE BLVD N
City,State,Zip: FARMERSVILLE, CA 93223
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0610700393
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported

FARMERSVILLE MINI MARKET (Continued) **S104404674**

Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	FARMERSVILLE MINI MARKET
edr_fadd1:	1456 FARMERSVILLE
City,State,Zip:	FARMERSVILLE, CA 93223
Region:	CORTESE
Facility County Code:	54
Reg By:	LTNKA
Reg Id:	5T54000419

CERS:

Name:	FARMERSVILLE MINI MARKET
Address:	1456 FARMERSVILLE BLVD N
City,State,Zip:	FARMERSVILLE, CA 93223
Site ID:	260080
CERS ID:	T0610700393
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JOEL MARTENS - TULARE COUNTY
Entity Title:	Not reported
Affiliation Address:	5957 So. Mooney Blvd
Affiliation City:	Visalia
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	5596247419,

28
South
1/4-1/2
0.453 mi.
2392 ft.

NEW ELEMENTARY SCHOOL **ENVIROSTOR** **S105629017**
CITRUS DRIVE/FARMERSVILLE BOULEVARD **SCH** **N/A**
FARMERSVILLE, CA 93223

Relative:
Lower

Actual:
363 ft.

ENVIROSTOR:

Name:	NEW ELEMENTARY SCHOOL
Address:	CITRUS DRIVE/FARMERSVILLE BOULEVARD
City,State,Zip:	FARMERSVILLE, CA 93223
Facility ID:	54010011
Status:	No Further Action
Status Date:	11/07/2001
Site Code:	104165
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	12.4
NPL:	NO

NEW ELEMENTARY SCHOOL (Continued) **S105629017**

Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Kevin Shaddy
Division Branch: Northern California Schools & Santa Susana
Assembly: 26
Senate: 14
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 36.30652
Longitude: -119.2018
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Arsenic Chlordane DDD DDE DDT
Confirmed COC: 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO No Contaminants found
Potential Description: SOIL
Alias Name: FARMERSVILLE USD-CITRUS DR/FARMERSVILLE
Alias Type: Alternate Name
Alias Name: NEW ELEMENTARY SCHOOL
Alias Type: Alternate Name
Alias Name: 104165
Alias Type: Project Code (Site Code)
Alias Name: 54010011
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 11/17/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 02/28/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 11/07/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/06/2001
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported

NEW ELEMENTARY SCHOOL (Continued) **S105629017**

Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: NEW ELEMENTARY SCHOOL
Address: CITRUS DRIVE/FARMERSVILLE BOULEVARD
City,State,Zip: FARMERSVILLE, CA 93223
Facility ID: 54010011
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 12.4
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Kevin Shaddy
Division Branch: Northern California Schools & Santa Susana
Site Code: 104165
Assembly: 26
Senate: 14
Special Program Status: Not reported
Status: No Further Action
Status Date: 11/07/2001
Restricted Use: NO
Funding: School District
Latitude: 36.30652
Longitude: -119.2018
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Arsenic, Arsenic, Chlordane, DDD, DDE, DDT
Confirmed COC: 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, No Contaminants found
Potential Description: SOIL
Alias Name: FARMERSVILLE USD-CITRUS DR/FARMERSVILLE
Alias Type: Alternate Name
Alias Name: NEW ELEMENTARY SCHOOL
Alias Type: Alternate Name
Alias Name: 104165
Alias Type: Project Code (Site Code)
Alias Name: 54010011
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 11/17/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 02/28/2001

NEW ELEMENTARY SCHOOL (Continued) **S105629017**

Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	11/07/2001
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	11/06/2001
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

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29 **PROPOSED MIDDLE SCHOOL** **ENVIROSTOR** **S109548216**
SSE **SOUTHEAST CORNER OF CITRUS DRIVE AND FREEDOM ROAD** **SCH** **N/A**
1/2-1 **FARMERSVILLE, CA 93223**
0.606 mi.
3198 ft.

Relative: **Lower**

Actual: **364 ft.**

ENVIROSTOR:

Name:	PROPOSED MIDDLE SCHOOL
Address:	SOUTHEAST CORNER OF CITRUS DRIVE AND FREEDOM ROAD
City,State,Zip:	FARMERSVILLE, CA 93223
Facility ID:	60000793
Status:	No Further Action
Status Date:	12/10/2009
Site Code:	104616
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	20
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Mellan Songco
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Assembly:	26
Senate:	14
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	36.30661
Longitude:	-119.1990
APN:	129-010-053, 129-010-058, 129-010-059, 129-010-060, 129-010-061
Past Use:	NONE
Potential COC:	Arsenic Chlordane DDE DDT Naturally Occurring Asbestos (NOA

PROPOSED MIDDLE SCHOOL (Continued) **S109548216**

Confirmed COC: 30001-NO 30004-NO 40002-NO 30007-NO 30008-NO No Contaminants found
Potential Description: NMA
Alias Name: 129-010-053
Alias Type: APN
Alias Name: 129-010-058
Alias Type: APN
Alias Name: 129-010-059
Alias Type: APN
Alias Name: 129-010-060
Alias Type: APN
Alias Name: 129-010-061
Alias Type: APN
Alias Name: 104616
Alias Type: Project Code (Site Code)
Alias Name: 60000793
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/10/2009
Comments: Project Manager changed from Mike Hall to Mellan Songco

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/26/2008
Comments: EOAs signed by PM

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 06/11/2008
Comments: DTSC issued a notice to the District that the project manager has been changed to Michael Hall. DA

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement Application
Completed Date: 09/03/2008
Comments: EOA Application

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/10/2009
Comments: DSTC approved the PEA with a no further action determination

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 12/11/2008
Comments: DTSC approved the PEA Workplan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report

PROPOSED MIDDLE SCHOOL (Continued) **S109548216**

Completed Date:	02/13/2008
Comments:	Phase I provided as background - recommends PEA. E-mail contact made 2/13/08.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	01/26/2010
Comments:	DTSC sent a CRU to the accounting unit to summarize costs associated with the PEA.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	PROPOSED MIDDLE SCHOOL
Address:	SOUTHEAST CORNER OF CITRUS DRIVE AND FREEDOM ROAD
City,State,Zip:	FARMERSVILLE, CA 93223
Facility ID:	60000793
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	20
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Mellan Songco
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104616
Assembly:	26
Senate:	14
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	12/10/2009
Restricted Use:	NO
Funding:	School District
Latitude:	36.30661
Longitude:	-119.1990
APN:	129-010-053, 129-010-058, 129-010-059, 129-010-060, 129-010-061
Past Use:	NONE
Potential COC:	Arsenic, Arsenic, Chlordane, DDE, DDT, Naturally Occurring Asbestos (NOA
Confirmed COC:	30001-NO, 30004-NO, 40002-NO, 30007-NO, 30008-NO, No Contaminants found
Potential Description:	NMA
Alias Name:	129-010-053
Alias Type:	APN

PROPOSED MIDDLE SCHOOL (Continued) **S109548216**

Alias Name: 129-010-058
Alias Type: APN
Alias Name: 129-010-059
Alias Type: APN
Alias Name: 129-010-060
Alias Type: APN
Alias Name: 129-010-061
Alias Type: APN
Alias Name: 104616
Alias Type: Project Code (Site Code)
Alias Name: 60000793
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/10/2009
Comments: Project Manager changed from Mike Hall to Mellan Songco

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/26/2008
Comments: EOAs signed by PM

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 06/11/2008
Comments: DTSC issued a notice to the District that the project manager has been changed to Michael Hall. DA

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement Application
Completed Date: 09/03/2008
Comments: EOA Application

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/10/2009
Comments: DSTC approved the PEA with a no further action determination

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 12/11/2008
Comments: DTSC approved the PEA Workplan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/13/2008
Comments: Phase I provided as background - recommends PEA. E-mail contact made 2/13/08.

PROPOSED MIDDLE SCHOOL (Continued) **S109548216**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	01/26/2010
Comments:	DTSC sent a CRU to the accounting unit to summarize costs associated with the PEA.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FARMERSVILLE	S100186523	CITY OF FARMERSVILLE SEWERAGE TRMT	FARMERSVILLE & OUTSIDE CREEK R	93223	ENVIROSTOR

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/06/2022
Next Scheduled EDR Contact: 01/10/2023
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/16/2022
Date Data Arrived at EDR: 08/22/2022
Date Made Active in Reports: 10/24/2022
Number of Days to Update: 63

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/15/2022
Date Data Arrived at EDR: 08/17/2022
Date Made Active in Reports: 10/24/2022
Number of Days to Update: 68

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/15/2022
Date Data Arrived at EDR: 08/17/2022
Date Made Active in Reports: 10/24/2022
Number of Days to Update: 68

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/14/2022
Date Data Arrived at EDR: 06/15/2022
Date Made Active in Reports: 06/21/2022
Number of Days to Update: 6

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/20/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/25/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 10/05/2022
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/25/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 10/05/2022
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/08/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 73

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/03/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/28/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 06/02/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 79

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 06/01/2022
Date Data Arrived at EDR: 06/09/2022
Date Made Active in Reports: 08/26/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/06/2022
Date Data Arrived at EDR: 06/07/2022
Date Made Active in Reports: 08/24/2022
Number of Days to Update: 78

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Semi-Annually

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 06/02/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 79

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/14/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/07/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/28/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/25/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 10/05/2022
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/21/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 09/08/2022
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/09/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/20/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/06/2022
Date Data Arrived at EDR: 06/07/2022
Date Made Active in Reports: 08/23/2022
Number of Days to Update: 77

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 08/12/2022
Date Data Arrived at EDR: 08/16/2022
Date Made Active in Reports: 08/26/2022
Number of Days to Update: 10

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/20/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 10/28/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/29/2022
Date Data Arrived at EDR: 08/18/2022
Date Made Active in Reports: 10/24/2022
Number of Days to Update: 67

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/18/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/25/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 10/05/2022
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/24/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/13/2023
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/18/2022
Date Data Arrived at EDR: 07/18/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 74

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/29/2022
Date Data Arrived at EDR: 08/18/2022
Date Made Active in Reports: 10/24/2022
Number of Days to Update: 67

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/18/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 08/04/2022
Date Data Arrived at EDR: 08/04/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 77

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/18/2022
Date Data Arrived at EDR: 07/18/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 74

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/25/2022
Date Data Arrived at EDR: 05/26/2022
Date Made Active in Reports: 08/11/2022
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/23/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 05/31/2022
Date Data Arrived at EDR: 05/31/2022
Date Made Active in Reports: 08/18/2022
Number of Days to Update: 79

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/19/2022
Date Data Arrived at EDR: 09/19/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 11

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/30/2022
Date Data Arrived at EDR: 07/18/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 74

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 1

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 06/28/2022
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/11/2022
Date Data Arrived at EDR: 08/11/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 50

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/10/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/03/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/03/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/20/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/20/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 10/28/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 10/28/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/12/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/18/2022
Date Data Arrived at EDR: 07/18/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 11

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/18/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/27/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/10/2022
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 69

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 11/03/2022
Next Scheduled EDR Contact: 02/13/2023
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/21/2022
Next Scheduled EDR Contact: 01/10/2023
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/24/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2022
Date Data Arrived at EDR: 07/21/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 71
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23
Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87
Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 10/27/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/09/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/26/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 20
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 08/01/2022
Date Data Arrived at EDR: 08/02/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 59

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 10/04/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/03/2022
Date Data Arrived at EDR: 08/17/2022
Date Made Active in Reports: 08/31/2022
Number of Days to Update: 14

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/14/2022
Date Data Arrived at EDR: 06/15/2022
Date Made Active in Reports: 08/22/2022
Number of Days to Update: 68

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/03/2022
Date Data Arrived at EDR: 08/25/2022
Date Made Active in Reports: 10/24/2022
Number of Days to Update: 60

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/05/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/22/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/25/2022
Date Data Arrived at EDR: 07/01/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 09/30/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/11/2022
Date Data Arrived at EDR: 08/11/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 50

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/10/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 07/08/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 123

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 10/04/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/04/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 10/28/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 08/22/2018
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 08/22/2018
Date Data Arrived at EDR: 10/26/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 08/31/2022
Date Data Arrived at EDR: 08/31/2022
Date Made Active in Reports: 10/31/2022
Number of Days to Update: 61

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 09/06/2022
Date Data Arrived at EDR: 09/06/2022
Date Made Active in Reports: 10/26/2022
Number of Days to Update: 50

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 09/06/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/21/2022
Date Data Arrived at EDR: 06/21/2022
Date Made Active in Reports: 09/08/2022
Number of Days to Update: 79

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 12/07/2021
Date Data Arrived at EDR: 05/09/2022
Date Made Active in Reports: 05/17/2022
Number of Days to Update: 8

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 11/10/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 05/20/2022
Date Data Arrived at EDR: 05/20/2022
Date Made Active in Reports: 08/09/2022
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/25/2022
Date Data Arrived at EDR: 05/26/2022
Date Made Active in Reports: 08/11/2022
Number of Days to Update: 77

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/23/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/30/2022
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/16/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/12/2022
Date Data Arrived at EDR: 07/18/2022
Date Made Active in Reports: 09/29/2022
Number of Days to Update: 73

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/19/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 07/06/2022
Date Data Arrived at EDR: 07/21/2022
Date Made Active in Reports: 10/03/2022
Number of Days to Update: 74

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/09/2022
Date Data Arrived at EDR: 08/10/2022
Date Made Active in Reports: 08/30/2022
Number of Days to Update: 20

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: Varies

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/11/2022
Date Data Arrived at EDR: 08/11/2022
Date Made Active in Reports: 10/28/2022
Number of Days to Update: 78

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/10/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/11/2022
Date Data Arrived at EDR: 08/11/2022
Date Made Active in Reports: 10/28/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/10/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/05/2022
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/03/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/06/2022
Date Data Arrived at EDR: 06/07/2022
Date Made Active in Reports: 08/23/2022
Number of Days to Update: 77

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/06/2022
Date Data Arrived at EDR: 05/31/2022
Date Made Active in Reports: 08/18/2022
Number of Days to Update: 79

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/08/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/03/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 05/31/2022
Date Data Arrived at EDR: 05/31/2022
Date Made Active in Reports: 08/18/2022
Number of Days to Update: 79

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/06/2022
Date Data Arrived at EDR: 06/07/2022
Date Made Active in Reports: 08/23/2022
Number of Days to Update: 77
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 06/10/2022
Date Data Arrived at EDR: 06/10/2022
Date Made Active in Reports: 08/26/2022
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/06/2022
Date Data Arrived at EDR: 06/07/2022
Date Made Active in Reports: 08/23/2022
Number of Days to Update: 77
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region’s active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/06/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/06/2022
Date Data Arrived at EDR: 06/07/2022
Date Made Active in Reports: 08/24/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 08/16/2022
Date Data Arrived at EDR: 08/17/2022
Date Made Active in Reports: 08/18/2022
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/18/2022
Date Data Arrived at EDR: 07/18/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 74

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/28/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/28/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/17/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 09/28/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/05/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/26/2022
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 10/03/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 06/29/2022
Date Data Arrived at EDR: 06/29/2022
Date Made Active in Reports: 07/21/2022
Number of Days to Update: 22

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 07/22/2022
Date Data Arrived at EDR: 07/27/2022
Date Made Active in Reports: 08/01/2022
Number of Days to Update: 5

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 02/13/2023
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/14/2022
Date Data Arrived at EDR: 06/15/2022
Date Made Active in Reports: 09/02/2022
Number of Days to Update: 79

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/20/2022
Date Data Arrived at EDR: 07/20/2022
Date Made Active in Reports: 10/03/2022
Number of Days to Update: 75

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/20/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 05/04/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/28/2022
Number of Days to Update: 83

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/20/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/20/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 09/30/2022
Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/13/2022
Date Data Arrived at EDR: 07/14/2022
Date Made Active in Reports: 09/29/2022
Number of Days to Update: 77

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 05/06/2022
Date Data Arrived at EDR: 05/12/2022
Date Made Active in Reports: 08/01/2022
Number of Days to Update: 81

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 10/05/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 05/06/2022
Date Data Arrived at EDR: 05/12/2022
Date Made Active in Reports: 08/01/2022
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/05/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 07/22/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 10/05/2022
Number of Days to Update: 72

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/04/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2022
Date Data Arrived at EDR: 07/07/2022
Date Made Active in Reports: 09/21/2022
Number of Days to Update: 76

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 09/27/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/11/2022
Date Data Arrived at EDR: 07/11/2022
Date Made Active in Reports: 09/23/2022
Number of Days to Update: 74

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/07/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/21/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 80
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/04/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/19/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82
Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/04/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 03/21/2022
Date Made Active in Reports: 06/15/2022
Number of Days to Update: 86
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 03/22/2022
Date Data Arrived at EDR: 06/24/2022
Date Made Active in Reports: 09/08/2022
Number of Days to Update: 76
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/20/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/04/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/22/2022
Date Data Arrived at EDR: 07/19/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 73

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/21/2022
Next Scheduled EDR Contact: 01/10/2023
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/16/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/15/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/21/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 07/28/2022
Number of Days to Update: 3

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/20/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/24/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 10/28/2022
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/03/2022
Next Scheduled EDR Contact: 02/13/2023
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 05/18/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/03/2022
Next Scheduled EDR Contact: 02/13/2023
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/24/2022
Date Data Arrived at EDR: 08/01/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/03/2022
Next Scheduled EDR Contact: 02/13/2023
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/25/2022
Date Data Arrived at EDR: 05/26/2022
Date Made Active in Reports: 06/01/2022
Number of Days to Update: 6

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/23/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/07/2022
Date Data Arrived at EDR: 07/08/2022
Date Made Active in Reports: 09/21/2022
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/07/2022
Date Data Arrived at EDR: 07/08/2022
Date Made Active in Reports: 09/21/2022
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/18/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/30/2022
Next Scheduled EDR Contact: 01/09/2023
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/04/2022
Date Data Arrived at EDR: 06/30/2022
Date Made Active in Reports: 07/05/2022
Number of Days to Update: 5

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/26/2022
Next Scheduled EDR Contact: 01/10/2023
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 07/27/2022
Date Data Arrived at EDR: 07/27/2022
Date Made Active in Reports: 10/11/2022
Number of Days to Update: 76

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/12/2022
Date Data Arrived at EDR: 05/12/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 6

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/28/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/31/2022
Date Data Arrived at EDR: 05/31/2022
Date Made Active in Reports: 08/18/2022
Number of Days to Update: 79

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/25/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/27/2021
Date Data Arrived at EDR: 03/04/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 88

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/23/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/04/2022
Date Data Arrived at EDR: 08/04/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 77

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/04/2022
Date Data Arrived at EDR: 08/04/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 77

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 02/13/2023
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/27/2022
Number of Days to Update: 97

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 10/07/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/07/2022
Next Scheduled EDR Contact: 12/26/2022
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 08/10/2022
Date Data Arrived at EDR: 08/11/2022
Date Made Active in Reports: 10/28/2022
Number of Days to Update: 78

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/09/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 08/29/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/18/2022
Date Made Active in Reports: 08/04/2022
Number of Days to Update: 78
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 10/28/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/15/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/26/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/23/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/23/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/13/2022
Next Scheduled EDR Contact: 01/02/2023
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/04/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 05/03/2022
Date Data Arrived at EDR: 05/27/2022
Date Made Active in Reports: 08/11/2022
Number of Days to Update: 76

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/23/2022
Next Scheduled EDR Contact: 12/12/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 07/27/2022
Date Data Arrived at EDR: 07/27/2022
Date Made Active in Reports: 10/11/2022
Number of Days to Update: 76

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/08/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/13/2022
Date Data Arrived at EDR: 07/14/2022
Date Made Active in Reports: 09/29/2022
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/05/2022
Next Scheduled EDR Contact: 02/16/2023
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/11/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/26/2022
Date Data Arrived at EDR: 07/21/2022
Date Made Active in Reports: 09/30/2022
Number of Days to Update: 71

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/21/2022
Next Scheduled EDR Contact: 01/10/2023
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/01/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/26/2022
Date Data Arrived at EDR: 07/25/2022
Date Made Active in Reports: 10/05/2022
Number of Days to Update: 72

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 01/30/2023
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2022
Date Data Arrived at EDR: 06/07/2022
Date Made Active in Reports: 08/24/2022
Number of Days to Update: 78
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/31/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/22/2022
Date Data Arrived at EDR: 06/30/2022
Date Made Active in Reports: 09/14/2022
Number of Days to Update: 76
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/21/2022
Next Scheduled EDR Contact: 01/10/2023
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/25/2022
Date Data Arrived at EDR: 10/26/2022
Date Made Active in Reports: 10/31/2022
Number of Days to Update: 5
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/20/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/08/2022
Date Made Active in Reports: 10/21/2022
Number of Days to Update: 74
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/10/2022
Next Scheduled EDR Contact: 02/20/2023
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/03/2022
Next Scheduled EDR Contact: 01/16/2023
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/28/2022
Next Scheduled EDR Contact: 02/06/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/05/2022
Next Scheduled EDR Contact: 01/23/2023
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/09/2022
Next Scheduled EDR Contact: 02/27/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 08/29/2022
Next Scheduled EDR Contact: 12/19/2022
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

VACANT LAND
APN 111-290-015-000
VISALIA, CA 93292

TARGET PROPERTY COORDINATES

Latitude (North):	36.31498 - 36ˆ 18’ 53.93’’
Longitude (West):	119.205801 - 119ˆ 12’ 20.88’’
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	301970.5
UTM Y (Meters):	4020942.0
Elevation:	365 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12012165 EXETER, CA
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

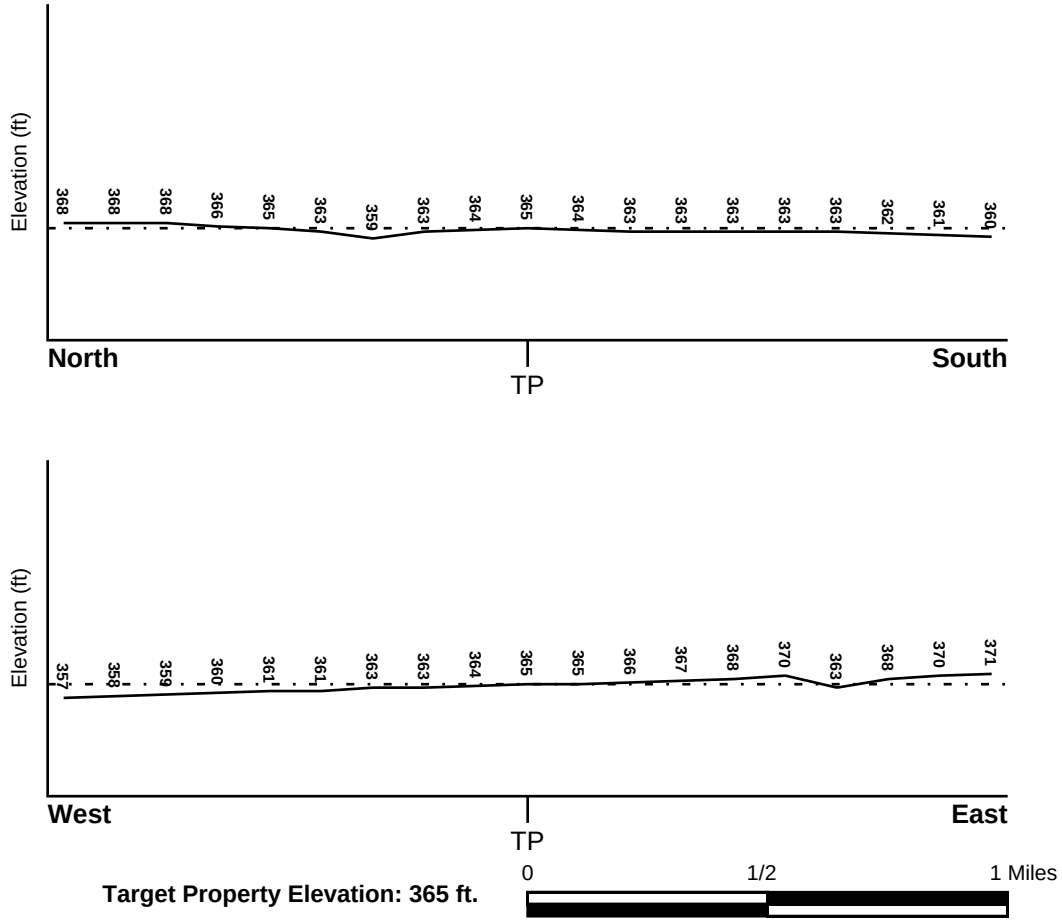
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06107C0954E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06107C0955E	FEMA FIRM Flood data
06107C0965E	FEMA FIRM Flood data
06107C0962E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
EXETER	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

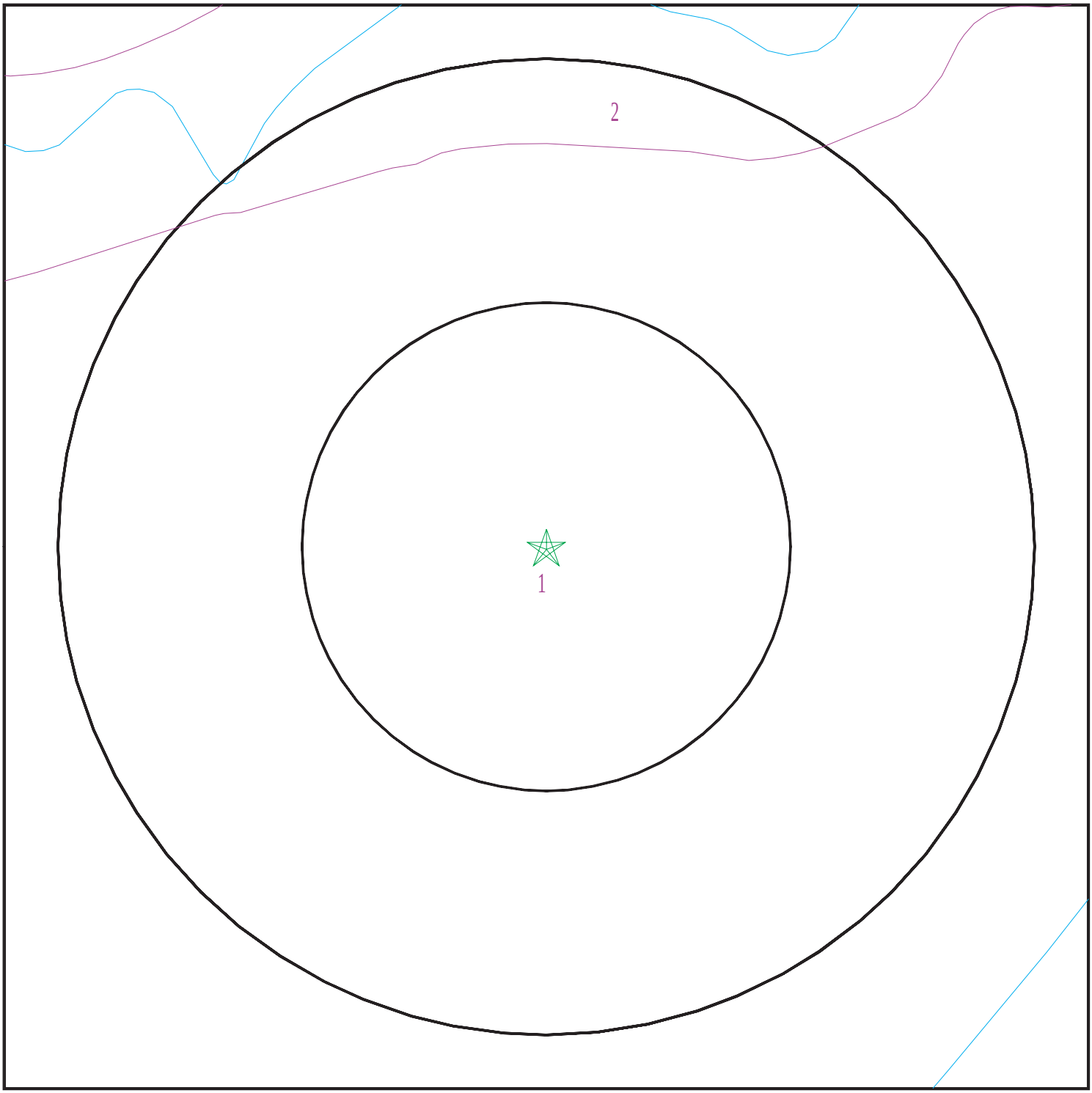
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7176734.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Vacant Land	CLIENT:	KCE Matrix
ADDRESS:	APN 111-290-015-000 Visalia CA 93292	CONTACT:	Aram Kaloustian
		INQUIRY #:	7176734.2s
LAT/LONG:	36.31498 / 119.205801	DATE:	November 11, 2022 4:47 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Nord

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6
2	11 inches	38 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6
3	38 inches	50 inches	stratified loamy coarse sand to coarse sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	50 inches	72 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: Grangeville

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 8.4 Min: 6.6
2	16 inches	27 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 8.4 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	27 inches	66 inches	stratified loamy sand to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
9	USGS40000171974	1/2 - 1 Mile ESE
12	USGS40000171903	1/2 - 1 Mile SSE
C22	USGS40000171881	1/2 - 1 Mile South
24	USGS40000172174	1/2 - 1 Mile NNE
G36	USGS40000172224	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

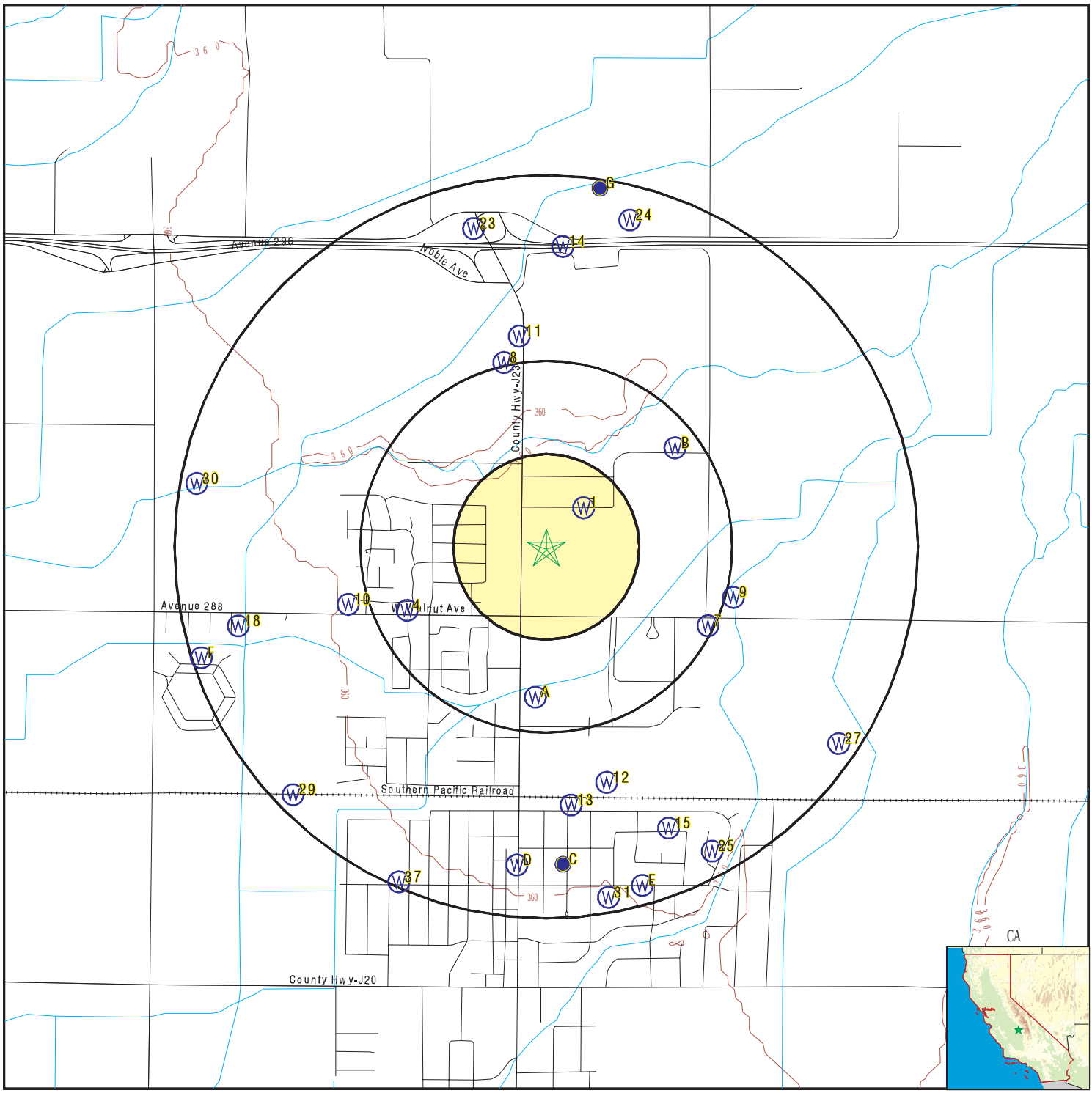
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAGAMA000000901	1/8 - 1/4 Mile NE
A2	14579	1/4 - 1/2 Mile South
A3	CADDW0000016240	1/4 - 1/2 Mile South
4	CADDW0000005761	1/4 - 1/2 Mile WSW
B5	13961	1/4 - 1/2 Mile NE
B6	13960	1/4 - 1/2 Mile NE
7	CADWR9000025215	1/4 - 1/2 Mile ESE
8	13953	1/2 - 1 Mile NNW
10	13962	1/2 - 1 Mile WSW
11	CADDW0000011638	1/2 - 1 Mile North
13	CADDW0000008089	1/2 - 1 Mile South
14	CADWR9000025368	1/2 - 1 Mile North
15	CADPR0000004107	1/2 - 1 Mile SSE
C16	14580	1/2 - 1 Mile South
D17	14552	1/2 - 1 Mile South
18	14551	1/2 - 1 Mile WSW
D19	CADWR0000025306	1/2 - 1 Mile South
D20	CADWR0000033428	1/2 - 1 Mile South
D21	CADWR0000011008	1/2 - 1 Mile South
23	CADDW0000005763	1/2 - 1 Mile NNW
25	CADPR0000004356	1/2 - 1 Mile SSE
E26	CADDW0000012175	1/2 - 1 Mile SSE
27	CADPR0000000810	1/2 - 1 Mile SE
E28	14581	1/2 - 1 Mile SSE
29	CADPR0000001487	1/2 - 1 Mile SW
30	13955	1/2 - 1 Mile West
31	CADDW0000004169	1/2 - 1 Mile South
F32	CADDW0000006640	1/2 - 1 Mile WSW
G33	CADWR0000022900	1/2 - 1 Mile North
G34	CADWR9000025437	1/2 - 1 Mile North
G35	CAUSGSN00001970	1/2 - 1 Mile North
37	CADDW0000003988	1/2 - 1 Mile SSW
F38	14550	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 7176734.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Vacant Land	CLIENT:	KCE Matrix
ADDRESS:	APN 111-290-015-000 Visalia CA 93292	CONTACT:	Aram Kaloustian
LAT/LONG:	36.31498 / 119.205801	INQUIRY #:	7176734.2s
		DATE:	November 11, 2022 4:47 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
NE
1/8 - 1/4 Mile
Higher

CA WELLS **CAGAMA000000901**

Well ID:	TUL1056	Well Type:	DOMESTIC
Source:	Groundwater Ambient Monitoring and Assessment Program		
Other Name:	TUL1056	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=GAMA&samp_date=&global_id=&assigned_name=TUL1056&store_num=		
GeoTracker Data:	Not Reported		

A2
South
1/4 - 1/2 Mile
Lower

CA WELLS **14579**

Seq:	14579	Prim sta c:	19S/26E-06E01 M
Frds no:	5410004004	County:	54
District:	12	User id:	CYA
System no:	5410004	Water type:	G
Source nam:	WELL 04A	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361833.0	Longitude:	1191218.0
Precision:	2	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5410004	System nam:	Farmersville, City Of
Hqname:	Not Reported	Address:	147 E. FRONT ST
City:	FARMERSVILLE	State:	CA
Zip:	93223	Zip ext:	Not Reported
Pop serv:	6981	Connection:	1851
Area serve:	FARMERSVILLE CITY		

Sample date:	08-JUN-17	Finding:	0.7
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		

Sample date:	08-JUN-17	Finding:	6.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		

Sample date:	08-JUN-17	Finding:	140.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		

Sample date:	08-JUN-17	Finding:	5.4
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	08-JUN-17	Finding:	2.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	1.
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported

Dlr:	0.		
Sample date:	08-JUN-17	Finding:	7.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	4.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	14.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	51.4
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	70.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	50.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	6.4
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	138.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	80.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	9.6
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-JUL-16	Finding:	0.542
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	10-DEC-15	Finding:	0.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-SEP-14	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		

Sample date:	23-SEP-14	Finding:	10.7
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	2.5
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	23-SEP-14	Finding:	2.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-SEP-14	Finding:	100.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	1.1
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	5.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	23-SEP-14	Finding:	70.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	23-SEP-14	Finding:	16.1
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	23-SEP-14	Finding:	5.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	23-SEP-14	Finding:	2.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	0.4
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	7.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	4.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	14.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	51.4
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L

Dlr:	0.		
Sample date:	23-SEP-14	Finding:	70.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	50.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	139.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-SEP-14	Finding:	600.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-NOV-13	Finding:	2.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	2.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

A3
South
1/4 - 1/2 Mile
Lower

CA WELLS **CADDW0000016240**

Well ID:	5410004-004	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 04A - RAW	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5410004-004&store_num=		
GeoTracker Data:	Not Reported		

4
WSW
1/4 - 1/2 Mile
Lower

CA WELLS **CADDW0000005761**

Well ID:	5410004-014	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 08A - RAW	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5410004-014&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B5
NE
1/4 - 1/2 Mile
Higher

CA WELLS **13961**

Seq:	13961	Prim sta c:	18S/26E-31L02 M
Frds no:	5400635002	County:	54
District:	84	User id:	54C
System no:	5400635	Water type:	G
Source nam:	WELL 02	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361908.0	Longitude:	1191157.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5400635	System nam:	Martin Water System
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

B6
NE
1/4 - 1/2 Mile
Higher

CA WELLS **13960**

Seq:	13960	Prim sta c:	18S/26E-31L01 M
Frds no:	5400635001	County:	54
District:	84	User id:	54C
System no:	5400635	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361908.0	Longitude:	1191153.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5400635	System nam:	Martin Water System
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

7
ESE
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR9000025215**

State Well #:	19S26E06C001M	Station ID:	35229
Well Name:	Not Reported	Basin Name:	Kaweah
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

Map ID
Direction
Distance
Elevation

Database EDR ID Number

8
NNW
1/2 - 1 Mile
Lower

CA WELLS 13953

Seq:	13953	Prim sta c:	18S/25E-36A01 M
Frds no:	5410004007	County:	54
District:	12	User id:	CYA
System no:	5410004	Water type:	G
Source nam:	WELL 07A - TREATED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361920.0	Longitude:	1191225.0
Precision:	3	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5410004	System nam:	Farmersville, City Of
Hqname:	Not Reported	Address:	147 E. FRONT ST
City:	FARMERSVILLE	State:	CA
Zip:	93223	Zip ext:	Not Reported
Pop serv:	6981	Connection:	1851
Area serve:	FARMERSVILLE CITY		

Sample date:	08-JUN-17	Finding:	1.6
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	08-JUN-17	Finding:	4.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		

Sample date:	08-JUN-17	Finding:	31.2
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		

Sample date:	08-JUN-17	Finding:	6.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	1.
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	13.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	6.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	29.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	08-JUN-17	Finding:	97.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-JUN-17	Finding:	110.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	90.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	6.4
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	270.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	170.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	10.2
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	0.3
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	05-JUL-16	Finding:	1.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-JUL-16	Finding:	4.8e-002
Chemical:	RADIUM 228	Report units:	PCI/L
Dlr:	1.		
Sample date:	05-JUL-16	Finding:	0.545
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	10-DEC-15	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-SEP-14	Finding:	2500.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-SEP-14	Finding:	1.25
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L

Dlr:	0.		
Sample date:	24-SEP-14	Finding:	0.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	24-SEP-14	Finding:	2.e-002
Chemical:	MERCURY	Report units:	UG/L
Dlr:	1.		
Sample date:	24-SEP-14	Finding:	220.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	1.27
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	40.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	9.e-002
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	24-SEP-14	Finding:	51.8
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	42.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	24-SEP-14	Finding:	7.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	0.9
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	21.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	6.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	34.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	110.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	24-SEP-14	Finding:	180.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	7.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	323.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	2.
Chemical:	ODOR THRESHOLD @ 60 C	Report units:	TON
Dlr:	1.		
Sample date:	24-SEP-14	Finding:	11.1
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-NOV-13	Finding:	4.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	2.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

9
ESE **FED USGS** **USGS40000171974**
1/2 - 1 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	019S026E06C001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1949	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1962-01-16
Feet below surface:	48.80	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

10
WSW
1/2 - 1 Mile
Lower

CA WELLS **13962**

Seq:	13962	Prim sta c:	18S/26E-31N01 M
Frds no:	5400643001	County:	54
District:	84	User id:	54C
System no:	5400643	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361846.0	Longitude:	1191252.0
Precision:	3	Status:	AR
Comment 1:	28880 RD 164 FARMERSVILLE	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5400643	System nam:	Copping Water System
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

11
North
1/2 - 1 Mile
Higher

CA WELLS **CADDW0000011638**

Well ID:	5410004-007	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 07A - RAW	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5410004-007&store_num=		
GeoTracker Data:	Not Reported		

12
SSE
1/2 - 1 Mile
Lower

FED USGS **USGS40000171903**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	019S026E06M003M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	160
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1961-05-22
Feet below surface:	50.00	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

13
South
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000008089**

Well ID:	5410004-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01A - RAW	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5410004-001&store_num=		
GeoTracker Data:	Not Reported		

14
North
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000025368**

State Well #:	18S26E31D001M	Station ID:	35153
Well Name:	Not Reported	Basin Name:	Kaweah
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

15
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADPR0000004107**

Well ID:	96473	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	96473	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96473&store_num=		
GeoTracker Data:	Not Reported		

C16
South
1/2 - 1 Mile
Lower

CA WELLS **14580**

Seq:	14580	Prim sta c:	19S/26E-06L01 M
Frds no:	5410004005	County:	54
District:	12	User id:	CYA
System no:	5410004	Water type:	G
Source nam:	WELL 05A - TREATED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361810.0	Longitude:	1191215.0
Precision:	2	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5410004	System nam:	Farmersville, City Of
Hqname:	Not Reported	Address:	147 E. FRONT ST
City:	FARMERSVILLE	State:	CA

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Zip:	93223	Zip ext:	Not Reported
Pop serv:	6981	Connection:	1851
Area serve:	FARMERSVILLE CITY		
Sample date:	08-JUN-17	Finding:	400.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	08-JUN-17	Finding:	0.6
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-JUN-17	Finding:	4.9
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	08-JUN-17	Finding:	2.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	1.
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	6.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	4.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	13.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	48.9
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	0.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-JUN-17	Finding:	70.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	50.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	7.6
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	134.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US

Dlr:	0.		
Sample date:	08-JUN-17	Finding:	9.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	08-JUN-17	Finding:	70.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	08-JUN-17	Finding:	1.4
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	08-JUN-17	Finding:	10.8
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-JUL-16	Finding:	0.483
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.2
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	15-DEC-15	Finding:	2.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-14	Finding:	11.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	1.6
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	24-SEP-14	Finding:	3.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-14	Finding:	130.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	8.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	24-SEP-14	Finding:	110.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	24.3
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		

Sample date:	24-SEP-14	Finding:	7.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	24-SEP-14	Finding:	3.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	0.3
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	6.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	5.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	16.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	60.5
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	70.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	60.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	7.6
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	153.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	700.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	04-DEC-13	Finding:	2.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	0.939
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-JUN-12	Finding:	4.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L

Dlr:	2.		
Sample date:	07-JUN-12	Finding:	1.07
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

D17
South
1/2 - 1 Mile
Lower

CA WELLS 14552

Seq:	14552	Prim sta c:	19S/25E-01K01 M
Frds no:	5410004006	County:	54
District:	12	User id:	CYA
System no:	5410004	Water type:	G
Source nam:	WELL 06A - TREATED	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361810.0	Longitude:	1191225.0
Precision:	2	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5410004	System nam:	Farmersville, City Of
Hqname:	Not Reported	Address:	147 E. FRONT ST
City:	FARMERSVILLE	State:	CA
Zip:	93223	Zip ext:	Not Reported
Pop serv:	6981	Connection:	1851
Area serve:	FARMERSVILLE CITY		
Sample date:	07-JUN-17	Finding:	6.2
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	07-JUN-17	Finding:	60.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	1.
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	9.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	5.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	17.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	63.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		

Sample date:	07-JUN-17	Finding:	1.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUN-17	Finding:	80.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	70.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	169.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	3.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	07-JUN-17	Finding:	0.4
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	07-JUN-17	Finding:	6.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	07-JUN-17	Finding:	1.1
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-JUN-17	Finding:	11.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	05-JUL-16	Finding:	0.505
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	05-JUL-16	Finding:	0.253
Chemical:	RADIUM 228 MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	10-DEC-15	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-SEP-14	Finding:	1900.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	24-SEP-14	Finding:	3.
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU

Dlr:	0.1		
Sample date:	24-SEP-14	Finding:	2.e-002
Chemical:	MERCURY	Report units:	UG/L
Dlr:	1.		
Sample date:	24-SEP-14	Finding:	8.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-14	Finding:	160.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	5.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	24-SEP-14	Finding:	220.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	30.7
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	24-SEP-14	Finding:	8.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	24-SEP-14	Finding:	3.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	1.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	0.5
Chemical:	SODIUM ABSORPTION RATIO	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	10.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	6.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	22.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	79.6
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	100.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		

Sample date:	24-SEP-14	Finding:	80.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	7.5
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	208.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	24-SEP-14	Finding:	11.1
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	05-NOV-13	Finding:	2.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	1.26
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-JUN-12	Finding:	7.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	07-JUN-12	Finding:	1.45
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

18
WSW
1/2 - 1 Mile
Lower

CA WELLS **14551**

Seq:	14551	Prim sta c:	19S/25E-01D02 M
Frds no:	5400631002	County:	54
District:	84	User id:	54C
System no:	5400631	Water type:	G
Source nam:	STANDBY WELL NORTH EAST	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361843.0	Longitude:	1191311.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5400631	System nam:	Linnell Farm Labor Camp
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		
Sample date:	24-JAN-18	Finding:	0.69
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	12.

Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	0.77
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	30-OCT-17	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	0.365
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	4.03
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	30-OCT-17	Finding:	180.
Chemical:	IRON	Report units:	UG/L
Dlr:	100.		
Sample date:	30-OCT-17	Finding:	25.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	30-OCT-17	Finding:	10.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	12.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	7.6
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	35.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	120.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	2.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	130.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	110.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		

Sample date:	30-OCT-17	Finding:	320.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	1.06
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	2.1
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	31-JAN-17	Finding:	280.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	19-JAN-17	Finding:	2.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	19-MAY-16	Finding:	300.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	25-JAN-16	Finding:	2.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	27-JAN-15	Finding:	7.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-OCT-14	Finding:	1.7
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-OCT-14	Finding:	0.48
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-OCT-14	Finding:	0.292
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.45
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	210.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.381
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	6.07
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	29-MAY-14	Finding:	21.
Chemical:	SULFATE	Report units:	MG/L

Dlr:	0.5		
Sample date:	29-MAY-14	Finding:	7.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	12.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	42.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	140.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	8.2
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	310.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.414
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.214
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	7.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-MAY-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	9.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	28-JAN-13	Finding:	9.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D19
South
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000025306**

Well ID:	19S26E06M003M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	19S26E06M003M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=19S26E06M003M&store_num=		
GeoTracker Data:	Not Reported		

D20
South
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000033428**

Well ID:	19S26E06M002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	19S26E06M002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=19S26E06M002M&store_num=		
GeoTracker Data:	Not Reported		

D21
South
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000011008**

Well ID:	19S26E06M004M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	19S26E06M004M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=19S26E06M004M&store_num=		
GeoTracker Data:	Not Reported		

C22
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000171881**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	019S026E06M001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1956	Well Depth:	150
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1961-02-09
Feet below surface:	40.90	Feet to sea level:	Not Reported
Note:	Not Reported		

23
NNW **CA WELLS** **CADDW0000005763**
1/2 - 1 Mile
Higher

Well ID:	5403141-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01 - RAW	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5403141-001&store_num=		
GeoTracker Data:	Not Reported		

24
NNE **FED USGS** **USGS40000172174**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	018S026E31D001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1962-01-12
Feet below surface:	36.10	Feet to sea level:	Not Reported
Note:	Not Reported		

25
SSE **CA WELLS** **CADPR0000004356**
1/2 - 1 Mile
Lower

Well ID:	96477	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	96477	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96477&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E26
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000012175**

Well ID:	5410004-005	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 05A - RAW	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5410004-005&store_num=		
GeoTracker Data:	Not Reported		

27
SE
1/2 - 1 Mile
Higher

CA WELLS **CADPR0000000810**

Well ID:	96475	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	96475	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96475&store_num=		
GeoTracker Data:	Not Reported		

E28
SSE
1/2 - 1 Mile
Lower

CA WELLS **14581**

Seq:	14581	Prim sta c:	19S/26E-06L02 M
Frds no:	5400657001	County:	54
District:	84	User id:	54C
System no:	5400657	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361806.0	Longitude:	1191203.0
Precision:	3	Status:	AR
Comment 1:	477 E ASH FARMERSVILLE	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5400657	System nam:	Hester School
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

29
SW
1/2 - 1 Mile
Lower

CA WELLS **CADPR0000001487**

Well ID:	96419	Well Type:	UNK
Source:	Department of Pesticide Regulation		

Other Name:	96419	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=96419&store_num=		
GeoTracker Data:	Not Reported		

30
West
1/2 - 1 Mile
Lower

CA WELLS **13955**

Seq:	13955	Prim sta c:	18S/25E-36D02 M
Frds no:	5400649001	County:	54
District:	84	User id:	54C
System no:	5400649	Water type:	G
Source nam:	NORTHEAST WELL	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361903.0	Longitude:	1191318.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5400649	System nam:	Oke Water Company
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

31
South
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000004169**

Well ID:	5400657-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5400657-001&store_num=		
GeoTracker Data:	Not Reported		

F32
WSW
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000006640**

Well ID:	5400631-002	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 02 - NORTH	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5400631-002&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G33
North
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000022900**

Well ID:	18S26E30N001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	18S26E30N001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=18S26E30N001M&store_num=		
GeoTracker Data:	Not Reported		

G34
North
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000025437**

State Well #:	18S26E30N001M	Station ID:	40078
Well Name:	18S26E30N001M	Basin Name:	Kaweah
Well Use:	Observation	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

G35
North
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00001970**

Well ID:	USGS-361945119120901	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-361945119120901	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-361945119120901&store_num=		
GeoTracker Data:	Not Reported		

G36
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000172224**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	018S026E30N001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium of the Sierra Nevada, Younger (Pleistocene-Holocene)		
Aquifer Type:	Not Reported	Construction Date:	195106
Well Depth:	700	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

37
SSW
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000003988**

Well ID:	5410004-006	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 06A - RAW	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5410004-006&store_num=		
GeoTracker Data:	Not Reported		

F38
WSW
1/2 - 1 Mile
Lower

CA WELLS **14550**

Seq:	14550	Prim sta c:	19S/25E-01D01 M
Frds no:	5400631001	County:	54
District:	84	User id:	54C
System no:	5400631	Water type:	G
Source nam:	MAIN WELL	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	361838.0	Longitude:	1191318.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5400631	System nam:	Linnell Farm Labor Camp
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

Sample date:	24-JAN-18	Finding:	2.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	30-OCT-17	Finding:	13.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	30-OCT-17	Finding:	1.06
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		

Sample date:	30-OCT-17	Finding:	1.3
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	30-OCT-17	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		

Sample date:	30-OCT-17	Finding:	290.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US

Dlr:	0.		
Sample date:	30-OCT-17	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	110.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	130.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	1.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	30-OCT-17	Finding:	110.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	33.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	7.4
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	6.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	18.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	30-OCT-17	Finding:	4.53
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	30-OCT-17	Finding:	0.381
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	30-OCT-17	Finding:	180.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	31-JAN-17	Finding:	310.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	19-JAN-17	Finding:	1.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	19-MAY-16	Finding:	320.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		

Sample date:	25-JAN-16	Finding:	1.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-JAN-15	Finding:	9.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-OCT-14	Finding:	2.25
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-OCT-14	Finding:	5.21
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	29-OCT-14	Finding:	0.411
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-OCT-14	Finding:	0.309
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	170.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	150.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	43.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	9.1
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	15.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	7.7
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	25.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	29-MAY-14	Finding:	6.62
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	29-MAY-14	Finding:	0.397
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	220.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L

Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.35
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	1.16
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	140.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	330.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.321
Chemical:	RADIUM 228 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	29-MAY-14	Finding:	0.306
Chemical:	RADIUM 226 COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93292	73	22

Federal EPA Radon Zone for TULARE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for TULARE COUNTY, CA

Number of sites tested: 59

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.846 pCi/L	97%	3%	0%
Living Area - 2nd Floor	0.600 pCi/L	100%	0%	0%
Basement	3.100 pCi/L	50%	50%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX C

REGULATORY RECORDS SEARCH

APPENDIX C-1

REGULATORY RECORDS SEARCH

CALIFORNIA STATE
REGIONAL WATER QUALITY CONTROL BOARD

Hagop Tatian

From: Hagop Tatian
Sent: Monday, November 14, 2022 10:02 AM
To: R5S-PRA
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: Location Map.jpg

To: RWQCB – Central Valley Office

KCE Matrix would like to inquire if the RWQCB agency maintains any records and/or documentation with regard to Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation documentation for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

If the waterboard does maintain such records, please advise as to the necessary procedure to obtain such records from your office.

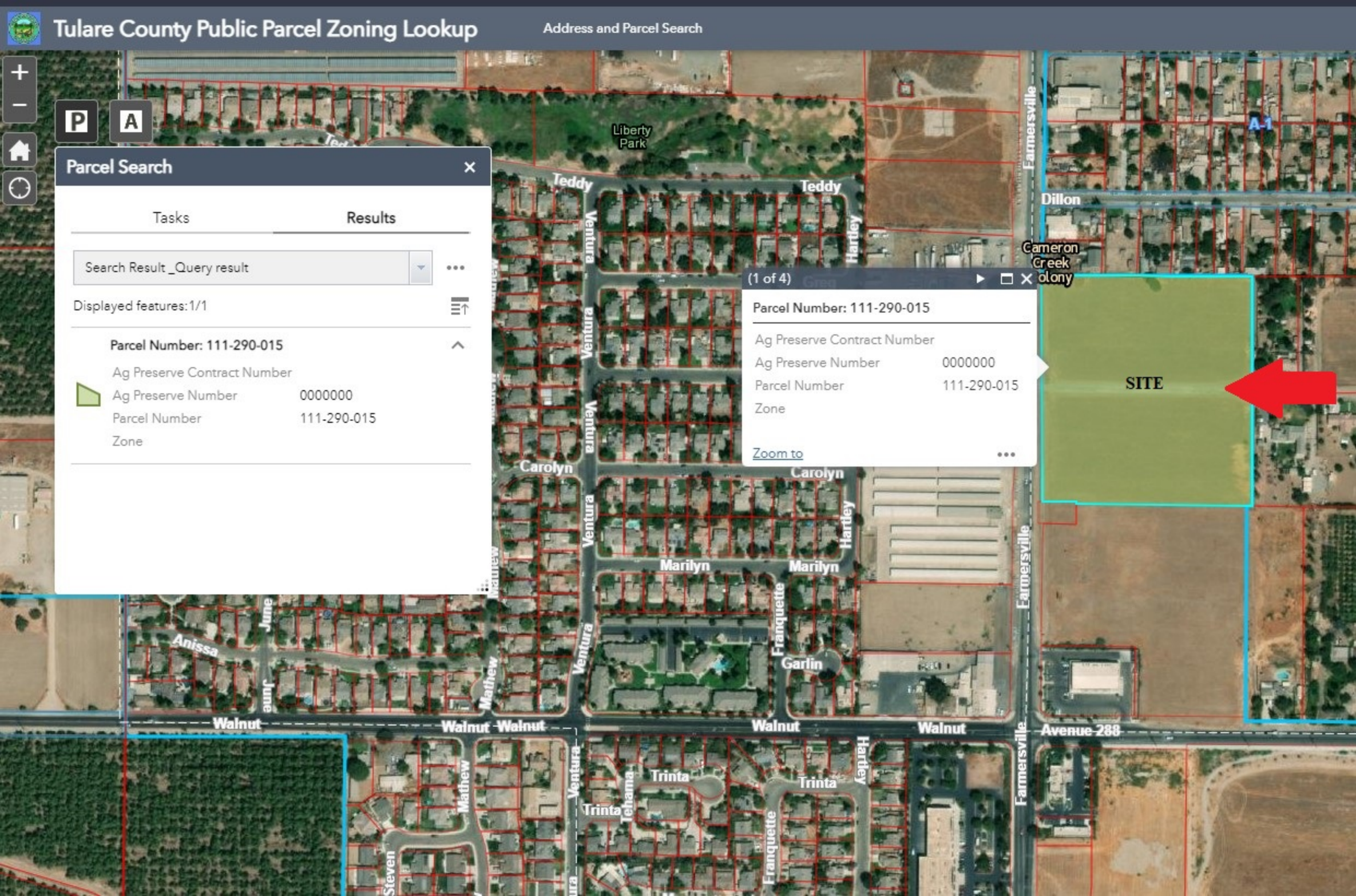
Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com


Tulare County Public Parcel Zoning Lookup
Address and Parcel Search
Parcel Search
Tasks
Results
Search Result _Query result
Displayed features:1/1
Parcel Number: 111-290-015
Ag Preserve Contract Number
Ag Preserve Number 0000000
Parcel Number 111-290-015
Zone
(1 of 4)
Parcel Number: 111-290-015
Ag Preserve Contract Number
Ag Preserve Number 0000000
Parcel Number 111-290-015
Zone
Zoom to
SITE
Liberty Park
Teddy
Ventura
Hartley
Carolyn
Marilyn
Franquette
Garlin
Farmersville
Dillon
Cameron Creek olony
A-1
Walnut
Avenue 288
Anissa
June
Mathew
Trinta
Tehama
Steven

Hagop Tatian

From: WB-RB5F-Records <RB5F-Records@Waterboards.ca.gov>
Sent: Wednesday, November 23, 2022 12:28 PM
To: Hagop Tatian
Subject: Public Records Request Response-Central Valley Water Board

Hello,

In response to your Public Records Request of **14 November 2022**, no records were found on the following property(s):

APN: 111-290-015-000
Farmersville, CA 93292

The search was conducted with the GeoTracker database, available for public access at https://geotracker.waterboards.ca.gov/.

In addition to GeoTracker, the California Integrated Water Quality Systems (CIWQS) database was also used in the search, and is available for public access at http://www.waterboards.ca.gov/centralvalley/resources/data_databases/.

The California Storm Water Multiple Applications and Report Tracking System (Smarts) was also used in the search, and is available for public access at http://smarts.waterboards.ca.gov.

If you have reason to believe that the Central Valley Water Board may have responsive records (contrary to this response), please let me know.

Thank you,

Nicholas Handcock, Staff Services Analyst
Central Valley Regional Water Quality Control Board
Fresno, CA
Phone: 559-445-6542
Nicholas.Handcock@waterboards.ca.gov

CALIFORNIA
Water Boards

APPENDIX C-2

REGULATORY RECORDS SEARCH

CALIFORNIA STATE
DEPARTMENT OF TOXIC SUBSTANCE CONTROL

Hagop Tatian

From: Hagop Tatian
Sent: Monday, November 14, 2022 10:06 AM
To: pubreqact@dtsc.ca.gov
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: Location Map.jpg

To: DTSC – Sacramento Office/File Room

KCE Matrix would like to inquire if the DTSC maintains any records and/or documentation with regard to Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation documentation for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

If the DTSC does maintain such records, please advise as to the necessary procedure to obtain such records from your office.

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

November 15, 2022

Hagop Tatian
KCE Matrix, Inc
hagop@kcematrixinc.com

Public Records Request Number: 1-111422-05
Location(s): APN: 111-290-015-000, Farmersville, CA 93292

Dear Requestor:

On November 14, 2022 the Department of Toxic Substances Control (DTSC) received your email of November 14, 2022 requesting records under the Public Records Act. We were unable to locate an address in the county database using the APNs provided and we are unable to search our records using APNs as our databases do not include this information. If you have a specific address or cross streets, please let us know.

A large number of our records are available on EnviroStor, an online database that provides non-confidential, public access to DTSCs data management system. It tracks our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues. EnviroStor is available 24/7, 365 days a year. The data reflects the latest updates as they are entered in the system. Access it from your computer or smartphone, the local library – anywhere Internet access is available. Just go to www.envirostor.dtsc.ca.gov. You'll find a step-by-step tour of EnviroStor under the "How to Use EnviroStor" menu on the website.

If you have any questions or would like further information regarding your request, please contact me at 916-255-4159 or via email at PubReqAct@dtsc.ca.gov.

Sincerely,
Gao Moua
Gao Moua
Regional Records Coordinator

APPENDIX C-3

REGULATORY RECORDS SEARCH

TULARE COUNTY
HEALTH AND HUMAN SERVICES AGENCY

Hagop Tatian

From: Hagop Tatian
Sent: Monday, November 14, 2022 10:53 AM
To: 'EAgbleode@tularecounty.ca.gov'
Cc: 'ngonzale@tularecounty.ca.gov'
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: Location Map.jpg; Public Record Request Form_KCE Matrix (11-14-22).pdf

To: Tulare County Environmental Health Services – Public Records

KCE Matrix would like to inquire if the Tulare County Environmental Health Services maintains any records and/or documentation with regard to Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation documentation for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

If the Environmental Health Services does maintain such records, please advise as to the necessary procedure to obtain such records from your office.

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

TULARE COUNTY

EALTH & HUMAN SERVICES AGENCY

Environmental Health Services
5957 S Mooney Blvd, Visalia, CA., 93277-9394
559 624-7400 ◆ FAX 559 687-6941

PUBLIC RECORD REVIEW REQUEST

Requestor's Name (Please Print) Hagop T. Agency/Affiliation KCE Matrix, Inc.

Address 1112 W. Burbank Blvd., Suite 301, Burbank, CA 91506 (818) 559 5500 (hagop@kcematrixinc.com)

Number Street City State ZIP Daytime Phone Number

☐ Business/Property Owner ☐ Agent of Business/Property Owner X (Consultant)

☐ **Food File** ☐ **Pool/Spa File** ☒ **Underground/Aboveground Storage Tank File** ☒ **Haz Mat File**
☐ **Water File** ☐ **Other:** _____

☐ **File Review** ☒ **Copy(ies) requested and marked with an X**

Date of Document	Describe the public record(s) you are seeking to inspect or obtain a copy of:	X Copy Requested
1900-Present	Underground Storage Tanks (USTs) records	x
1900-Present	Hazardous Materials (HAZMAT) records	x
	Site Address: (APN: 111-290-015-000), Farmersville, CA 93292	
	-->> See attached Location Map	

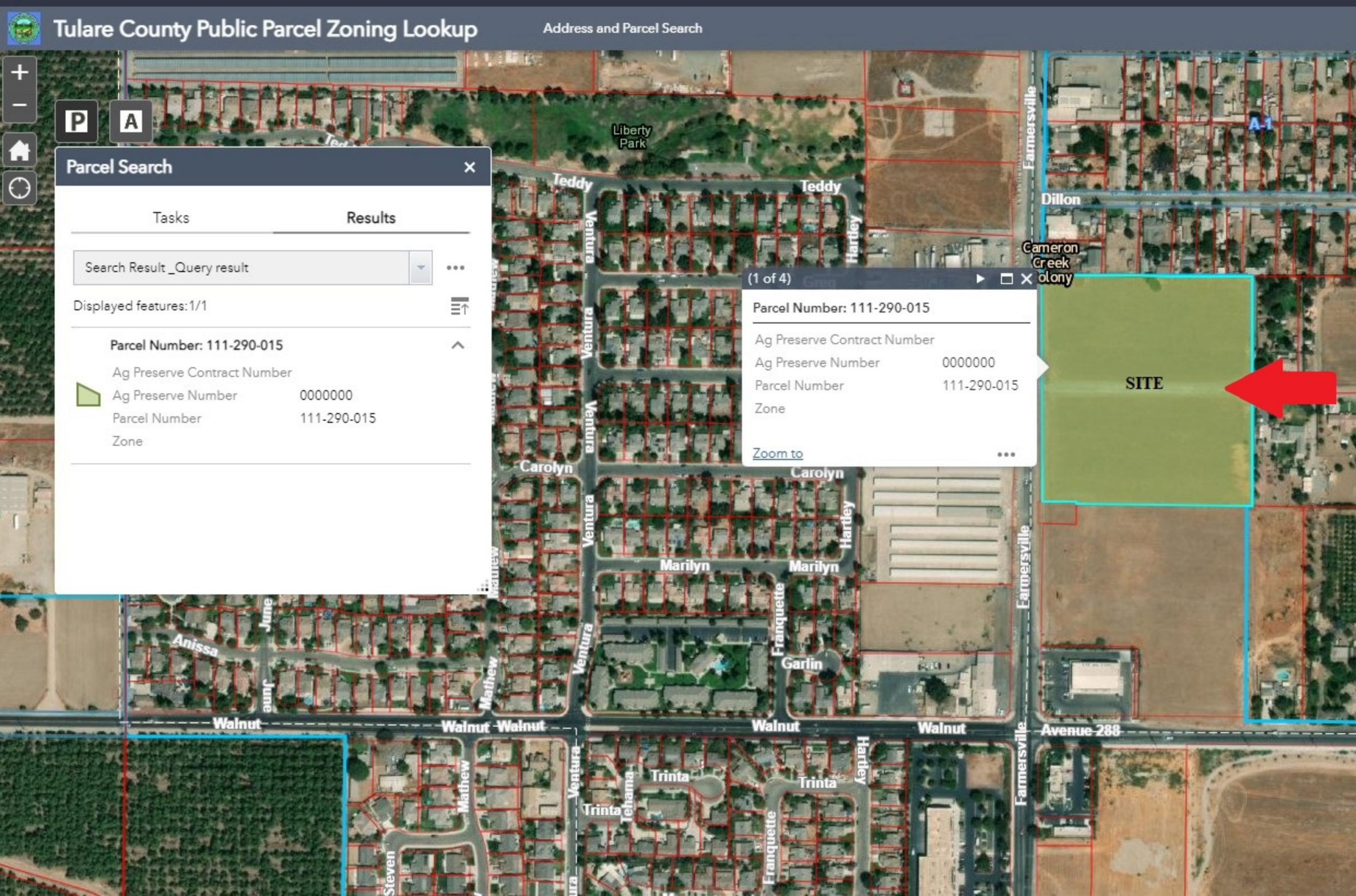
RESPONSIBILITY STATEMENT

I have read and I understand the Public Records Review Guidelines on the back of this page and agree to abide by them.

Hagop T. _____ 11/14/2022
PRINT NAME SIGNATURE DATE

FOR COUNTY USE ONLY BELOW THIS LINE

Date	Action	Initial	Notes and Information
	REQUEST RECEIVED ☐ Letter/Form attached:		
	SUPERVISOR REVIEW		
	RETURNED TO CLERICAL		


Tulare County Public Parcel Zoning Lookup
Address and Parcel Search
Parcel Search
Tasks
Results
Search Result _Query result
Displayed features:1/1
Parcel Number: 111-290-015
Ag Preserve Contract Number
Ag Preserve Number 0000000
Parcel Number 111-290-015
Zone
(1 of 4)
Parcel Number: 111-290-015
Ag Preserve Contract Number
Ag Preserve Number 0000000
Parcel Number 111-290-015
Zone
Zoom to
SITE
Liberty Park
Teddy
Ventura
Hartley
Carolyn
Marilyn
Franquette
Garlin
Farmersville
Dillon
Cameron Creek olony
A-1
Walnut
Avenue 288
Anissa
June
Mathew
Trinta
Tehama
Steven

Hagop Tatian

From: Edem K Agbleode <EAgbleode@tularecounty.ca.gov>
Sent: Monday, November 21, 2022 9:54 AM
To: Hagop Tatian
Subject: RE: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

Good Morning Hagop,

No Haz Mat/UST/AST records were located for the APN provided. Let me know if you have any questions.

Best regards,

Edem

Edem Agbleode
Environmental Health Specialist II
Tulare County Environmental Health Services
5957 S. Mooney Blvd., Visalia, CA 93277
Phone: 559-624-7427
Fax: 559-687-6941
Email: eagbleode@tularecounty.ca.gov

From: Hagop Tatian <hagop@kcematrixinc.com>
Sent: Monday, November 14, 2022 10:49 AM
To: Edem K Agbleode <EAgbleode@tularecounty.ca.gov>
Cc: Nilsa H Gonzalez <ngonzale@tularecounty.ca.gov>
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

To: Tulare County Environmental Health Services – Public Records

KCE Matrix would like to inquire if the Tulare County Environmental Health Services maintains any records and/or documentation with regard to Underground Storage Tanks (USTs), Hazardous Materials (HAZMAT) and/or associated environmental assessment or remediation documentation for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

If the Environmental Health Services does maintain such records, please advise as to the necessary procedure to obtain such records from your office.

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

APPENDIX C-4

REGULATORY RECORDS SEARCH

CITY OF FARMERSVILLE – CITY CLERK'S OFFICE
(FIRE DEPARTMENT)

Hagop Tatian

From: Hagop Tatian
Sent: Monday, November 14, 2022 11:47 AM
To: Rgiovani@cityoffarmersville-ca.gov
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: Location Map.pdf; Public Records Request_KCE Matrix (11-14-22).pdf

City of Farmersville, CA – Clerk's Office

Please find attached public record request for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

The City of Farmersville
Office of the City Clerk
909 W. Visalia Rd.
Farmersville, Ca. 93223

Phone: (559)747-0458 ex:1003 Email: Rgiovani@cityoffarmersville-ca.gov

Requests for public records are received by the City Clerk's Office. Please provide sufficient identifying information for the record (s) you are seeking in order for the City Clerk to conduct an accurate and thorough search. Although a written request is not required, this process helps to ensure that City Clerk is searching and providing exactly what you are requesting.

Requester Information

Name: Hagop T.

Email Address: hagop@ kcematrixinc.com // Phone: (818) 559 5500

Request Summary

Records related to the following:

1) Building Records: historic and current permit applications, certificates of occupancies and violations, and

2) Fire Department Records: records related to Underground Storage Tanks (USTs) and/or Hazardous Materials (HAZMAT)
for the following property: *(APN: 111-290-015-000), Farmersville, CA 93292*

Today's Date: 11/14/2022

Hagop Tatian

From: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Sent: Monday, November 14, 2022 11:51 AM
To: Hagop Tatian
Subject: RE: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

Please be advised that City of Farmersville has received your California Public Records Act request. Your request will be processed in compliance with the Public Records Act. California Government Code § 6253.

The City shall, within 10 days from receipt of the request, determine whether the request, in whole or in part, will be made available and shall promptly notify the person making the request of the determination and the reasons therefore.

In certain circumstances, the time limit prescribed in this section may be extended by written notice to the person making the request, setting forth the reasons for the extension and the date on which a determination is expected to be dispatched.

Please note that you will be contacted when the information is available. All document duplication fees are due and payable in full and are based on the City's current fee schedule.

Thank You

Rochelle Giovani, CMC
City Clerk
Administrative Analyst
559-747-0458 ex: 1003

From: Hagop Tatian <hagop@kcematrixinc.com>
Sent: Monday, November 14, 2022 11:47 AM
To: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Subject: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

City of Farmersville, CA – Clerk's Office

Please find attached public record request for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Hagop Tatian

From: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Sent: Monday, November 14, 2022 1:13 PM
To: Hagop Tatian
Subject: RE: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

This email is in response to the Request for Public Records that you sent to me 11/14/2022. After review we have no records responsive to your request. If you have any questions, please do not hesitate to contact me.
For the historic records you might want to contact Tulare County.

Thank you

Rochelle Giovani, CMC
City Clerk/Administrative Analyst
Phone: 559-747-0458 ex: 1003
909 W. Visalia Rd. Farmersville, Ca. 93223
Web: www.cityoffarmersville-ca.gov

From: Hagop Tatian <hagop@kcematrixinc.com>
Sent: Monday, November 14, 2022 11:47 AM
To: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Subject: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

City of Farmersville, CA – Clerk's Office

Please find attached public record request for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

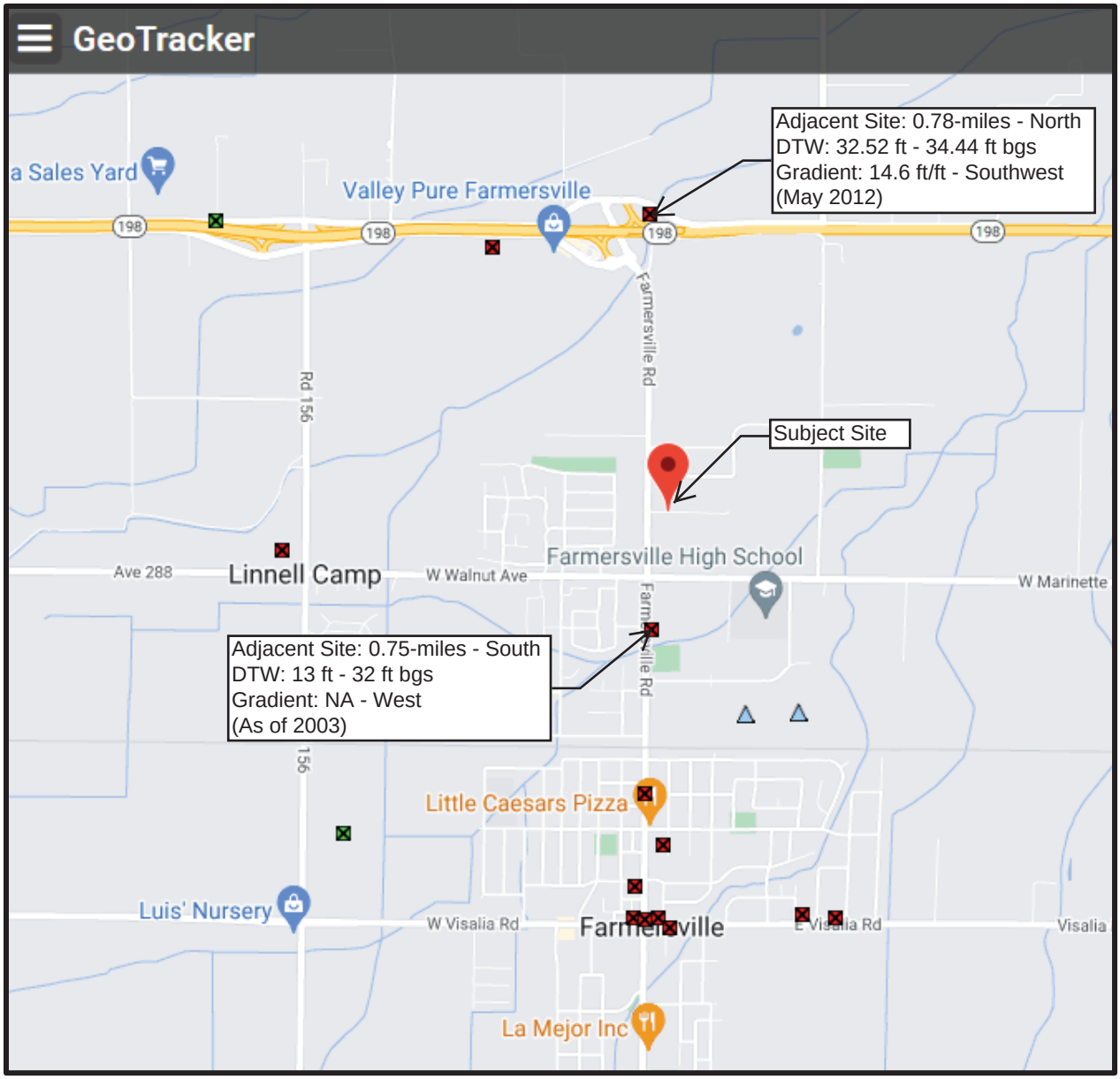
Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

APPENDIX C-5

HYDROLOGY INFORMATION


GeoTracker
Adjacent Site: 0.78-miles - North
DTW: 32.52 ft - 34.44 ft bgs
Gradient: 14.6 ft/ft - Southwest
(May 2012)
a Sales Yard
Valley Pure Farmersville
198
198
198
198
Farmersville Rd
Rd 156
Subject Site
Ave 288
Linnell Camp
W Walnut Ave
Farmersville High School
W Marinette
Adjacent Site: 0.75-miles - South
DTW: 13 ft - 32 ft bgs
Gradient: NA - West
(As of 2003)
156
Little Caesars Pizza
Luis' Nursery
W Visalia Rd
Farmersville
E Visalia Rd
Visalia
La Mejor Inc

APPENDIX C-6

NATIONAL WETLANDS INVENTORY -
WETLAND MAP

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands

November 16, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

APPENDIX C-7

FEDERAL EMERGENCY MANAGEMENT AGENCY

NATIONAL FLOOD HAZARD MAP

National Flood Hazard Layer FIRMette

FEMA

119°12'40"W 36°19'9"N

119°12'3"W 36°18'40"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/15/2022 at 7:17 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

APPENDIX D-1

CITY OF FARMERSVILLE – CITY CLERK'S OFFICE
(BUILDING DEPARTMENT)

TULARE COUNTY
RESOURCE MANAGEMENT AGENCY

Hagop Tatian

From: Hagop Tatian
Sent: Monday, November 14, 2022 11:47 AM
To: Rgiovani@cityoffarmersville-ca.gov
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: Location Map.pdf; Public Records Request_KCE Matrix (11-14-22).pdf

City of Farmersville, CA – Clerk's Office

Please find attached public record request for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

The City of Farmersville
Office of the City Clerk
909 W. Visalia Rd.
Farmersville, Ca. 93223

Phone: (559)747-0458 ex:1003 Email: Rgiovani@cityoffarmersville-ca.gov

Requests for public records are received by the City Clerk's Office. Please provide sufficient identifying information for the record (s) you are seeking in order for the City Clerk to conduct an accurate and thorough search. Although a written request is not required, this process helps to ensure that City Clerk is searching and providing exactly what you are requesting.

Requester Information

Name: Hagop T.

Email Address: hagop@ kcematrixinc.com // Phone: (818) 559 5500

Request Summary

Records related to the following:

1) Building Records: historic and current permit applications, certificates of occupancies and violations, and

2) Fire Department Records: records related to Underground Storage Tanks (USTs) and/or Hazardous Materials (HAZMAT)
for the following property: *(APN: 111-290-015-000), Farmersville, CA 93292*

Today's Date: 11/14/2022

Hagop Tatian

From: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Sent: Monday, November 14, 2022 11:51 AM
To: Hagop Tatian
Subject: RE: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

Please be advised that City of Farmersville has received your California Public Records Act request. Your request will be processed in compliance with the Public Records Act. California Government Code § 6253.

The City shall, within 10 days from receipt of the request, determine whether the request, in whole or in part, will be made available and shall promptly notify the person making the request of the determination and the reasons therefore.

In certain circumstances, the time limit prescribed in this section may be extended by written notice to the person making the request, setting forth the reasons for the extension and the date on which a determination is expected to be dispatched.

Please note that you will be contacted when the information is available. All document duplication fees are due and payable in full and are based on the City's current fee schedule.

Thank You

Rochelle Giovani, CMC
City Clerk
Administrative Analyst
559-747-0458 ex: 1003

From: Hagop Tatian <hagop@kcematrixinc.com>
Sent: Monday, November 14, 2022 11:47 AM
To: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Subject: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

City of Farmersville, CA – Clerk's Office

Please find attached public record request for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Hagop Tatian

From: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Sent: Monday, November 14, 2022 1:13 PM
To: Hagop Tatian
Subject: RE: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

This email is in response to the Request for Public Records that you sent to me 11/14/2022. After review we have no records responsive to your request. If you have any questions, please do not hesitate to contact me.
For the historic records you might want to contact Tulare County.

Thank you

Rochelle Giovani, CMC
City Clerk/Administrative Analyst
Phone: 559-747-0458 ex: 1003
909 W. Visalia Rd. Farmersville, Ca. 93223
Web: www.cityoffarmersville-ca.gov

From: Hagop Tatian <hagop@kcematrixinc.com>
Sent: Monday, November 14, 2022 11:47 AM
To: Rochelle Giovani <RGiovani@cityoffarmersville-ca.gov>
Subject: [EXTERNAL]Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

City of Farmersville, CA – Clerk's Office

Please find attached public record request for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

Hagop Tatian

From: Karl Schoettler <karl@weplancities.com>
Sent: Wednesday, November 16, 2022 9:22 AM
To: Hagop Tatian
Subject: Re: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292
Attachments: CG Brochure 12-12-14.pdf

Hello Hagop:

That site (APN 111-290-015-000) is vacant and the City has no records of any permits for construction. The parcel is inside city limits and is zoned CG (General Commercial). This zone allows for a wide variety of commercial uses, including retail stores, restaurants and offices, among others. I have attached a brochure that summarizes permitted uses and zoning standards.

I hope this information is helpful.

Sincerely,

Karl Schoettler, City Planning Consultant
City of Farmersville

Collins & Schoettler
1002 W. Main Street
Visalia, CA 93291
(559) 734-8737
fax: 734-8767
www.weplancities.com

From: Hagop Tatian <hagop@kcematrixinc.com>
Date: Tuesday, November 15, 2022 at 10:40 AM
To: Karl Schoettler <karl@weplancities.com>
Subject: FW: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

Sincerely,

Hagop

From: RMA <RMA@tularecounty.ca.gov>
Sent: Monday, November 14, 2022 4:52 PM
To: Hagop Tatian <hagop@kcematrixinc.com>; RMA <RMA@tularecounty.ca.gov>
Subject: RE: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

Good Afternoon,

Please contact Karl Schoettler, the planner contracted by/for the City of Farmersville. Phone 559-734-8737 or email him at karl@weplancities.com

Thank you.

Carrie Carrillo
Administrative Secretary
Tulare County RMA

From: Hagop Tatian <hagop@kcematrixinc.com>
Sent: Monday, November 14, 2022 11:51 AM
To: RMA <rma@co.tulare.ca.us>
Subject: Public Record Request: (APN: 111-290-015-000), Farmersville, CA 93292

To: County of Tulare – Resource Management Agency

KCE Matrix would like to request copies or scans of any files and documentation that you may maintain with regard to site history, including historic and current building permits, certificates of occupancy and violations for the following property:

APN: 111-290-015-000
Farmersville, CA 93292
(See attached location map)

Should you have any questions or require additional information, please do not hesitate to contact our office at (818) 559 5500.

Thank you.

Sincerely,

Hagop Tatian

KCE Matrix, Inc.
1112 W. Burbank Blvd., Suite 301
Burbank, CA 91506
(818) 559 5500 phone
(818) 559 5511 fax
hagop@kcematrixinc.com

What is the Purpose of the C-G Zone?

The C-G (General Commercial) zone is intended to provide attractive areas for the establishment of a variety of retail commercial uses, offices and support services in Farmersville. Typical uses permitted in this zone include retail stores, restaurants, offices and similar uses. Some uses are permitted by Conditional Use Permit (see lists below).

Development and land use in Farmersville is regulated by the Farmersville Zoning Ordinance (Title 17 of the Farmersville Municipal Code). The C-G zone is specifically found in Section 17.44 of the Zoning Ordinance.

Permitted Uses

The following uses are permitted by right in the C-G zone. New buildings (or site improvements) for these uses require Site Plan Review (see Site Plan Review brochure).

Accessory buildings and uses customarily appurtenant to a permitted use*
Appliance sales, service and supply
Auto leasing, truck and trailer rentals
Auto parts sales (no servicing)
Auto sales, service and repair, new and used, including boat, motorcycle, RV, trailer and trucks, and repair garages
Auto and truck service stations
Bakeries
Barber and beauty shops
Boarding and rooming houses (C.U.P. required for more more than six guests)
Cafes, coffee shops and restaurants, except drive-in, fast food, self-service and take out restaurants (these require a C.U.P.)
Cargo containers*
Drug stores and pharmacies
Electrical sales, service and supply
Film processing pick-up stations
Financial institutions
Florists
Food and grocery stores
Funeral homes and mortuaries
Gift shops
Glass sales, service and supply
Hardware stores
Laundry, self service
Locksmiths
Medical and dental clinics
Medical laboratories
Offices (professional or commercial)
Opticians
Parking facilities, as part of a permitted use
Parking facilities – off site
Plant nurseries and greenhouses
Plumbing sales, service and supply
Pool service and supply
Prescription pharmacies
Public and private schools
Public and quasi-public buildings and uses appropriate to the area
Retail stores and shops
Shopping centers less than 20 acres
Social halls, lodges, fraternal ogranizations and clubs
Swimming, tennis and racquetball clubs, health clubs
Taxicab service
Technical, trade and craft schools and studios
Temporary construction storage yards
Temporary outdoor uses (subject to Section 17.56.040 of the Farmersville Municipal Code)
Tire recapping
Upholstery shops
Variety stores
Video game centers
Video games when incidental to a permitted use
Video movie rental shops
Thrift shops, used merchandise stores

* New structures proposed for uses marked with an asterisk are subject to Administrative Site Plan Review (staff review)

Uses Permitted Subject to Conditional Use Permit (C.U.P.)

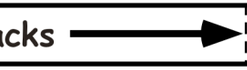
The following uses (whether in existing or new (to-be-constructed) buildings/sites) are permitted by Conditional Use Permit:

Ambulance Service
Bars, cocktail lounges and taverns
Bowling alleys
Card rooms
Car washes
Catering trucks and mobile food vendors (see Section 17.68.100 of the Zoning Ordinance)
Churches
Clothes cleaning and laundry pick up
Communication and public utility service facilities
Drive-in, drive-thru or drive-up businesses, including, but not limited to fast food, beverage, financial institutions, pharmacies and similar businesses.
Dance halls
Heating and air conditioning sales, service and supply
Hospitals
Hotels and motels
Liquor sales, on and off sale
Massage businesses
Miniature golf
Multi-use developments
Palm readers, fortune tellers, hypnotists
Passenger terminals
Pool halls
Produce stands
Shopping centers 20 acres or greater
Skating rinks
Smoke shops/tobacco shops
Tattoo and piercing shops
Theaters
Veterinary offices and clinics

What Development Standards Apply to Property in the C-G zone?

All new development in the C-G zone is subject to the following development standards.

Setbacks

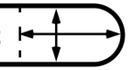


Front Yard: Four feet, minimum. However, parking lots must be separated from street rights-of-way by a landscape buffer at least 10 feet wide. For lots shallower than 100 feet, the parking setback shall be 10% of the depth of the lot, down to 5 feet wide, whichever is greater.

Interior Side Yard: No setbacks are required except where a C-G parcel abuts a residentially zoned parcel, in which case the interior side yard setback shall be the same as required for the residential parcel.

Rear Yard: None required.

Lot Size/Dimensions



Newly-created parcels must meet the following minimum area/dimensions:

Lot Area: 6,000 square feet, minimum
Corner lot width: 70 feet, minimum
Interior lot width: 60 feet, minimum

Building Height

40 feet, maximum. Some exceptions are permitted under Section 17.88 of the Farmersville Zoning Ordinance.

Parking

On-site parking must be provided for all new uses. The number of spaces shall be as required in Section 17.80 of the Farmersville Zoning Ordinance (see also the Parking brochure). Parking requirements for several common uses in the C-G zone are as follows:

Restaurants: one parking space per four seats, but not less than five spaces, plus one space per employee.
Fast food restaurants, drive-ins and take-out restaurants: one space per 250 square feet of floor area, but not less than five spaces, plus one space per employee.
Retail stores, banks and shopping centers: one space per 300 square feet of gross floor area (except for storage and loading areas) but not less than five spaces, plus one space per employee.
Auto Repair, service stations, personal service businesses and other non-retail commercial: one space per 300 square feet of gross floor area, but not less than five spaces, plus one space per employee.
Offices (except medical/dental offices): One space per 300 square feet of floor area, but not less than five spaces.
Medical and Dental offices: Five spaces per doctor/practioner , plus one space per 300 square feet of lab, x-ray and similar specialty areas, plus one space for each employee.

Parking Design

All on-site parking lots shall be designed consistent with requirements of the Zoning Ordinance (see also the "Parking Design" brochure. Minimum dimensions for most parking lots are as follows:

Parking spaces (90 degrees): 9' wide x 19' long
Aisles: 25 feet wide, minimum.

Landscaping

Landscaping and automatic irrigation shall be provided for all non-paved areas. Parking lots shall include landscaping and shade trees consistent with requirements of the Zoning Ordinance.

Design Guidelines

All uses must comply with the Farmersville Design Guidelines. Contact City Hall for copies of the Guidelines.

Signs

All new signs shall comply with requirements of the Farmersville Sign Ordinance (see the "Sign Ordinance" brochure for more information).

Other Requirements

- Utilities (water, sewer, storm drain, etc.) shall be installed for new development, consistent with the requirements of the City Engineer and City standards.
- Street improvements shall be installed consistent with the Standard Specifications Manual.
- Development in the Highway 198 Specific Plan area shall be consistent with requirements of the Specific Plan (contact City Hall for copies of the Specific Plan);
- Development along waterways identified in the Farmersville Waterway/Trails Master Plan must comply with the policies of the Plan. Copies of the Master Plan are available at Farmersville City Hall;
- Solid fencing and landscaping adequate to screen development from adjacent residential zones along rear and side property lines is required;
- Outdoor storage shall be screened from view from the public right of way;
- Outdoor light fixtures shall be hooded and adjusted to prevent unnecessary illumination of adjoining properties and streets.
- All uses/activities are to be conducted wholly within completely enclosed buildings Any outdoor storage of materials shall be enclosed with a minimum six foot high solid masonry or wood fence.
- Maximum noise levels at property lines shall not exceed 65 decibels

For more information…

The City of Farmersville is here to help you with your project. For additional information, please contact Farmersville City Hall at

Farmersville City Hall
909 W. Visalia Road
Farmersville, CA 93223
(559) 747-0458

Collins & Schoettler Planning Consultants 11/2014

C-G

(General Commercial) Zone

- *Permitted Uses*
- *Conditional Uses*
- *Zoning Standards*

This informational brochure explains development standards for the C-G zone. It may not cover all regulations pertaining to your property. Additional information can be found in the Farmersville Zoning Ordinance. If you are uncertain regarding development standards, please contact Farmersville City Hall.

City of Farmersville
909 W. Visalia Road
Farmersville, CA 93223
(559) 747-0458

APPENDIX D-2

HISTORIC MAPS

Vacant Land

APN 111-290-015-000

Visalia, CA 93292

Inquiry Number: 7176734.3

November 11, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

11/11/22

Site Name:

Vacant Land
APN 111-290-015-000
Visalia, CA 93292
EDR Inquiry # 7176734.3

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Aram Kaloustian

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by KCE Matrix were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 8C7C-44AA-9C23

PO # KCE-2022-454E

Project Vacant Land

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 8C7C-44AA-9C23

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX D-3

AERIAL PHOTOGRAPHS

Vacant Land

APN 111-290-015-000

Visalia, CA 93292

Inquiry Number: 7176734.8

November 14, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

11/14/22

Site Name:

Vacant Land
APN 111-290-015-000
Visalia, CA 93292
EDR Inquiry # 7176734.8

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Aram Kaloustian

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1994	1"=500'	Acquisition Date: May 21, 1994	USGS/DOQQ
1984	1"=500'	Flight Date: June 16, 1984	USDA
1977	1"=500'	Flight Date: June 02, 1977	USGS
1969	1"=500'	Flight Date: July 24, 1969	USGS
1952	1"=500'	Flight Date: October 09, 1952	USDA
1937	1"=500'	Flight Date: August 28, 1937	USDA

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INQUIRY #: 7176734.8
YEAR: 2016
= 500'
N
EDR

INQUIRY #: 7176734.8

YEAR: 2012

= 500'

N

EDR

INQUIRY #: 7176734.8

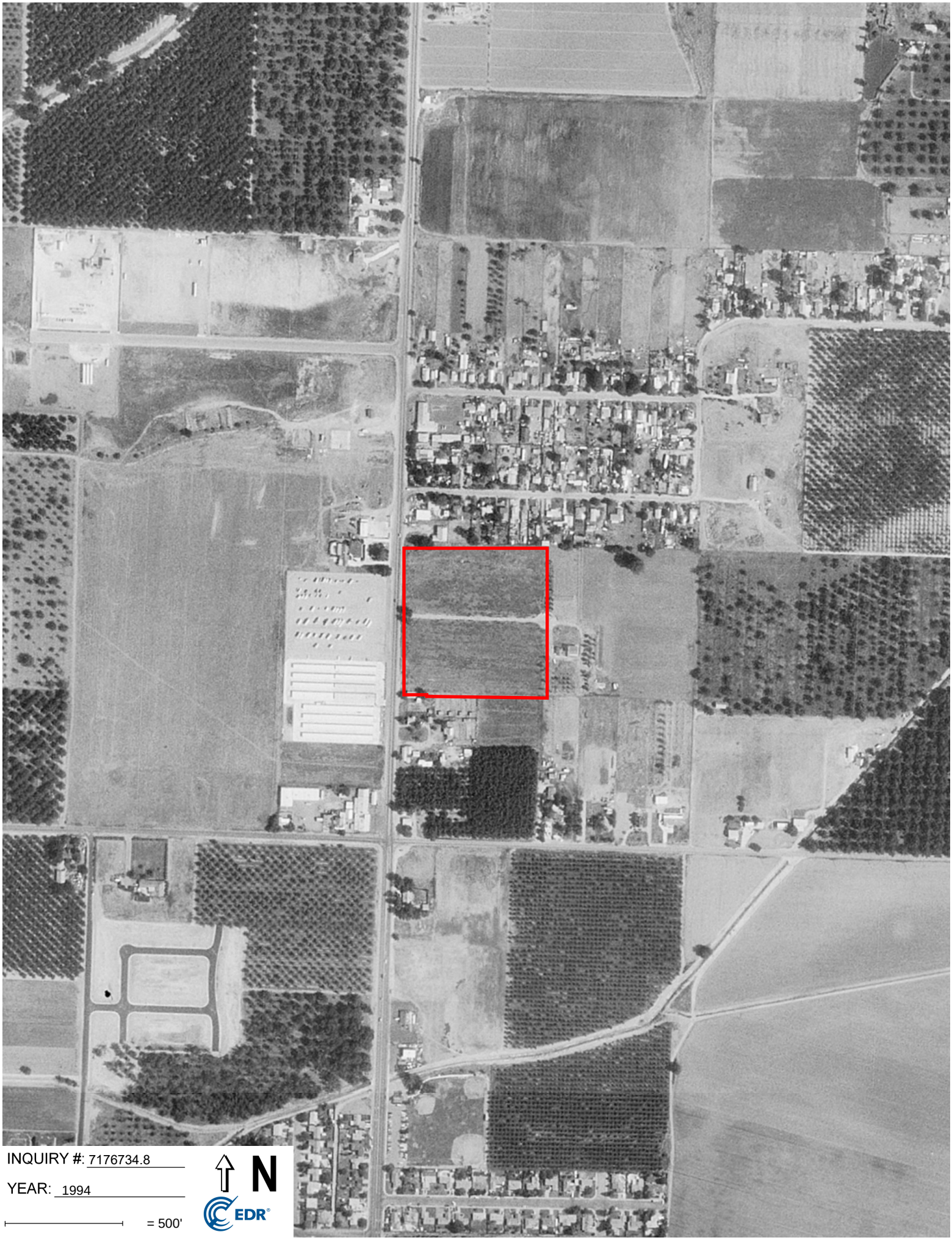
YEAR: 2009

= 500'

N

EDR

INQUIRY #: 7176734.8
YEAR: 2006
= 500'
N
EDR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YEAR: 1994
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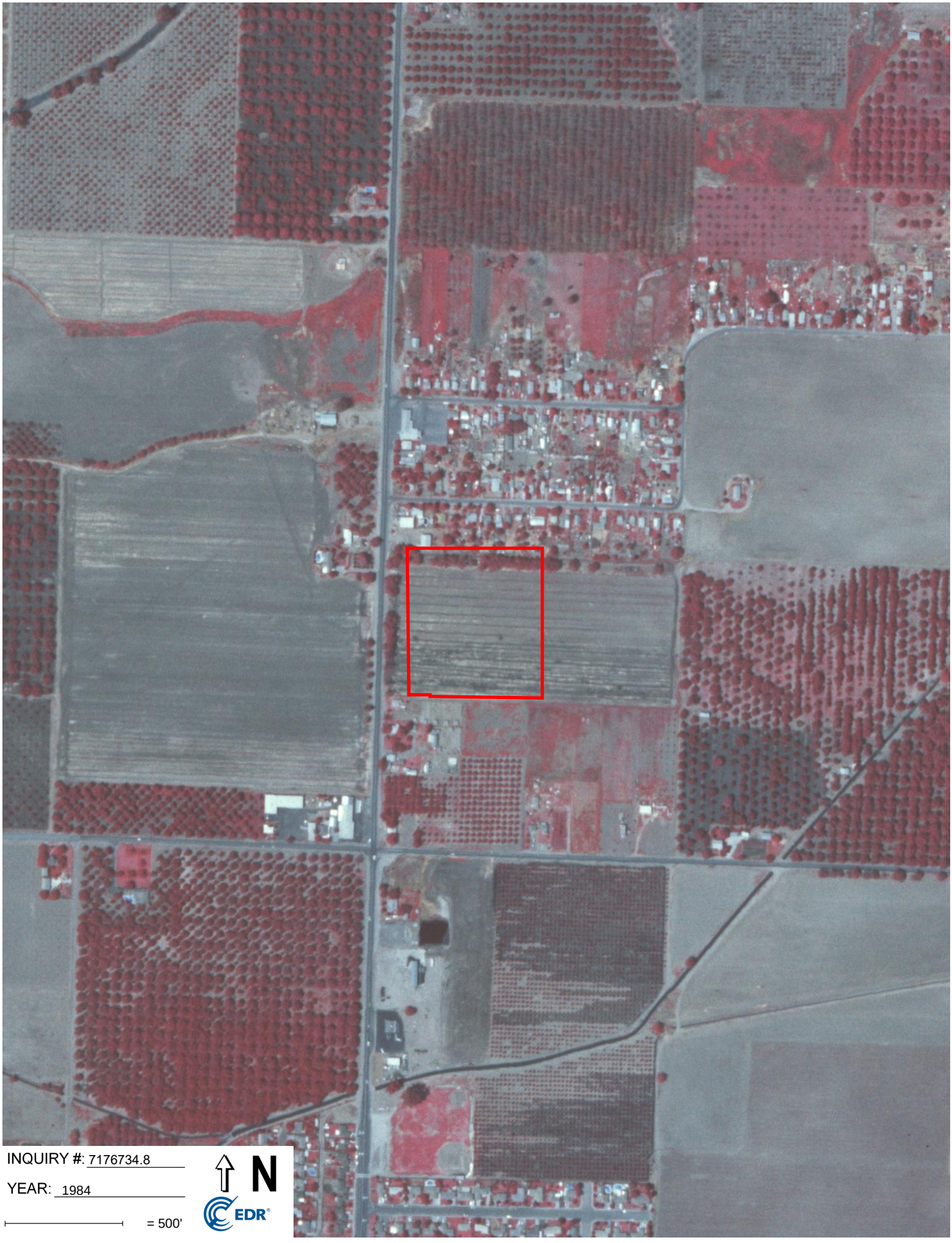
EDR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YEAR: 1984
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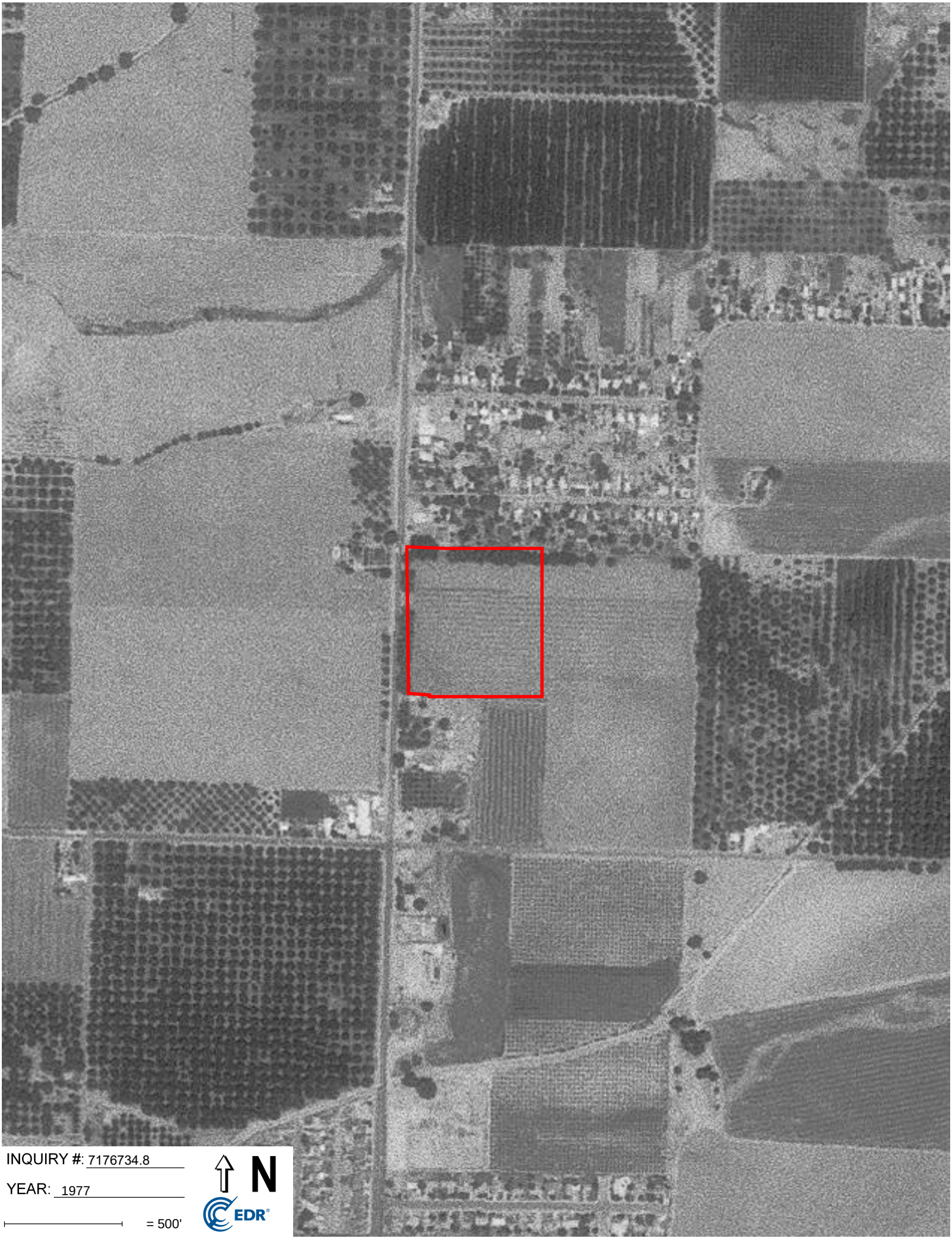
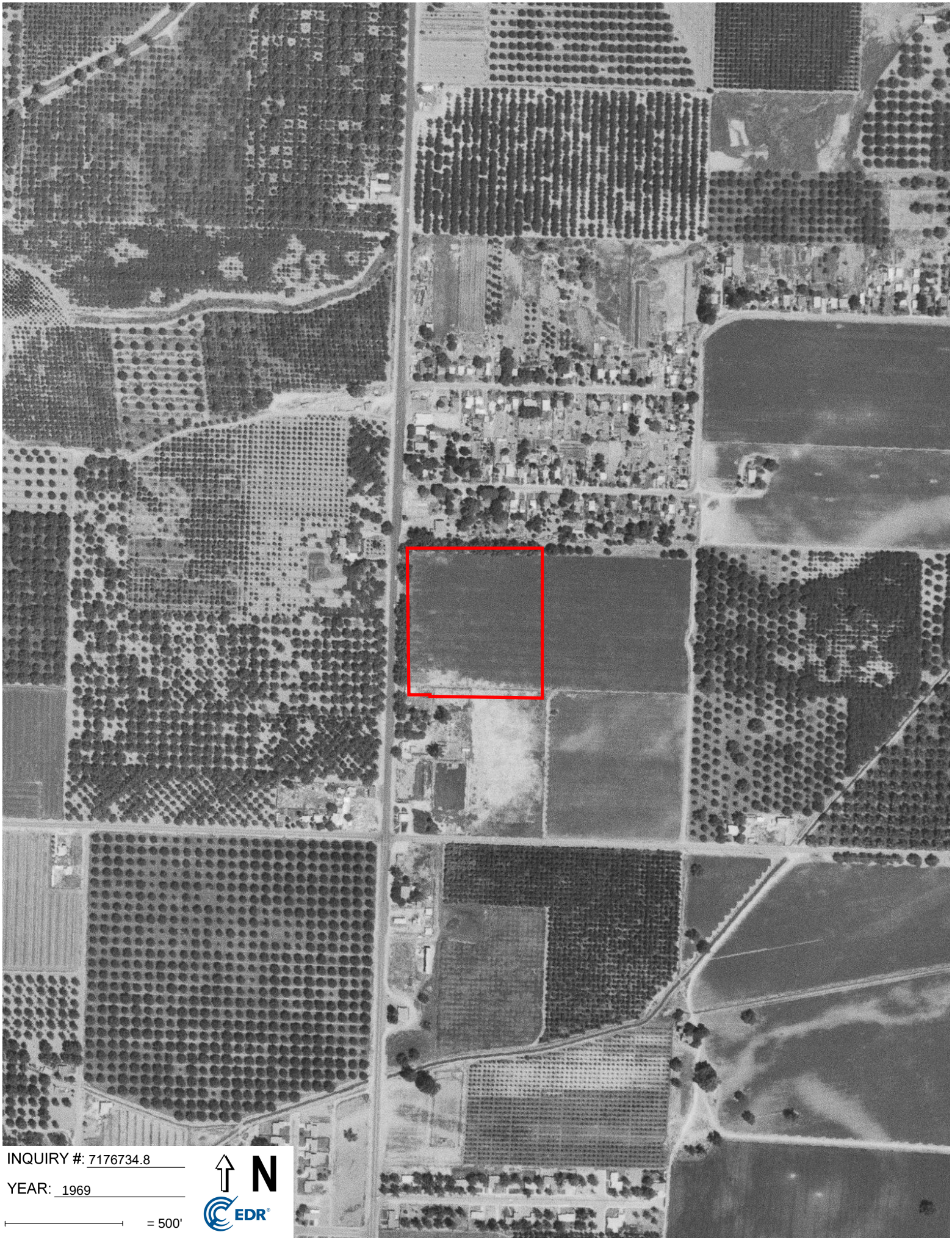
N
EDR


INQUIRY #: 7176734.8
YEAR: 1977
= 500'
N
EDR


INQUIRY #: 7176734.8
YEAR: 1969
= 500'
N
EDR

INQUIRY #: 7176734.8
YEAR: 1952
= 500'
N
EDR

INQUIRY #: 7176734.8

YEAR: 1937

= 500'

N

EDR

APPENDIX D-4

HISTORICAL TOPOGRAPHIC MAPS

Vacant Land

APN 111-290-015-000

Visalia, CA 93292

Inquiry Number: 7176734.4

November 11, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

11/11/22

Site Name:

Vacant Land
APN 111-290-015-000
Visalia, CA 93292
EDR Inquiry # 7176734.4

Client Name:

KCE Matrix
1112 W Burbank Blvd Suite 301
Burbank, CA 91506
Contact: Aram Kaloustian

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by KCE Matrix were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# KCE-2022-454E

Project: Vacant Land

Coordinates:

Latitude:	36.31498 36° 18' 54" North
Longitude:	-119.205801 -119° 12' 21" West
UTM Zone:	Zone 11 North
UTM X Meters:	301975.23
UTM Y Meters:	4021143.36
Elevation:	365.00' above sea level

Maps Provided:

2018
2015
2012
1969
1952
1950
1926

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

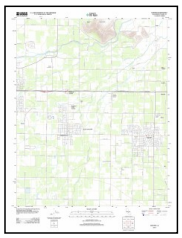
2018 Source Sheets

Exeter
2018
7.5-minute, 24000

2015 Source Sheets

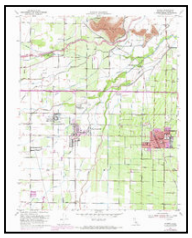
Exeter
2015
7.5-minute, 24000

2012 Source Sheets



Exeter
2012
7.5-minute, 24000

1969 Source Sheets



Exeter
1969
7.5-minute, 24000
Aerial Photo Revised 1969

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1952 Source Sheets

Exeter
1952
15-minute, 62500
Aerial Photo Revised 1946

1950 Source Sheets

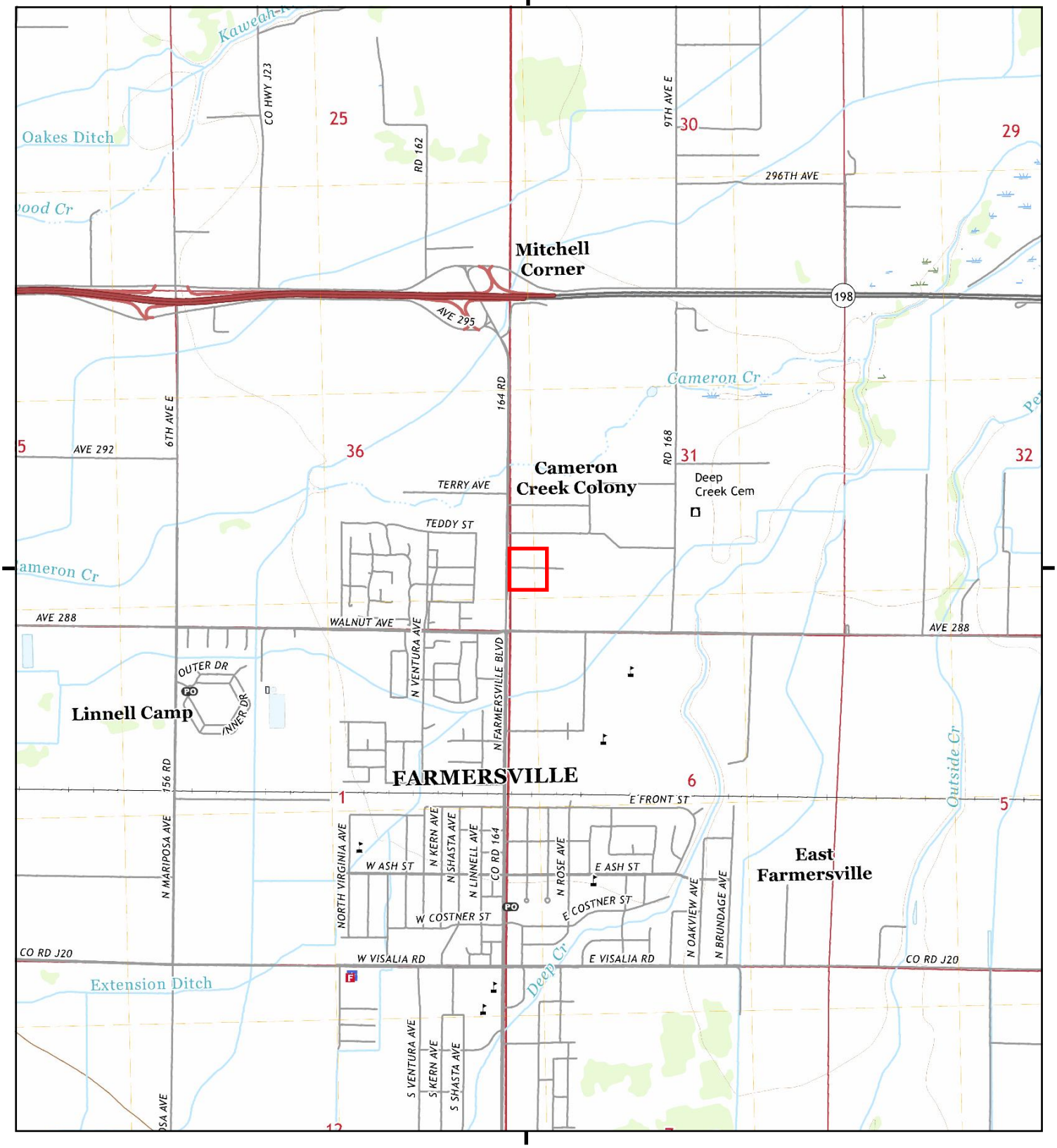
Exeter
1950
7.5-minute, 24000
Aerial Photo Revised 1946

1926 Source Sheets

Exeter
1926
7.5-minute, 31680

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

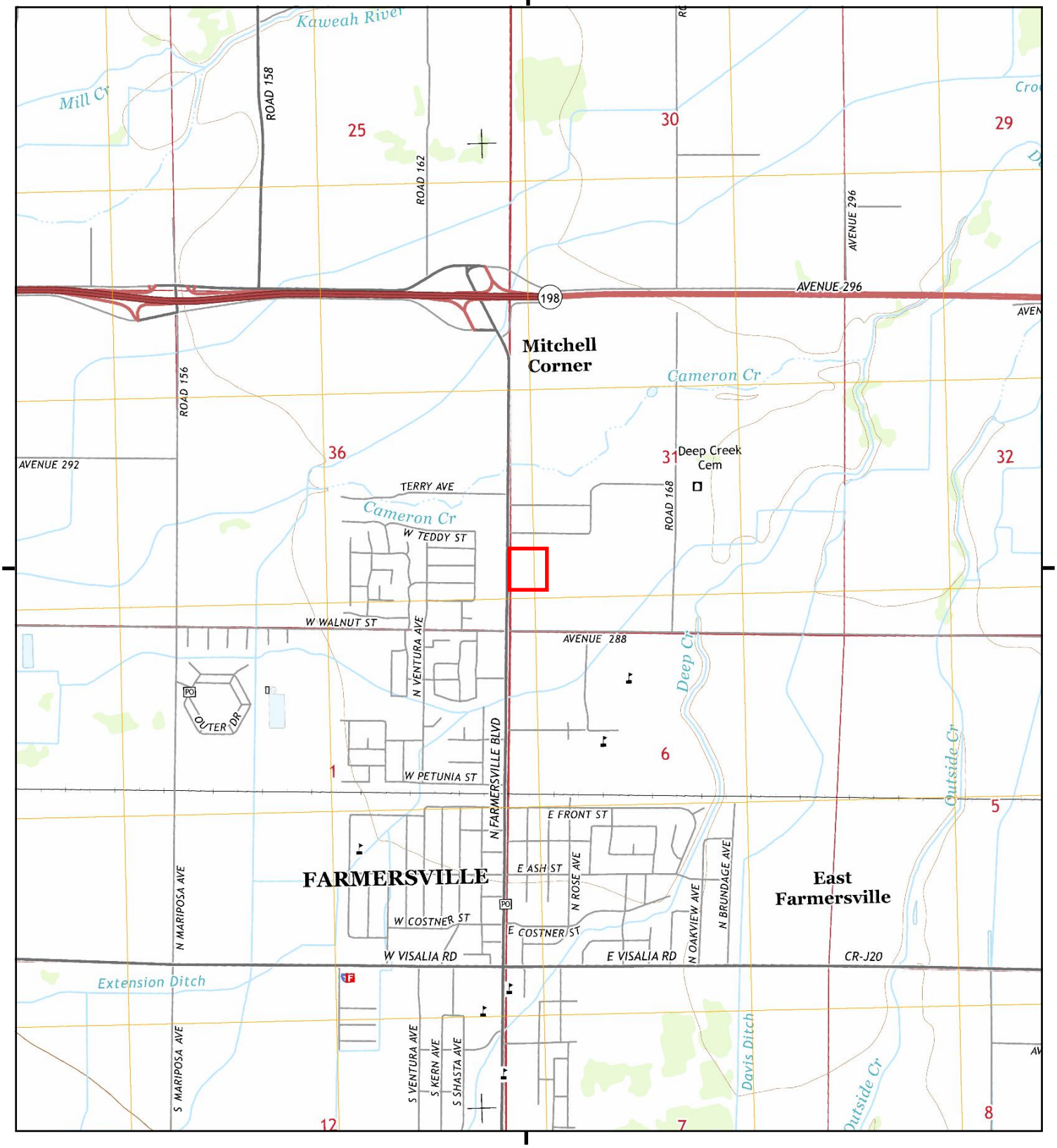
TP, Exeter, 2018, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Visalia, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

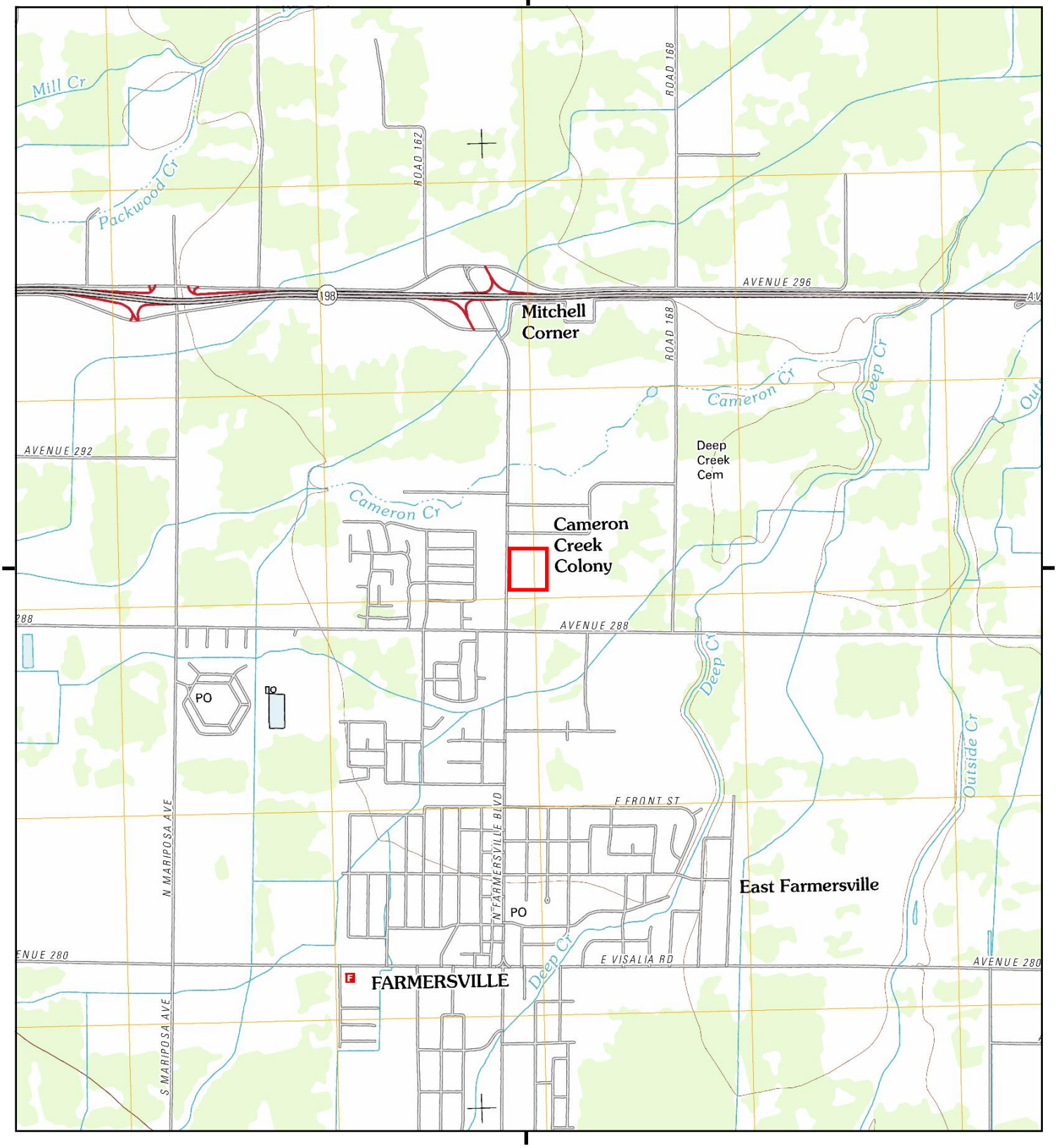
TP, Exeter, 2015, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Visalia, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

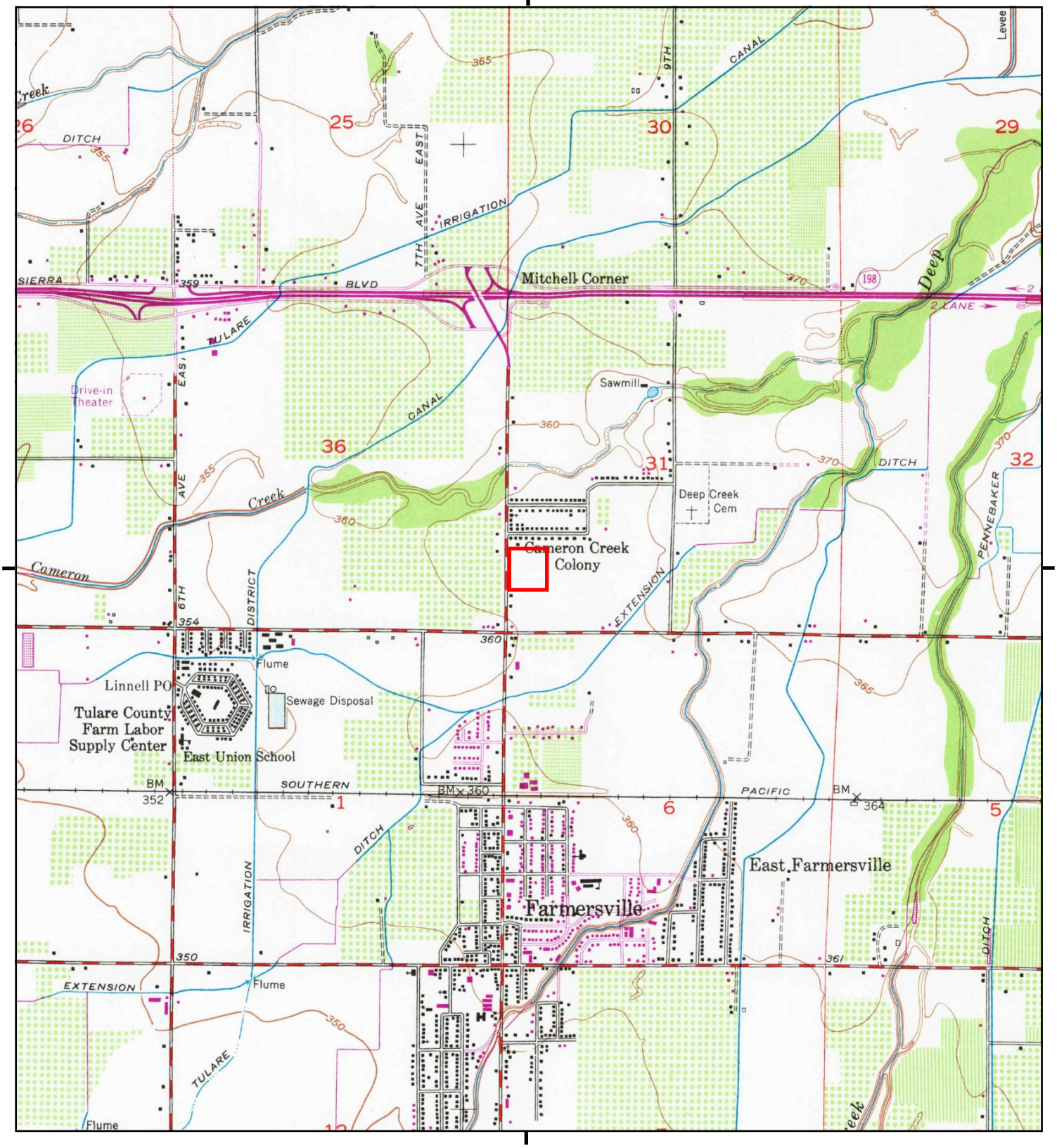
TP, Exeter, 2012, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Visalia, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

1969



This report includes information from the following map sheet(s).

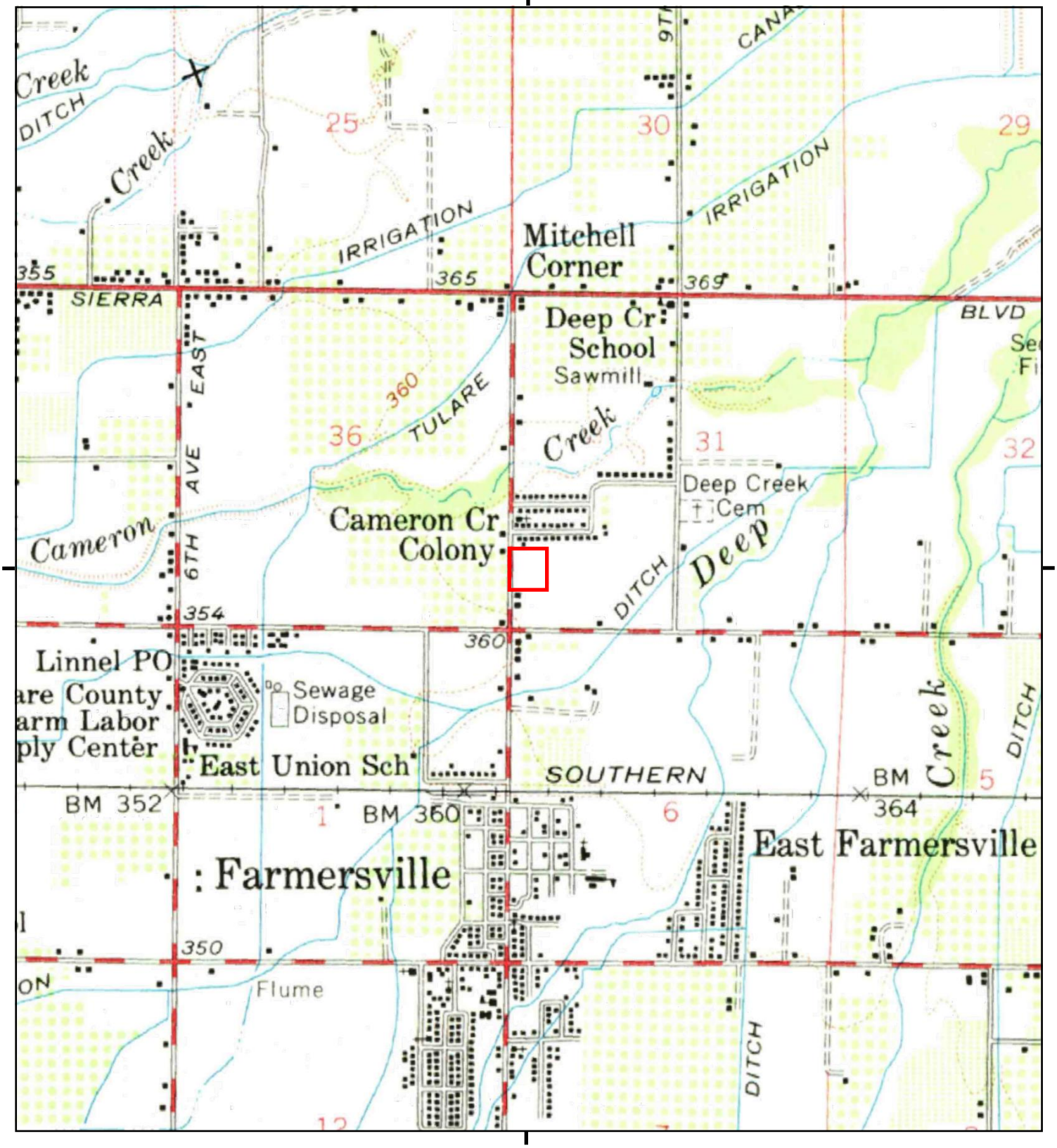
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Exeter, 1969, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Visalia, CA 93292
CLIENT: KCE Matrix

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

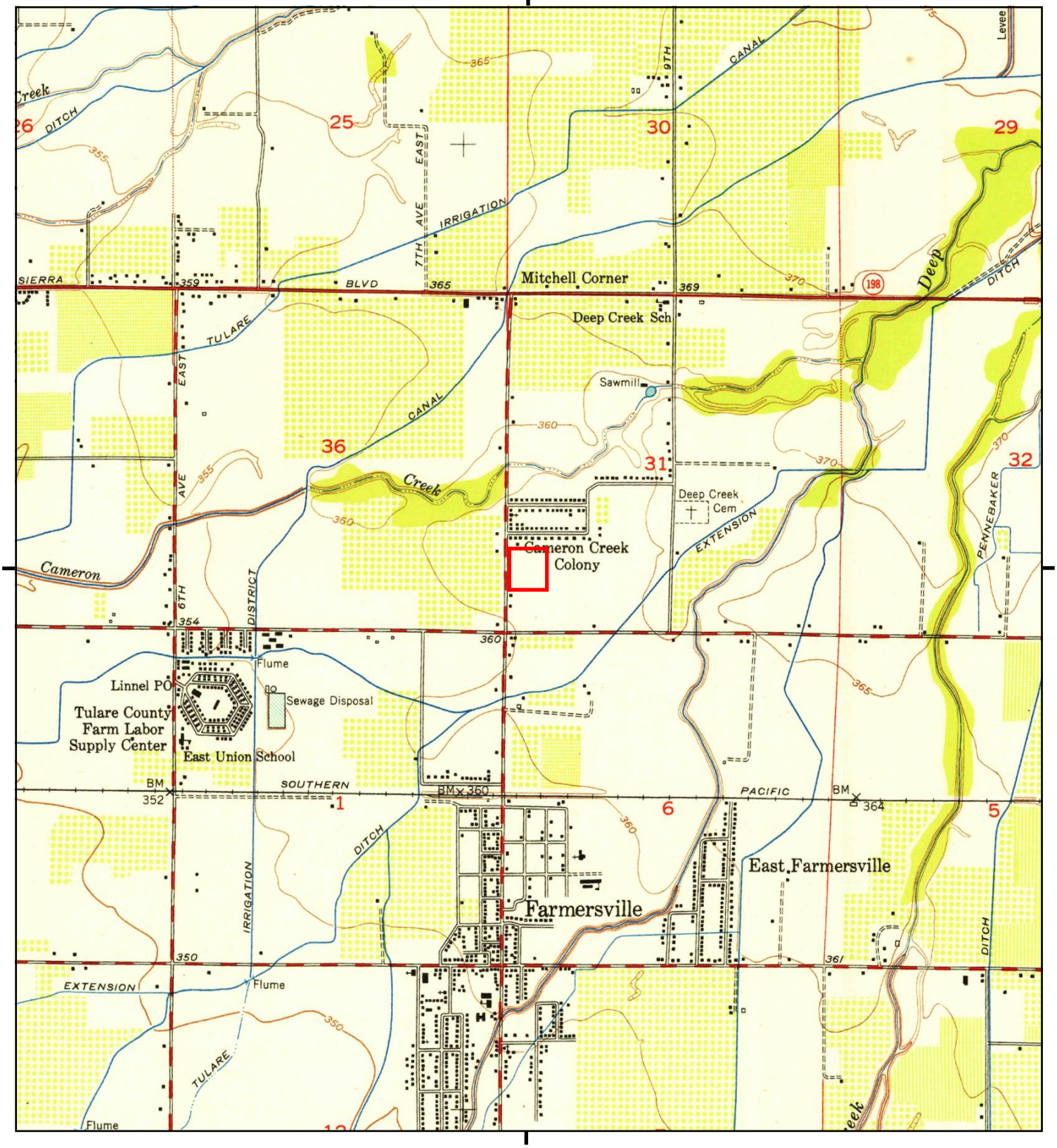
TP, Exeter, 1952, 15-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Visalia, CA 93292
CLIENT: KCE Matrix

N

Historical Topo Map

1950



This report includes information from the following map sheet(s).

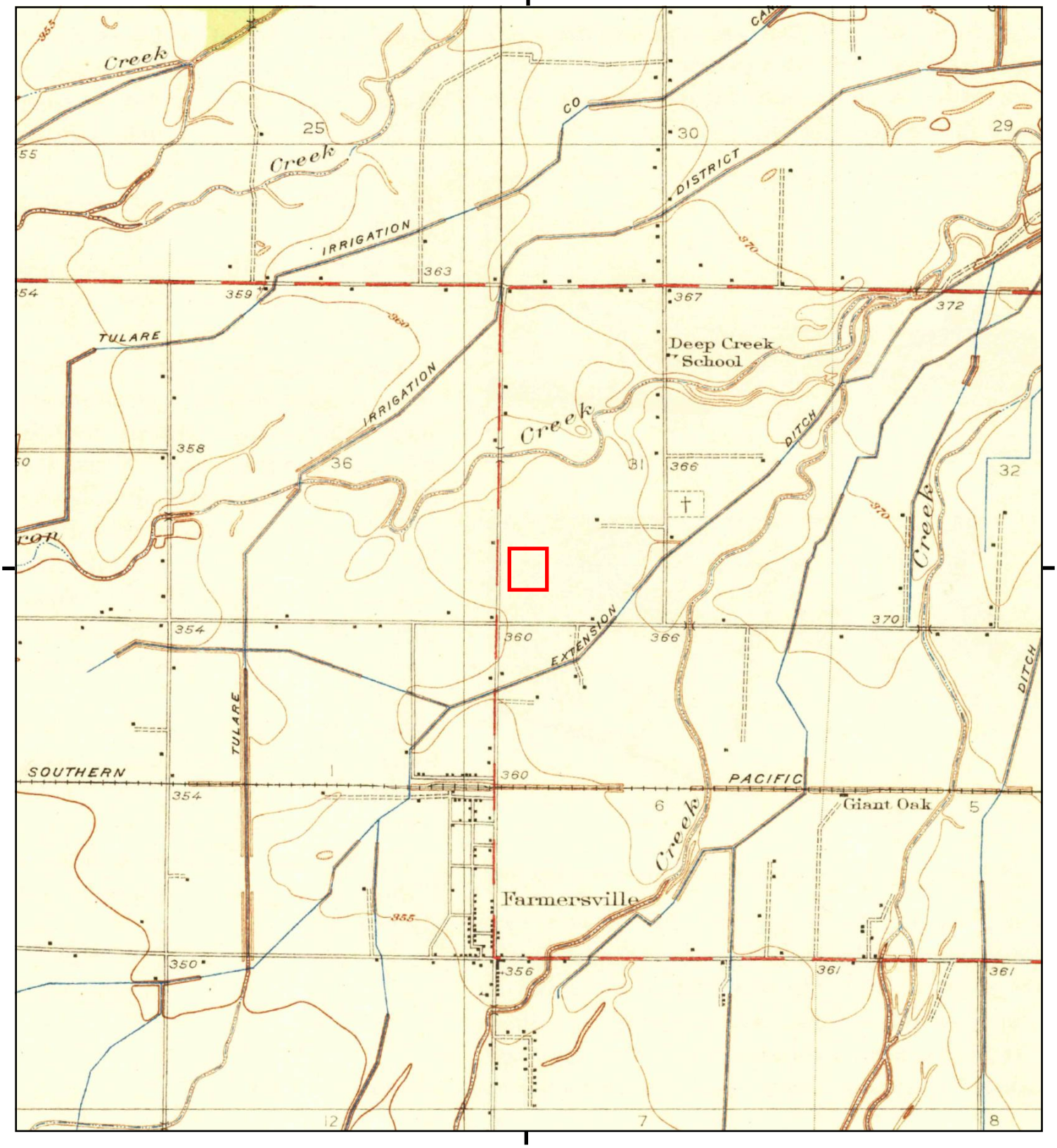
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Exeter, 1950, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Visalia, CA 93292
CLIENT: KCE Matrix

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Exeter, 1926, 7.5-minute

SITE NAME: Vacant Land
ADDRESS: APN 111-290-015-000
Visalia, CA 93292
CLIENT: KCE Matrix

N

APPENDIX D-5

CITY DIRECTORY ABSTRACT

Vacant Land
APN 111-290-015-000
Visalia, CA 93292

Inquiry Number: 7176734.5
November 16, 2022

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☑	EDR Digital Archive
2014	☑	☑	EDR Digital Archive
2010	☑	☑	EDR Digital Archive
2005	☑	☑	EDR Digital Archive
2000	☑	☑	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1986	☑	☐	POLK DIRECTORY CO
1981	☑	☐	POLK DIRECTORY CO
1976	☑	☐	POLK DIRECTORY CO
1971	☑	☐	POLK DIRECTORY CO
1967	☑	☐	POLK DIRECTORY CO
1962	☑	☐	POLK DIRECTORY CO
1959	☑	☐	POLK DIRECTORY CO

EXECUTIVE SUMMARY

Year	Target Street	Cross Street	Source

FINDINGS

TARGET PROPERTY STREET

APN 111-290-015-000
Visalia, CA 93292

Year	*CD Image*	*Source*

N FARMERSVILLE BLVD

2017	pg A2	EDR Digital Archive
2014	pg A4	EDR Digital Archive
2010	pg A6	EDR Digital Archive
2005	pg A8	EDR Digital Archive
2000	pg A10	EDR Digital Archive
1995	pg A11	EDR Digital Archive
1992	pg A12	EDR Digital Archive

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
E WALNUT AVE			
2017	pg. A1	EDR Digital Archive	
2014	pg. A3	EDR Digital Archive	
2010	pg. A5	EDR Digital Archive	
2005	pg. A7	EDR Digital Archive	
2000	pg. A9	EDR Digital Archive	
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1986	-	POLK DIRECTORY CO	Street not listed in Source
1981	-	POLK DIRECTORY CO	Street not listed in Source
1976	-	POLK DIRECTORY CO	Street not listed in Source
1971	-	POLK DIRECTORY CO	Street not listed in Source
1967	-	POLK DIRECTORY CO	Street not listed in Source
1962	-	POLK DIRECTORY CO	Street not listed in Source
1959	-	POLK DIRECTORY CO	Street not listed in Source
N FARMERSVILLE BLVD			
1986	pg. A13	POLK DIRECTORY CO	
1981	pg. A14	POLK DIRECTORY CO	
1976	pg. A15	POLK DIRECTORY CO	
1971	pg. 0	POLK DIRECTORY CO	Target and Adjoining not listed in Source
1967	pg. 0	POLK DIRECTORY CO	Target and Adjoining not listed in Source
1962	pg. 0	POLK DIRECTORY CO	Street not listed in Source
1959	pg. 0	POLK DIRECTORY CO	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E WALNUT AVE 2017

631 FARMERSVILLE UNIFIED SCHOOL DISTRICT

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N FARMERSVILLE BLVD 2017

1215	RUBALCABA, LOIS D
1235	VALENCIA, JUAN M
1250	SANTOYO, LUIS A
1255	HURTADO, LUCILA
1295	TORRES, DELFINA C
1315	REYES, JOSE A
1335	WHITSON, PATSY A
1355	SILVA, JACINTO
1376	MASON TIRE
1425	FAMILY DOLLAR
1456	FARMERSVILLE FOOD MART
1550	FAMILY DOLLAR
1555	AUTOZONE
	CENTRO DE SERVICIOS
	CHECK N GO
	DOLLAR TREE
	PIZZA FACTORY
	SMOKIN DEALS
	TAQUERIA EL TAPATIO
1616	SANCHEZ, E
1660	VTP ENTERPRISES
1662	JACK IN THE BOX
1877	GLENS MINI STORAGE
2073	CHITO TIRE & WHEEL REPAIR
2465	BALTEZOR, DAWAYNE
2975	KAWEAH DELTA WATER CONSERVATION DIST

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E WALNUT AVE 2014

631 FARMERSVILLE UNIFIED SCHOOL DISTRICT

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N FARMERSVILLE BLVD 2014

1215	RUBALCABA, LOIS D
1235	NUNO, GABRIELA
1250	SANTOYO, LUIS A
1255	URENA, LUIS M
1275	OLEA, ROSITA
1295	TORRES, DELFINA C
1315	REYES, FELIPE L
1335	OCCUPANT UNKNOWN,
1355	SILVA, JACINTO
1376	MASON TIRE
1425	FAMILY DOLLAR
1456	FARMERSVILLE FOOD MART
1555	AUTOZONE
	CENTRO DE SERVICIOS
	CHECK N GO
	DOLLAR TREE
	PIZZA FACTORY
	TAQUERIA EL TAPATIO
1616	SANCHEZ, E
1662	JACK IN THE BOX
1877	GLENS MINI STORAGE
2465	JAMES, DOROTHY D
	QUINN, DANNY J
2975	KAWEAH DELTA WATER CONSERVATION DIST

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E WALNUT AVE 2010

631 FARMERSVILLE HIGH SCHOOL

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N FARMERSVILLE BLVD 2010

1215	RUBALCABA, LINDA
1235	VALENCIA, JUAN M
1250	OCCUPANT UNKNOWN,
1255	VAZQUEZ, DAVID F
1275	OLEA, ROSITA
1295	TORRES, DELFINA C
1315	REYES, FELIPE L
1335	OCCUPANT UNKNOWN,
1355	SILVA, JACINTO
1376	MASON TIRE
1456	FARMERSVILLE FOOD MART
1555	ACADEMY WEST INSURANCE SVC INC
	AUTOZONE
	CHECK N GO
	DOLLAR TREE
	PIZZA FACTORY
	TAQUERIA LOS ALTOS
1616	BURKETT, ANITA
1660	VTP ENTERPRISES
1662	JACK IN THE BOX
1877	GLENS MINI STORAGE
	UHAUL CO
2465	BALTEZOR, OSCAR
	QUINN, KEVIN P
2495	QUINN, DANNY J
2515	OCCUPANT UNKNOWN,
2975	KAWEAH DELTA WATER CNSRVTN

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E WALNUT AVE 2005

631 FARMERSVILLE HIGH SCHOOL

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N FARMERSVILLE BLVD 2005

1215	RUBALCABA, LINDA
1235	VALENCIA, JUAN M
1250	OCCUPANT UNKNOWN,
1255	VAZQUEZ, DAVID F
1275	ORTIZ, SANDRA
1295	CORONA, RAYMOND
1315	REYES, FELIPE
1335	WHITSON, BOBBY J
1355	SILVA, JACINTO
1376	MASON TIRE
1456	FARMERSVILLE FOOD MART
1616	BURKETT, ANITA
1715	CB PERFORMANCE
	CLAUDES BUGGIES INC
2465	WATSON, LILLIAN
2515	HENRY, BOB V
2975	KAWEAH RIVER POWER AUTHORITY

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

E WALNUT AVE 2000

631 FARMERSVILLE HIGH SCHOOL

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N FARMERSVILLE BLVD 2000

1215	RUBALCABA, LOIS D
1235	OCCUPANT UNKNOWN,
1250	VAZQUEZ, ROSE M
1255	VAZQUEZ, DAVID F
1275	MARTIN, RENEE
1295	TORRES, DELFINA C
1335	WHITSON, BOBBY J
1355	HOLT, SUKIYEM
1376	MASON TIRE
	MASON TIRE EMERGENCY 24 HR
1456	JACKPOT FOOD MART
1616	OCCUPANT UNKNOWN,
1667	OCCUPANT UNKNOWN,
1715	CLAUDES BUGGIES INCORPORATED
1877	GLENS MINI STORAGE
2073	TERRY, TED C
2515	DAVIDSON, ESTHER

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N FARMERSVILLE BLVD 1995

1215	RUBALCABA, LOIS D
1235	CHAVEZ, JOSE
1250	VAZQUEZ, ROSE M
1255	VAZQUEZ, DAVID F
1295	TORRES, DELFINA C
1315	OCCUPANT UNKNOWNN
1335	WHITSON, BOBBY J
1376	MASON TIRE
1616	LEWIS, CHARLES

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

N FARMERSVILLE BLVD 1992

1005 MYERS, RON L
1085 RICE, W H
1125 MCCOY, VAN F
1188 BARRIOS, LETICIA
1250 VASQUEZ, FRANK
1376 MASON TIRE
1456 JACKPOT FOOD MART
1616 HOPKINS, EDMUND

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

N FARMERSVILLE BLVD 1986

W PETUNIA ST INTERSECTS
985 Blake James W ◎ 747-0358
1005 Myers Ron L ◎ 747-0601
1025 Teague Michl S
1045 Rios Frank R ◎
1065 Rice Warren ◎ 747-3170
1085 Rice Alma ◎ 747-0122
1105 Sisk Leon D ◎ 747-1169
1125 Mc Coy Van F ◎ 747-0293
W CITRUS ST INTERSECTS
1188 Chamberlain Kenneth ◎ 747-0025
1195 Santana Steven ◎
1215 James Darlene Mrs ◎
1235 No Return
1250 Vasquez Frank ◎ 747-3285
1255 Vacant
1275 Patterson Doris Mrs ◎
1295 Torres Delfina ◎
1315 Wirt Ernest A ◎ 747-0073
1335 Whitson Bob J ◎ 747-3092
1376 Mason Tire & Wheel 747-0223
1456 Jackpot Food Mart 747-0240

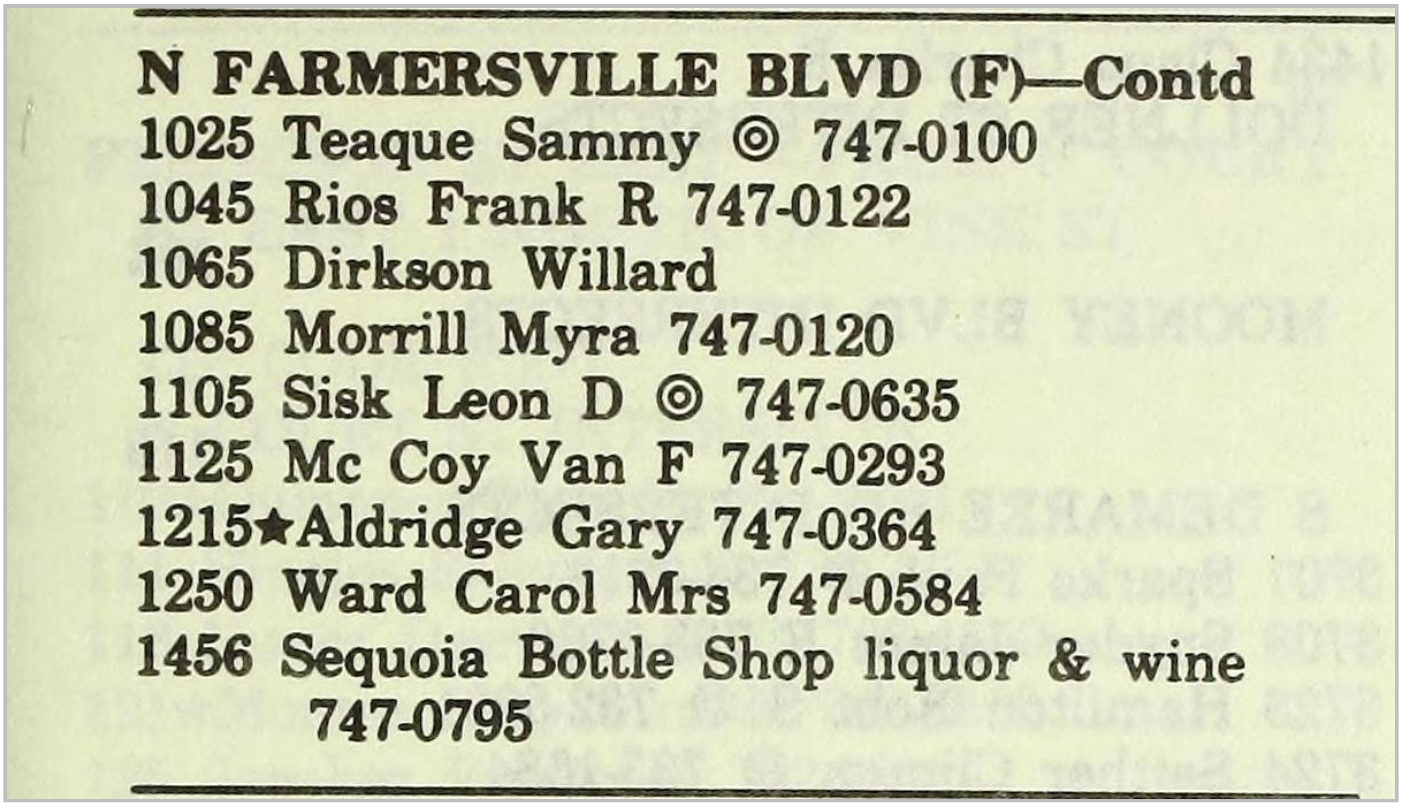
Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

N FARMERSVILLE BLVD 1981

1005 Myers Ron L ◎ 747-0601
1025 Teague Sammy ◎ 747-0100
1045 Rios Frank R ◎ 747-0122
1065 Rice Warren ◎
1085 Wheeler Fred ◎ 747-0211
1105 Sisk Leon D. ◎ 747-0635
1125 Mc Coy Van F ◎ 747-0293
1188 Chamberlain Kenneth ◎ 747-0025
1195 Santana Steven ◎
1215★James Darrell ◎
1235 Rummerfield Bill
1250★Vasquez Frank 747-3285
1255 De Jesus Wm ◎ 747-3916
1275 Patterson Pat ◎ 747-0141
1295 Torres Delfina
1315 Wirt Ernest A 747-0073
1335 Whitson Bob J ◎ 741-3092
1456 Sequoia Bottle Shop liquor & wine
747-0795

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

N FARMERSVILLE BLVD 1976



N FARMERSVILLE BLVD (F)—Contd

1025 Teaque Sammy ◎ 747-0100
1045 Rios Frank R 747-0122
1065 Dirkson Willard
1085 Morrill Myra 747-0120
1105 Sisk Leon D ◎ 747-0635
1125 Mc Coy Van F 747-0293
1215★Aldridge Gary 747-0364
1250 Ward Carol Mrs 747-0584
1456 Sequoia Bottle Shop liquor & wine 747-0795

APPENDIX E

USER QUESTIONNAIRE
AND TITLE REPORT

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Site Address, APN, etc.: (APN: 111-290-015-000), Farmersville, CA 93292

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

1. **Environmental cleanup liens that are filed or recorded against the site**
   Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law?
   ☑ **No** ☐ **Yes, please explain** _____

2. **Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry**
   Are you aware of any Activity and Use Limitations (AULs), such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?
   ☑ **No** ☐ **Yes, please explain** _____

3. **Specialized knowledge or experience of the person seeking to qualify for the LLP**
   As the *user* of this *ESA,* do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?
   ☑ **No** ☐ **Yes, please explain** _____

4. **Relationship of the purchase price to the fair market value of the *property* if it were not contaminated**
   Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?
   ☑ **Yes** ☐ **No, there is a difference between the purchase price and the fair market value**
   If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?
   please explain _____

5. **Commonly known or *reasonably ascertainable* information about the *property***
   Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,

   (a.) Do you know the past uses of the *property*?
   ☑ **No** ☐ **Yes, please explain** _____

   (b.) Do you know of specific chemicals that are present or once were present at the *property*?
   ☑ **No** ☐ **Yes, please explain** _____

   (c.) Do you know of spills or other chemical releases that have taken place at the *property*?
   ☑ **No** ☐ **Yes, please explain** _____

   (d.) Do you know of any environmental cleanups that have taken place at the *property*?
   ☑ **No** ☐ **Yes, please explain** _____

6. **The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation**
   As the *user* of this *ESA*, based on your knowledge and experience related to the *property,* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?
   ☑ **No** ☐ **Yes, please explain** _____

Note: Landowner Liability Protections, or *LLPs*, is the term used to describe the three types of potential defenses to Superfund liability in EPA's *Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Limitations on CERCLA Liability* ("*Common Elements*" Guide) issued on March 6, 2003.

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

In addition, certain information should be collected, if available, and provided to *KCE Matrix, Inc.* to conduct the Phase I Environmental Site Assessment. This information is intended to assist *KCE Matrix, Inc.* but is not necessarily required to qualify for one of the *LLPs*. The information includes:

(a) The reason why the Phase I Environmental Site Assessment is required,

Due diligence

(b) The type of *property* and type of *property* transaction, for example, sale, purchase, exchange, etc.,

unimproved, vacant land

(c) The complete and correct address for the *property* (a map or other documentation showing *property* location and boundaries is helpful) APN = 111-290-015

Along Farmersville Rd (East side) between Dillon Ave & E Walnut St

(d) The scope of services desired for the Phase I (including whether any parties to the *property* transaction may have a required standard scope of services on whether any considerations beyond the requirements of Practice E 1527 are to be considered),

Standard scope

(e) Identification of all parties who will rely on the Phase I *report*,

Pacific West Communities

(f) Identification of the site contact and how the contact can be reached,

Don Slattery, dons@tpchousing.com, (208)908-4873

(g) Any special terms and conditions which must be agreed upon by the *environmental professional*

None

(h) Any other knowledge or experience with the *property* that may be pertinent to the *environmental professional* for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *property* and its environmental condition).

None

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Vapor Encroachment Screening Section

1. **Property Type:**
   ☐ Commercial ☐ Industrial ☐ Multi Tenant ☑ Vacant Land

2. **Are there any building/structures on the property?**
   ☑ No ☐ Unknown ☐ Yes, type construction _____

3. **Will buildings/structures be constructed on the property in the future?**
   ☐ No ☐ Unknown ☑ Yes, type construction Apartments

4. **If buildings exist or are proposed, do/will they have elevators?**
   ☐ Yes ☒ No

5. **Type of level below grade (existing or proposed)?**
   ☐ Full Basement ☐ Crawl Space ☑ Slab on Grade ☐ Parking Garage ☐ Multi-Level

6. **Ventilation in level below grade?**
   ☐ Yes ☐ No ☒ Unknown

7. **Sump pumps, floor drains, or trenches (existing or proposed)?**
   ☐ Yes ☐ No ☑ Unknown

8. **Radon or methane mitigation system installed?**
   ☐ Yes ☐ No ☒ Unknown

9. **Heating system type? (existing or proposed)? (CHECK ALL THAT APPLY)**

☒ Hot Air Circulation	☐ Electric Baseboard	☐ Hot Air Radiation	☐ Heat Pump
☐ Hot Water Radiation	☐ Wood Stove	☐ Kerosene Heater	☐ Steam Radiation
☐ Fireplace	☐ Coal Furnace	☐ Radiant Floor Heat	☒ Hot Water Circulation
☐ Fuel Oil Furnace	☒ Gas Furnace	☐ Other	

10. **Type of fuel energy? (existing or proposed)? (CHECK ALL THAT APPLY)**

☒ Natural Gas	☒ Electric	☐ Propane	☐ Fuel Oil
☐ Kerosene	☐ Wood	☐ Coal	☐ Solar
☐ Other			

11. **Have there ever been any environmental problems at the property?**
    ☐ No ☑ Unknown ☐ Yes, describe _____

12. **Does/will a gas station or dry cleaner operate anywhere on the property?**
    ☐ Yes ☒ No ☐ Unknown

13. **Do any tenants use hazardous chemicals in relatively large quantities on the property?**
    ☐ No ☑ Unknown ☐ Yes, describe _____

PHASE I ESA - USER QUESTIONNAIRE

KCE Matrix, Inc.

Vapor Encroachment Screening Section Continued:

14. **Have any tenants ever complained about odors in the building or experienced health related problems that may have been associated with the building?**
    ☐ Yes ☐ No ☑ Unknown

15. **Are the operations (or proposed operations to be performed) on the property OSHA regulated?**
    ☐ Yes ☑ No ☐ Unknown

16. **Are there any existing or proposed underground storage tanks (USTs) or above ground storage tanks (ASTs)?**
    ☐ Yes ☐ No ☑ Unknown

17. **Are there any sensitive receptors (for example, children, elderly, people in poor health, and so forth) that occupy or will occupy the property?**
    ☒ Yes ☐ No ☐ Unknown

Print Name: Jacob Soroudi **Date:** 11/16/22

First American Title

First American Title Company

211 East Caldwell Avenue
Visalia, CA 93277
California Department of Insurance License No. 151

Escrow Officer:	Ann Kay
Phone:	(559)635-6803
Fax No.:	(866)590-2167
E-Mail:	akay@firstam.com

E-Mail Loan Documents to:	Lenders please contact the Escrow Officer for email address for sending loan documents.
Owner:	TBD
Property:	Vacant Land Farmersville, CA 93274

PRELIMINARY REPORT

In response to the above referenced application for a policy of title insurance, this company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Exhibit A attached. *The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties*. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Exhibit A. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

Please be advised that any provision contained in this document, or in a document that is attached, linked or referenced in this document, that under applicable law illegally discriminates against a class of individuals based upon personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or any other legally protected class, is illegal and unenforceable by law.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of October 18, 2022 at 7:30 A.M.

The form of Policy of title insurance contemplated by this report is:

ALTA/CLTA Homeowner's (EAGLE) Policy of Title Insurance (2013) and ALTA Ext Loan Policy 1056.06 (06-17-06) if the land described is an improved residential lot or condominium unit on which there is located a one-to-four family residence; or ALTA Standard Owner's Policy 2006 (WRE 06-17-06) and the ALTA Loan Policy 2006 (06-17-06) if the land described is an unimproved residential lot or condominium unit

A specific request should be made if another form or additional coverage is desired.

Title to said estate or interest at the date hereof is vested in:

Marlene E. Gardiner, as Trustee of the Marlene E. Gardiner Survivor's Trust, dated January 5, 1988 as to an undivided 40% interest and DMA Investments Limited Partnership, a Nevada limited partnership as to an undivided 60% interest as tenants in common, Subject to Exception No. 15

The estate or interest in the land hereinafter described or referred to covered by this Report is:

FEE

The Land referred to herein is described as follows:

(See attached Legal Description)

At the date hereof exceptions to coverage in addition to the printed Exceptions and Exclusions in said policy form would be as follows:

1. General and special taxes and assessments for the fiscal year 2022-2023.

First Installment:	$2,279.55, OPEN
Penalty:	$0.00
Second Installment:	$2,279.55, OPEN
Penalty:	$0.00
Tax Rate Area:	008-020
A. P. No.:	111-290-015-000

2. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.

3. AN EASEMENT FOR THE PURPOSE SHOWN BELOW RIGHTS INCIDENTAL THERETO, AS SHOWN BELOW MAP OF: TULARE COUNTY ASSESSOR'S MAP IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY PURPOSE : ROAD 164
AFFECTS : WEST LINE OF SAID LAND

4. Any and all offers of dedications, conditions, restrictions, easements, notes and/or provisions shown or disclosed by the filed or recorded map referred to in the legal description including but not limited to: PUBLIC UTILITIES, ACCESS EASEMENT, PUBLIC USE THE ROAD RIGHT OF WAY and incidental purposes affecting said land.

5. The effect of a map purporting to show the land and other property, filed IN BOOK 30, PAGE 72 of Record of Surveys.

6. The effect of a document entitled "GRANT DEED", recorded JULY 14, 2005 as INSTRUMENT NO. 05-74678 of Official Records.

   The requirement the document is re-recorded to include a complete and correct legal description.

7. The effect of a document entitled "GRANT DEED", recorded DECEMBER 7, 2010 as INSTRUMENT NO. 10-78135 of Official Records.

   The requirement the document is re-recorded to include a complete and correct legal description.

8. An easement for CONSTRUCTION AND RELATED PURPOSES and incidental purposes, recorded MAY 12, 2020 as INSTRUMENT NO. 20-26557 OF OFFICIAL RECORDS.

In Favor of:	THE CITY OF FARMERSVILLE, A MUNICIPAL CORPORATION
Affects:	as described therein

9. Rights of the public in and to that portion of the Land lying within any Road, Street, Alley or Highway.

10. Water rights, claims or title to water, whether or not shown by the Public Records.

Prior to the issuance of any policy of title insurance, the Company will require:

11. With respect to the trust referred to in the vesting:
    a. A certification pursuant to Section 18100.5 of the California Probate Code in a form satisfactory to the Company.
    b. Copies of those excerpts from the original trust documents and amendments thereto which designate the trustee and confer upon the trustee the power to act in the pending transaction.
    c. Other requirements which the Company may impose following its review of the material required herein and other information which the Company may require.

12. With respect to DMA Investments Limited Partnership, a California limited partnership:

    a. That a certified copy of the certificate of limited partnership (form LP-1) and any amendments thereto (form LP-2) be recorded in the public records;
    b. A full copy of the partnership agreement and any amendments;
    c. Satisfactory evidence of the consent of a majority in interest of the limited partners to the contemplated transaction;
    d. Other requirements which the Company may impose following its review of the material required herein and other information which the Company may require.

13. With respect to DMA Investments Limited Partnership, a NEVADA limited partnership:

a. That a certified copy of the application for registration, foreign limited partnership (form LP-5) and any amendments thereto (form LP-6) be recorded in the public records;
b. A full copy of the partnership agreement and any amendments;
c. Satisfactory evidence of the consent of a majority in interest of the limited partners to the contemplated transaction;
d. Other requirements which the Company may impose following its review of the material required herein and other information which the Company may require.

14. With respect to DMA Investments Limited Partnership, a Nevada limited partnership, a certificate of revivor and a certificate of relief from contract voidability issued by the Franchise Tax Board of the State of California.

15. With respect to THE GARDINER FAMILY TRUST U/T/A/ DATED JANUARY 5, 1988 :
a. A certification pursuant to Section 18100.5 of the California Probate Code in a form satisfactory to the Company.
b. Copies of those excerpts from the original trust documents and amendments thereto which designate the trustee and confer upon the trustee the power to act in the pending transaction.
c. Other requirements which the Company may impose following its review of the material required herein and other information which the Company may require.

16. A copy of the Trust Agreement and all amendments should be submitted prior to closing. The Company may make additional requirements following a review of such documents including, but not limited to, a certification of trust confirming the powers of the trustees and the continuing existence of the trust.

INFORMATIONAL NOTES

Note: The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

1. The property covered by this report is vacant land.

2. According to the public records, there has been no conveyance of the land within a period of twenty-four months prior to the date of this report, except as follows:

   None

3. We find no outstanding voluntary liens of record affecting subject property. Disclosure should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any possible security interest in the subject property.

   NOTE to proposed insured lender only: No Private transfer fee covenant, as defined in Federal Housing Finance Agency Final Rule 12 CFR Part 1228, that was created and first appears in the Public Records on or after February 8, 2011, encumbers the Title except as follows: None

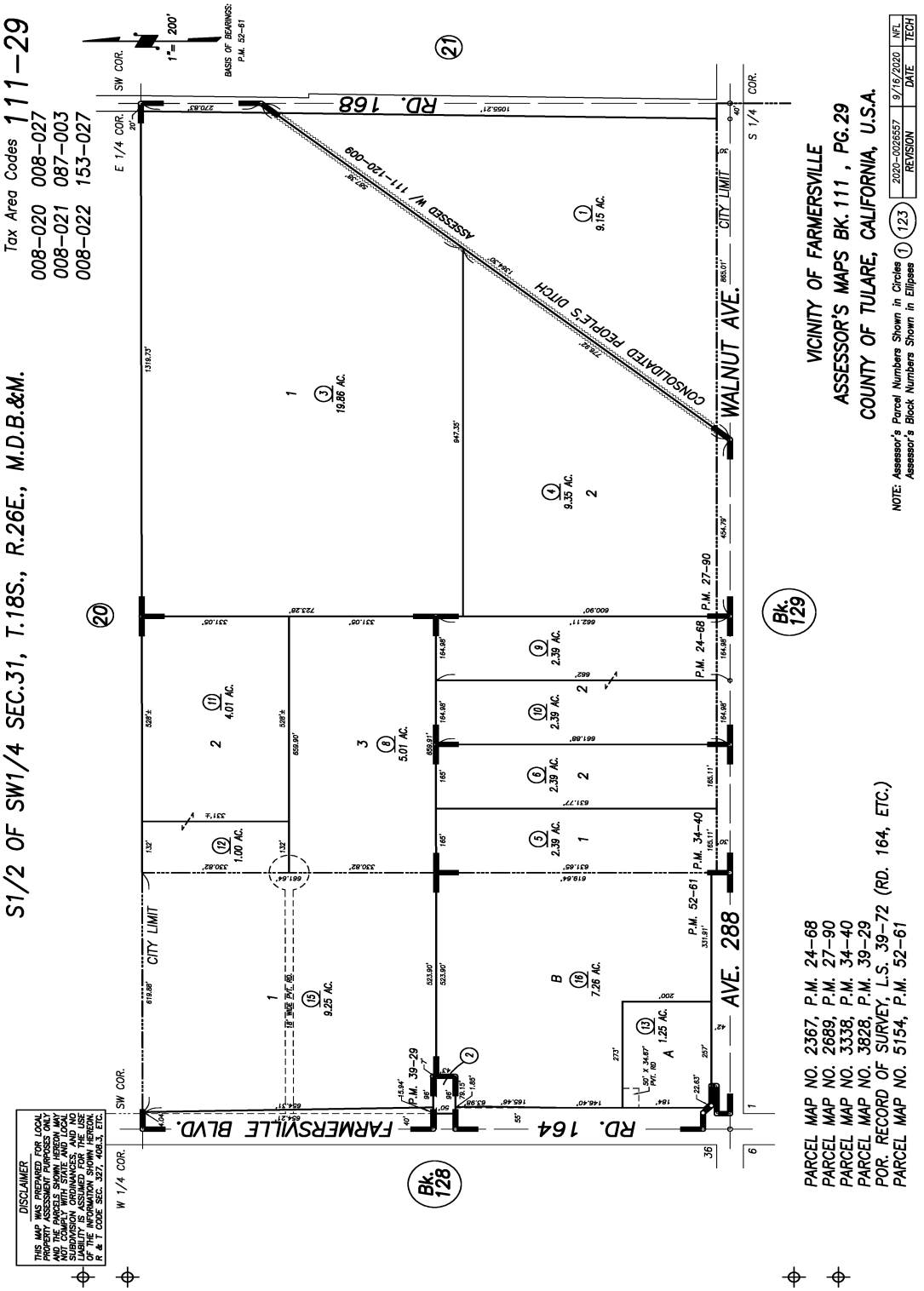
The map attached, if any, may or may not be a survey of the land depicted hereon. First American expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

LEGAL DESCRIPTION

Real property in the City of Farmersville, County of Tulare, State of California, described as follows:

PARCEL 1 OF PARCEL MAP NO. 3826, IN THE COUNTY OF TULARE, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN BOOK 39, PAGE 29 OF PARCEL MAPS, TULARE COUNTY RECORDS.

APN: 111-290-015-000


S1/2 OF SW1/4 SEC.31, T.18S., R.26E., M.D.B.&M.
Tax Area Codes 111-29
008-020 008-027
008-021 087-003
008-022 153-027
VICINITY OF FARMERSVILLE
ASSESSOR'S MAPS BK. 111 , PG. 29
COUNTY OF TULARE, CALIFORNIA, U.S.A.
NOTE: Assessor's Parcel Numbers Shown in Circles (1) (123)
Assessor's Block Numbers Shown in Ellipses
2020-0026557 9/16/2020 NFL
REVISION DATE TECH
1"= 200'
BASIS OF BEARINGS: P.M. 52-61
RD. 168
WALNUT AVE.
CONSOLIDATED PEOPLE'S DITCH
ASSESSD W/ 111-120-009
CITY LIMIT
AVE. 288
RD. 164
FARMERSVILLE BLVD.
P.M. 24-68
P.M. 27-90
P.M. 34-40
P.M. 52-61
P.M. 39-29
Bk. 129
Bk. 128
SW COR.
E 1/4 COR.
S 1/4 COR.
W 1/4 COR.
DISCLAIMER
THIS MAP WAS PREPARED FOR LOCAL PROPERTY ASSESSMENT PURPOSES ONLY AND THE PARCELS SHOWN HEREON MAY NOT COMPLY WITH STATE AND LOCAL SUBDIVISION ORDINANCES, AND NO LIABILITY IS ASSUMED FOR THE USE OF THE INFORMATION SHOWN HEREON. R & T CODE SEC. 327, 408.3, ETC.
PARCEL MAP NO. 2367, P.M. 24-68
PARCEL MAP NO. 2689, P.M. 27-90
PARCEL MAP NO. 3338, P.M. 34-40
PARCEL MAP NO. 3828, P.M. 39-29
POR. RECORD OF SURVEY, L.S. 39-72 (RD. 164, ETC.)
PARCEL MAP NO. 5154, P.M. 52-61

NOTICE

Section 12413.1 of the California Insurance Code, effective January 1, 1990, requires that any title insurance company, underwritten title company, or controlled escrow company handling funds in an escrow or sub-escrow capacity, wait a specified number of days after depositing funds, before recording any documents in connection with the transaction or disbursing funds. This statute allows for funds deposited by wire transfer to be disbursed the same day as deposit. In the case of cashier's checks or certified checks, funds may be disbursed the next day after deposit. In order to avoid unnecessary delays of three to seven days, or more, please use wire transfer, cashier's checks, or certified checks whenever possible.

EXHIBIT A
LIST OF PRINTED EXCEPTIONS AND EXCLUSIONS (BY POLICY TYPE)

CLTA STANDARD COVERAGE POLICY – 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
   (c) resulting in no loss or damage to the insured claimant;
   (d) attaching or created subsequent to Date of Policy; or
   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public, records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the public records at Date of Policy.

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
   a. building;

b. zoning;
c. land use;
d. improvements on the Land;
e. land division; and
f. environmental protection.

This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.

2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
   a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
   a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.

   This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:
For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.
The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1% of Policy Amount Shown in Schedule A or $2,500 (whichever is less)	$10,000
Covered Risk 18:	1% of Policy Amount Shown in Schedule A or $5,000 (whichever is less)	$25,000
Covered Risk 19:	1% of Policy Amount Shown in Schedule A or $5,000 (whichever is less)	$25,000
Covered Risk 21:	1% of Policy Amount Shown in Schedule A or $2,500 (whichever is less)	$5,000

2006 ALTA LOAN POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;

   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

[Except as provided in Schedule B - Part II,[t[or T]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

[PART I

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;

   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.

(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
(a) created, suffered, assumed, or agreed to by the Insured Claimant;
(b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
(c) resulting in no loss or damage to the Insured Claimant;
(d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 or 10); or
(e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
(a) a fraudulent conveyance or fraudulent transfer, or
(b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:
[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.
7. [Variable exceptions such as taxes, easements, CC&R's, etc. shown here.]

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (07-26-10)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

(i) the occupancy, use, or enjoyment of the Land;
(ii) the character, dimensions, or location of any improvement erected on the Land;
(iii) the subdivision of land; or
(iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
(a) created, suffered, assumed, or agreed to by the Insured Claimant;
(b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
(c) resulting in no loss or damage to the Insured Claimant;
(d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11,

16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
(e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.

4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

APPENDIX F

SITE PHOTOGRAPHS

B&M
TRANSMISSIONS
559 747-3677
Brakes
Tune Ups
Engine Work
559-747-3677

LOW RATES

APPENDIX G

VAPOR ENCROACHMENT SCREEN

Vacant Land
APN 111-290-015-000
Visalia, CA 93292

Inquiry Number: 7176734.2s
November 15, 2022

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Secondary Map	**3**
Map Findings	**4**
Record Sources and Currency	**GR-1**

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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The EDR Vapor Encroachment Worksheet enables EDR's customers to make certain online modifications that effects maps, text and calculations contained in this Report. As a result, maps, text and calculations contained in this Report may have been so modified. EDR has not taken any action to verify any such modifications, and this report and the findings set forth herein must be read in light of this fact. Environmental Data Resources shall not be responsible for any customer's decision to include or not include in any final report any records determined to be within the relevant minimum search distances.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by EDR. The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

STANDARD ENVIRONMENTAL RECORDS	Default Area of Concern (Miles)*	property	1/10	> 1/10
Lists of Federal NPL (Superfund) sites	1.0	0	0	0
Lists of Federal Delisted NPL sites	1.0	0	0	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders	0.5	0	0	0
Lists of Federal CERCLA sites with NFRAP	0.5	0	0	0
Lists of Federal RCRA facilities undergoing Corrective Action	1.0	0	0	0
Lists of Federal RCRA TSD facilities	0.5	0	0	0
Lists of Federal RCRA generators	0.25	0	0	0
Federal institutional controls / engineering controls registries	0.5	0	0	0
Federal ERNS list	0.001	0	0	-
Lists of state- and tribal (Superfund) equivalent sites	1.0	0	0	0
Lists of state- and tribal hazardous waste facilities	1.0	0	0	0
Lists of state and tribal landfills and solid waste disposal facilities	0.5	0	0	0
Lists of state and tribal leaking storage tanks	0.5	0	0	0
Lists of state and tribal registered storage tanks	0.25	0	0	0
State and tribal institutional control / engineering control registries	not searched	-	-	-
Lists of state and tribal voluntary cleanup sites	0.5	0	0	0
Lists of state and tribal brownfield sites	0.5	0	0	0

ADDITIONAL ENVIRONMENTAL RECORDS				
Local Brownfield lists	0.5	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites	0.5	0	0	0
Local Lists of Hazardous waste / Contaminated Sites	1.0	0	0	0
Local Lists of Registered Storage Tanks	0.25	0	3	0
Local Land Records	0.5	0	0	0
Records of Emergency Release Reports	0.5	0	0	0
Other Ascertainable Records	1.0	0	1	0

EDR HIGH RISK HISTORICAL RECORDS				
EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

VACANT LAND
APN 111-290-015-000
VISALIA, CA 93292

COORDINATES

Latitude (North):	36.31498 - 36° 18′ 53.92639″
Longitude (West):	119.205801 - 119° 12′ 20.890503″
Elevation:	365 ft. above sea level

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

ADDITIONAL ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
RAL COPPING HIST UST: HIST UST	28880 RD 164	<1/10 WNW	◆ A1	8
RALPH COPPING HIST UST: HIST UST	28880 ROAD 164	<1/10 WNW	◆ A2	9
CLAUDES BUGGIES INC SWEEPS UST: SWEEPS UST HIST UST: HIST UST	28813 FARMERSVILLE BLVD	<1/10 SW	◆ 3	9
T YOUNG DIESEL ELECTRIC RCRA NonGen / NLR: RCRA NonGen / NLR	29022 ROAD 164	<1/10 NNW	▲ 4	10

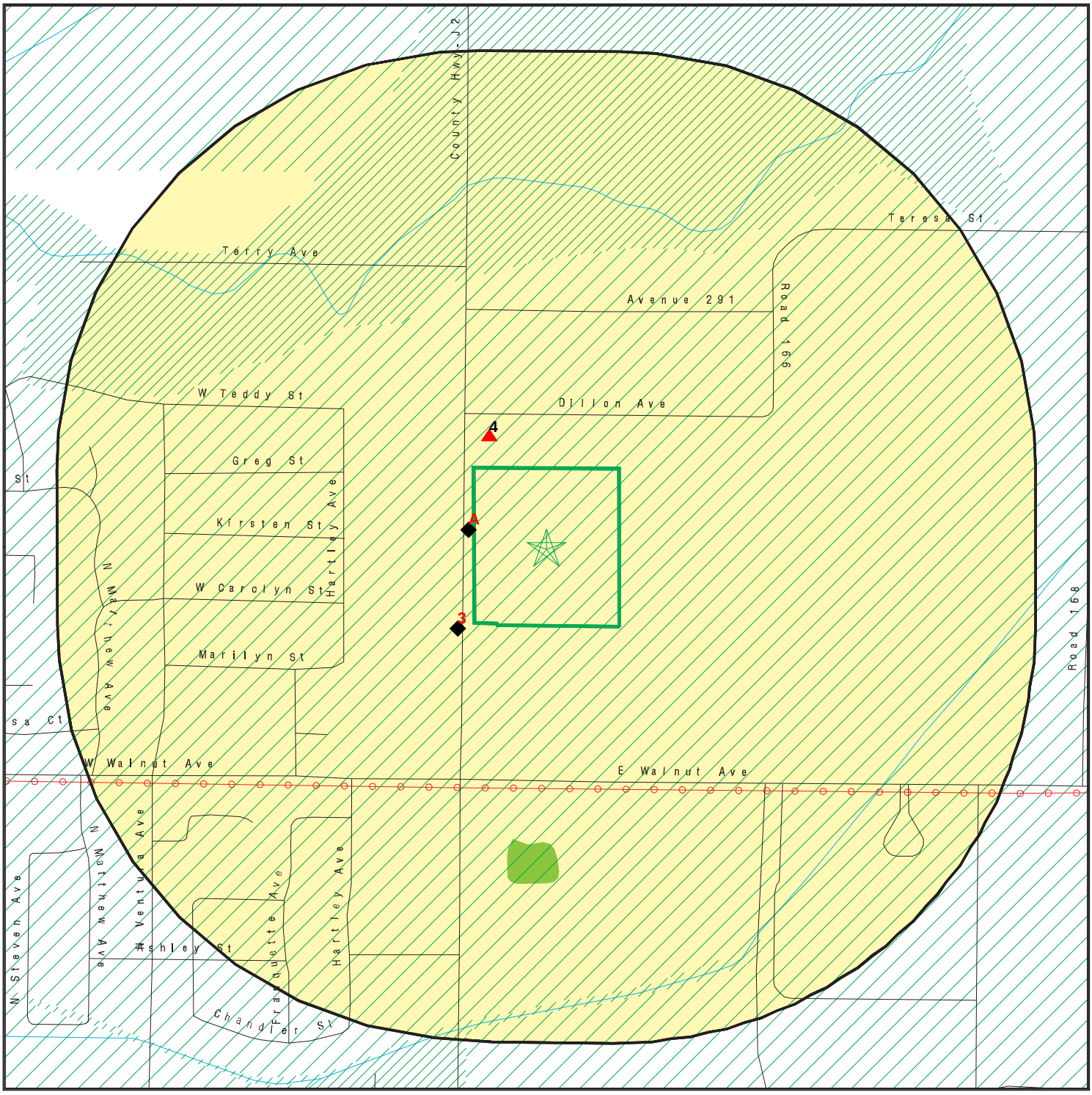
EDR HIGH RISK HISTORICAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

EDR RECOVERED GOVERNMENT ARCHIVES

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

PRIMARY MAP - 7176734.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vacant Land	CLIENT: KCE Matrix
ADDRESS: APN 111-290-015-000 Visalia CA 93292	CONTACT: Aram Kaloustian
LAT/LONG: 36.31498 / 119.205801	INQUIRY #: 7176734.2s DATE: November 11, 2022 4:46 pm

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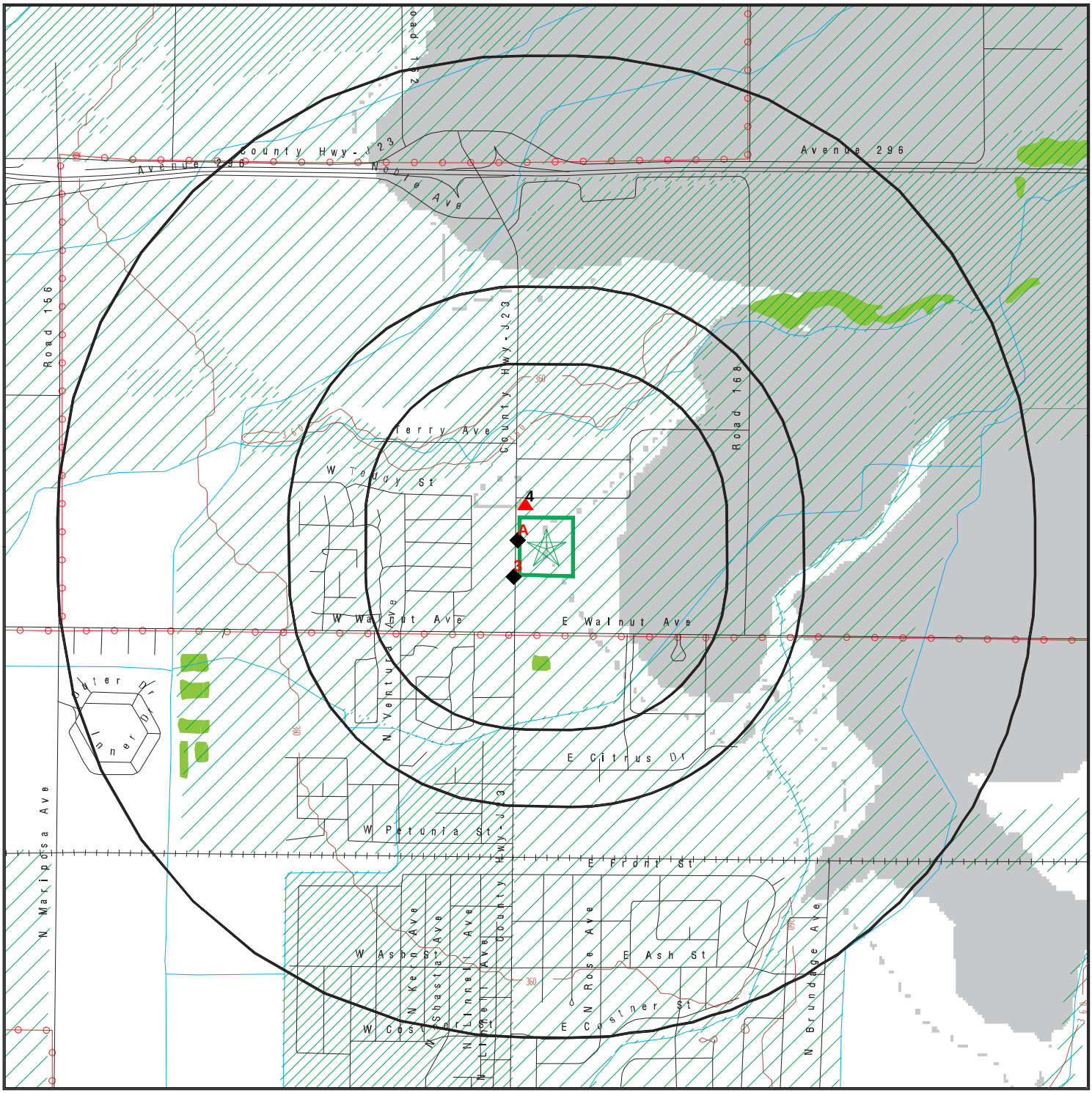
SECONDARY MAP - 7176734.2S



0 1/3 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vacant Land	CLIENT: KCE Matrix
ADDRESS: APN 111-290-015-000 Visalia CA 93292	CONTACT: Aram Kaloustian
LAT/LONG: 36.31498 / 119.205801	INQUIRY #: 7176734.2s DATE: November 11, 2022 4:46 pm

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MAP FINDINGS

LEGEND

FACILITY NAME **FACILITY ADDRESS, CITY, ST, ZIP**		EDR SITE ID NUMBER
◆ **MAP ID#**	Direction Distance Range (Distance feet / miles) Relative Elevation Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.

Worksheet:

Comments:
Comments may be added on the online Vapor Encroachment Worksheet.

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

RAL COPPING 28880 RD 164, VISALIA, CA, 93277			S118414367
◆ A1	WNW <1/10	(23 ft. / 0.004 mi.)	Local Lists of Registered Storage Tanks
	1 ft. Lower Elevation	364 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

HIST UST: Local Lists of Registered Storage Tanks

Name:	RAL COPPING
Address:	28880 RD 164
City,State,Zip:	VISALIA, CA 93277
File Number:	0002BCC2
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002BCC2.pdf
Region:	Not Reported
Facility ID:	Not Reported
Facility Type:	Not Reported
Other Type:	Not Reported
Contact Name:	Not Reported
Telephone:	Not Reported
Owner Name:	Not Reported
Owner Address:	Not Reported
Owner City,St,Zip:	Not Reported
Total Tanks:	Not Reported
Tank Num:	Not Reported
Container Num:	Not Reported
Year Installed:	Not Reported
Tank Capacity:	Not Reported
Tank Used for:	Not Reported
Type of Fuel:	Not Reported
Container Construction Thickness:	Not Reported

RAL COPPING, 28880 RD 164, VISALIA, CA 93277 (Continued)

Leak Detection: Not Reported

Click here for Geo Tracker PDF: http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_HISTUST_PDF&img_id=0002BCC2

RALPH COPPING 28880 ROAD 164, VISALIA, CA, 93277			U001583452
◆ A2	WNW <1/10	(23 ft. / 0.004 mi.)	Local Lists of Registered Storage Tanks
	1 ft. Lower Elevation	364 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

HIST UST: Local Lists of Registered Storage Tanks

Name: RALPH COPPING
Address: 28880 ROAD 164
City,State,Zip: VISALIA, CA 93277
File Number: Not Reported
URL: Not Reported
Region: STATE
Facility ID: 00000045349
Facility Type: Other
Other Type: PRIVATE
Contact Name: Not Reported
Telephone: 2097470070
Owner Name: RALPH COPPING
Owner Address: 28880 RD. 164
Owner City,St,Zip: VISALIA, CA 93277
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: Not Reported
Tank Capacity: 00000260
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not Reported
Leak Detection: None

CLAUDES BUGGIES INC 28813 FARMERSVILLE BLVD, FARMERSVILLE, CA, 93223			U001581412
◆ 3	SW <1/10	(75 ft. / 0.014 mi.)	Local Lists of Registered Storage Tanks
	1 ft. Lower Elevation	364 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

SWEEPS UST: Local Lists of Registered Storage Tanks

CLAUDES BUGGIES INC, 28813 FARMERSVILLE BLVD, FARMERSVILLE, CA 93223 (Continued)

Name:	CLAUDES BUGGIES INC
Address:	28813 FARMERSVILLE
City:	FARMERSVILLE
Status:	Active
Comp Number:	57012
Number:	9
Board Of Equalization:	44-030297
Referral Date:	04-20-88
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1237-987
SWRCB Tank Id:	54-000-057012-000001
Tank Status:	A
Capacity:	1500
Active Date:	04-20-88
Tank Use:	M.V. FUEL
STG:	P
Content:	UNKNOWN
Number Of Tanks:	1

HIST UST: Local Lists of Registered Storage Tanks

Name:	CLAUDES BUGGIES INC
Address:	28813 FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
File Number:	0002377E
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002377E.pdf
Region:	STATE
Facility ID:	00000057012
Facility Type:	Other
Other Type:	AUTO PARTS DIST.
Contact Name:	R. TOMLINSON
Telephone:	2097338222
Owner Name:	CLAUDES BUGGIES INC.
Owner Address:	28813 FARMERSVILLE BLVD.
Owner City,St,Zip:	FARMERSVILLE, CA 93223
Total Tanks:	0001
Tank Num:	001
Container Num:	001237-987
Year Installed:	1977
Tank Capacity:	00001500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not Reported
Leak Detection:	Stock Inventor
Click here for Geo Tracker PDF:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_HISTUST_PDF&img_id=0002377E

T YOUNG DIESEL ELECTRIC
29022 ROAD 164, VISALIA, CA, 93292-0000 1024793181

MAP FINDINGS

▲ 4	NNW <1/10	(129 ft. / 0.024 mi.)	Other Ascertainable Records
	Equal Elevation	365 ft. Above Sea Level	

Worksheet:

Impact on Target Property: Undetermined

RCRA Listings: Other Ascertainable Records

Date Form Received by Agency:	19950111
Handler Name:	T YOUNG DIESEL ELECTRIC
Handler Address:	29022 ROAD 164
Handler City,State,Zip:	VISALIA, CA 93292-0000
EPA ID:	CAL000130104
Contact Name:	THAD YOUNG OWNER
Contact Address:	29022 ROAD 164
Contact City,State,Zip:	VISALIA, CA 93292
Contact Telephone:	559-747-5502
Contact Fax:	000-000-0000
Contact Email:	TYDEOFCA@YAHOO.COM
Contact Title:	Not Reported
EPA Region:	09
Land Type:	Not Reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not Reported
Biennial Report Cycle:	Not Reported
Accessibility:	Not Reported
Active Site Indicator:	Handler Activities
State District Owner:	Not Reported
State District:	Not Reported
Mailing Address:	29022 ROAD 164
Mailing City,State,Zip:	VISALIA, CA 93292-9258
Owner Name:	THAD YOUNG
Owner Type:	Other
Operator Name:	THAD YOUNG OWNER
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not Reported

T YOUNG DIESEL ELECTRIC, 29022 ROAD 164, VISALIA, CA 93292-0000 (Continued)

Active Site Converter Treatment storage and Disposal Facility:	Not Reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not Reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not Reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not Reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not Reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not Reported
Permit Workload Universe:	Not Reported
Permit Progress Universe:	Not Reported
Post-Closure Workload Universe:	Not Reported
Closure Workload Universe:	Not Reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not Reported
Full Enforcement Universe:	Not Reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not Reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

T YOUNG DIESEL ELECTRIC, 29022 ROAD 164, VISALIA, CA 93292-0000 (Continued)

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	THAD YOUNG
Legal Status:	Other
Date Became Current:	Not Reported
Date Ended Current:	Not Reported
Owner/Operator Address:	29022 ROAD 164
Owner/Operator City,State,Zip:	VISALIA, CA 93292-9258
Owner/Operator Telephone:	559-747-5502
Owner/Operator Telephone Ext:	Not Reported
Owner/Operator Fax:	Not Reported
Owner/Operator Email:	Not Reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	THAD YOUNG OWNER
Legal Status:	Other
Date Became Current:	Not Reported
Date Ended Current:	Not Reported
Owner/Operator Address:	29022 ROAD 164
Owner/Operator City,State,Zip:	VISALIA, CA 93292
Owner/Operator Telephone:	559-747-5502
Owner/Operator Telephone Ext:	Not Reported
Owner/Operator Fax:	Not Reported
Owner/Operator Email:	Not Reported

Historic Generators:

Receive Date:	19950111
Handler Name:	T YOUNG DIESEL ELECTRIC
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not Reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not Reported
Electronic Manifest Broker:	Not Reported

List of NAICS Codes and Descriptions:

NAICS Code:	811412
NAICS Description:	APPLIANCE REPAIR AND MAINTENANCE

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

T YOUNG DIESEL ELECTRIC, 29022 ROAD 164, VISALIA, CA 93292-0000 (Continued)

Evaluations: No Evaluations Found

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
ENVIRONMENTAL RECORDS						
Federal NPL site list						
US	NPL	National Priority List	EPA	07/26/2022	08/02/2022	08/22/2022
US	Proposed NPL	Proposed National Priority List Sites	EPA	07/26/2022	08/02/2022	08/22/2022
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
Federal CERCLIS list						
US	SEMS	Superfund Enterprise Management System	EPA	07/26/2022	08/02/2022	08/22/2022
Federal RCRA CORRACTS facilities list						
US	CORRACTS	Corrective Action Report	EPA	06/20/2022	06/21/2022	06/28/2022
Federal RCRA TSD facilities list						
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	06/20/2022	06/21/2022	06/28/2022
Federal RCRA generators list						
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	06/20/2022	06/21/2022	06/28/2022
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	06/20/2022	06/21/2022	06/28/2022
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	06/20/2022	06/21/2022	06/28/2022
Federal institutional controls / engineering controls registries						
US	LUCIS	Land Use Control Information System	Department of the Navy	08/16/2022	08/22/2022	10/24/2022
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	08/15/2022	08/17/2022	10/24/2022
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	08/15/2022	08/17/2022	10/24/2022
Federal ERNS list						
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	06/14/2022	06/15/2022	06/21/2022
State and tribal - equivalent NPL						
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	07/25/2022	07/25/2022	10/05/2022
State and tribal - equivalent CERCLIS						
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	07/25/2022	07/25/2022	10/05/2022
State and tribal landfill / solid waste disposal						
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	08/08/2022	08/08/2022	10/20/2022
State and tribal leaking storage tank lists						
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	05/24/2022
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/08/2022	06/13/2022	08/16/2022
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/28/2021	06/11/2021	09/07/2021
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/14/2022	06/13/2022	08/16/2022
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/20/2022	06/13/2022	08/16/2022
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/20/2022	06/13/2022	08/16/2022
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/28/2022	06/13/2022	08/16/2022
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	06/02/2022	06/13/2022	08/31/2022
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/11/2022	06/13/2022	08/16/2022
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	05/24/2022
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
State and tribal registered storage tank lists						
CA	UST	Active UST Facilities	SWRCB	06/06/2022	06/07/2022	08/24/2022
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	06/01/2022	06/09/2022	08/26/2022
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	06/02/2022
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	06/02/2022	06/13/2022	08/31/2022
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/20/2022	06/13/2022	08/16/2022
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/14/2022	06/13/2022	08/16/2022
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/20/2022	06/13/2022	08/16/2022
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/08/2022	06/13/2022	08/16/2022
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/07/2022	06/13/2022	08/16/2022
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/28/2022	06/13/2022	08/16/2022
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/11/2022	06/13/2022	08/16/2022
US	FEMA UST	Underground Storage Tank Listing	FEMA	10/14/2021	11/05/2021	02/01/2022
State and tribal voluntary cleanup sites						
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	07/25/2022	07/25/2022	10/05/2022

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
State and tribal Brownfields sites						
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	06/21/2022	06/21/2022	09/08/2022
Other Records						
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	06/30/2022	07/21/2022	09/30/2022
US	ROD	Records Of Decision	EPA	07/26/2022	08/02/2022	08/22/2022
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	07/26/2022	08/02/2022	08/22/2022
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
CA	SWRCY	Recycler Database	Department of Conservation	06/06/2022	06/07/2022	08/23/2022
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	08/04/2022	08/04/2022	10/20/2022
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	07/26/2022	08/02/2022	08/22/2022
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	06/20/2022	06/21/2022	08/31/2022
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	07/26/2021	07/27/2021	10/22/2021
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2020	11/30/2021	02/22/2022
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	07/29/2022	08/18/2022	10/24/2022
US	Delisted NPL	National Priority List Deletions	EPA	07/26/2022	08/02/2022	08/22/2022
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	07/26/2022	08/02/2022	08/22/2022
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	06/20/2022	06/21/2022	06/28/2022
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	09/19/2022	09/19/2022	09/30/2022
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	07/29/2022	08/18/2022	10/24/2022
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	02/23/2022	03/10/2022	03/10/2022
US	DOD	Department of Defense Sites	USGS	06/07/2021	07/13/2021	03/09/2022
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	08/11/2022	08/11/2022	09/30/2022
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/03/2022	08/17/2022	08/31/2022
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	08/01/2022	08/02/2022	09/30/2022
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	PRP	Potentially Responsible Parties	EPA	07/26/2022	08/02/2022	08/31/2022
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2018	08/14/2020	11/04/2020
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/17/2020	09/10/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	SSTS	Section 7 Tracking Systems	EPA	07/18/2022	07/18/2022	07/29/2022
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	PADS	PCB Activity Database System	EPA	01/20/2022	01/20/2022	03/25/2022
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	06/10/2022	06/14/2022	08/22/2022
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	FINDS	Facility Index System/Facility Registry System	EPA	08/03/2022	08/25/2022	10/24/2022
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RMP	Risk Management Plans	Environmental Protection Agency	04/27/2022	05/04/2022	05/10/2022
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2019	03/02/2022	03/25/2022
US	PWS	Public Water System Data	EPA	12/17/2013	01/09/2014	10/15/2014
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	ABANDONED MINES	Abandoned Mines	Department of Interior	06/14/2022	06/15/2022	08/22/2022
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2019	01/20/2021	04/08/2021
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	06/30/2022	07/18/2022	09/30/2022
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	06/21/2022	06/21/2022	09/08/2022
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	12/07/2021	05/09/2022	05/17/2022
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	05/31/2022	05/31/2022	08/18/2022
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	05/20/2022	05/20/2022	08/09/2022
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	05/25/2022	05/26/2022	08/11/2022
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	08/27/2021	09/01/2021	11/19/2021
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2020	06/13/2022	08/30/2022
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	07/12/2022	07/18/2022	09/29/2022
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	07/06/2022	07/21/2022	10/03/2022
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	08/09/2022	08/10/2022	08/30/2022
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	08/12/2022	08/16/2022	08/26/2022
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2021	07/05/2022	09/19/2022
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	08/11/2022	08/11/2022	10/28/2022
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	07/05/2022	07/05/2022	09/19/2022
CA	ICE	ICE	Department of Toxic Subsances Control	08/11/2022	08/11/2022	10/28/2022
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	05/23/2022	05/23/2022	05/24/2022
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	05/25/2022	05/26/2022	08/11/2022
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	05/24/2022
CA	MINES	Mines Site Location Listing	Department of Conservation	06/06/2022	06/07/2022	08/23/2022
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	05/06/2022	05/31/2022	08/18/2022
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	08/08/2022	08/08/2022	10/20/2022
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	05/31/2022	05/31/2022	08/18/2022
CA	PROC	Certified Processors Database	Department of Conservation	06/06/2022	06/07/2022	08/23/2022
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	06/10/2022	06/10/2022	08/26/2022
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	07/25/2022	07/25/2022	10/05/2022

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	06/06/2022	06/07/2022	08/23/2022
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	02/11/2021	07/01/2021	09/29/2021
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	06/02/2022
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	05/23/2022	05/23/2022	06/02/2022
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	06/02/2022
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	06/25/2022	07/01/2022	09/30/2022
US	PFAS ECHO FIRE TRAINING	Facilities in Industries that May Be Handling PFAS Listing	Environmental Protection Agency	08/22/2018	03/31/2022	11/08/2022
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	06/02/2022
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	06/02/2022
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	06/06/2022	06/07/2022	08/24/2022
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	08/16/2022	08/17/2022	08/18/2022
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
US	PFAS FEDERAL SITES	Federal Sites PFAS Information	Environmental Protection Agency	02/23/2022	03/31/2022	11/08/2022
US	PFAS TSCA	PFAS Manufacture and Imports Information	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
US	AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing	Environmental Protection Agency	02/23/2022	03/31/2022	11/08/2022
US	PFAS NPL	Superfund Sites with PFAS Detections Information	Environmental Protection Agency	02/23/2022	07/08/2022	11/08/2022
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2020	01/11/2022	02/14/2022
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	04/05/2022	04/05/2022	04/26/2022
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	05/25/2021	06/24/2021	09/20/2021
US	PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
US	PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
CA	AQUEOUS FOAM	Former Fire Training Facility Assessments Listing	State Water Resources Control Board	09/06/2022	09/06/2022	10/26/2022
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	08/31/2022	08/31/2022	10/31/2022
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/06/2021	05/21/2021	08/11/2021
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	07/18/2022	07/18/2022	09/30/2022
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	07/18/2022	07/18/2022	09/30/2022
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	07/18/2022	07/18/2022	09/30/2022
US	PFAS WQP	Ambient Environmental Sampling for PFAS	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
US	PFAS ATSDR	PFAS Contamination Site Location Listing	Department of Health & Human Services	06/24/2020	03/17/2021	11/08/2022
US	PFAS NPDES	Clean Water Act Discharge Monitoring Information	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/11/2022	08/11/2022	09/30/2022
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	06/02/2022
US	PFAS PART 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing	Environmental Protection Agency	08/22/2018	10/26/2022	11/08/2022
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	06/02/2022
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	05/23/2022	05/23/2022	06/02/2022

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HISTORICAL USE RECORDS						
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
COUNTY RECORDS						
CA	CS ALAMEDA	Contaminated Sites	Alameda County Environmental Health Services	01/09/2019	01/11/2019	03/05/2019
CA	UST ALAMEDA	Underground Tanks	Alameda County Environmental Health Services	06/29/2022	06/29/2022	07/21/2022
CA	CUPA AMADOR	CUPA Facility List	Amador County Environmental Health	07/22/2022	07/27/2022	08/01/2022
CA	CUPA BUTTE	CUPA Facility Listing	Public Health Department	04/21/2017	04/25/2017	08/09/2017
CA	CUPA CALVERAS	CUPA Facility Listing	Calveras County Environmental Health	06/14/2022	06/15/2022	09/02/2022
CA	CUPA COLUSA	CUPA Facility List	Health & Human Services	04/06/2020	04/23/2020	07/10/2020
CA	SL CONTRA COSTA	Site List	Contra Costa Health Services Department	07/20/2022	07/20/2022	10/03/2022
CA	CUPA DEL NORTE	CUPA Facility List	Del Norte County Environmental Health Divisio	05/04/2022	05/06/2022	07/28/2022
CA	CUPA EL DORADO	CUPA Facility List	El Dorado County Environmental Management Dep	08/08/2022	08/09/2022	09/01/2022
CA	CUPA FRESNO	CUPA Resources List	Dept. of Community Health	06/28/2021	12/21/2021	03/03/2022
CA	CUPA GLENN	CUPA Facility List	Glenn County Air Pollution Control District	01/22/2018	01/24/2018	03/14/2018
CA	CUPA HUMBOLDT	CUPA Facility List	Humboldt County Environmental Health	08/12/2021	08/12/2021	11/08/2021
CA	CUPA IMPERIAL	CUPA Facility List	San Diego Border Field Office	07/13/2022	07/14/2022	09/29/2022
CA	CUPA INYO	CUPA Facility List	Inyo County Environmental Health Services	04/02/2018	04/03/2018	06/14/2018
CA	CUPA KERN	CUPA Facility List	Kern County Public Health	05/06/2022	05/12/2022	08/01/2022
CA	UST KERN	Underground Storage Tank Sites & Tank Listing	Kern County Environment Health Services Depar	05/06/2022	05/12/2022	08/01/2022
CA	CUPA KINGS	CUPA Facility List	Kings County Department of Public Health	12/03/2020	01/26/2021	04/14/2021
CA	CUPA LAKE	CUPA Facility List	Lake County Environmental Health	07/22/2022	07/25/2022	10/05/2022
CA	CUPA LASSEN	CUPA Facility List	Lassen County Environmental Health	07/31/2020	08/21/2020	11/09/2020
CA	AOCONCERN	Key Areas of Concerns in Los Angeles County		03/30/2009	03/31/2009	10/23/2009
CA	HMS LOS ANGELES	HMS: Street Number List	Department of Public Works	07/06/2022	07/07/2022	09/21/2022
CA	LF LOS ANGELES	List of Solid Waste Facilities	La County Department of Public Works	07/11/2022	07/11/2022	09/23/2022
CA	LF LOS ANGELES CITY	City of Los Angeles Landfills	Engineering & Construction Division	01/01/2022	01/21/2022	04/11/2022
CA	LOS ANGELES AST	Active & Inactive AST Inventory	Los Angeles Fire Department	06/01/2019	06/25/2019	08/22/2019
CA	LOS ANGELES CO LF METHANE	Methane Producing Landfills	Los Angeles County Department of Public Works	01/10/2022	01/12/2022	04/04/2022
CA	LOS ANGELES HM	Active & Inactive Hazardous Materials Inventory	Los Angeles Fire Department	01/13/2022	03/21/2022	06/15/2022
CA	LOS ANGELES UST	Active & Inactive UST Inventory	Los Angeles Fire Department	03/22/2022	06/24/2022	09/08/2022
CA	SITE MIT LOS ANGELES	Site Mitigation List	Community Health Services	05/26/2021	07/09/2021	09/29/2021
CA	UST EL SEGUNDO	City of El Segundo Underground Storage Tank	City of El Segundo Fire Department	01/21/2017	04/19/2017	05/10/2017
CA	UST LONG BEACH	City of Long Beach Underground Storage Tank	City of Long Beach Fire Department	04/22/2019	04/23/2019	06/27/2019
CA	UST TORRANCE	City of Torrance Underground Storage Tank	City of Torrance Fire Department	04/22/2022	07/19/2022	09/30/2022
CA	CUPA MADERA	CUPA Facility List	Madera County Environmental Health	08/10/2020	08/12/2020	10/23/2020
CA	UST MARIN	Underground Storage Tank Sites	Public Works Department Waste Management	09/26/2018	10/04/2018	11/02/2018
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	09/22/2021	11/18/2021	11/22/2021
CA	CUPA MERCED	CUPA Facility List	Merced County Environmental Health	02/15/2022	02/17/2022	05/11/2022
CA	CUPA MONO	CUPA Facility List	Mono County Health Department	02/22/2021	03/02/2021	05/19/2021
CA	CUPA MONTEREY	CUPA Facility Listing	Monterey County Health Department	10/04/2021	10/06/2021	12/29/2021
CA	LUST NAPA	Sites With Reported Contamination	Napa County Department of Environmental Manag	01/09/2017	01/11/2017	03/02/2017

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	UST NAPA	Closed and Operating Underground Storage Tank Sites	Napa County Department of Environmental Manag	09/05/2019	09/09/2019	10/31/2019
CA	CUPA NEVADA	CUPA Facility List	Community Development Agency	07/21/2022	07/25/2022	07/28/2022
CA	IND_SITE ORANGE	List of Industrial Site Cleanups	Health Care Agency	05/24/2022	08/09/2022	10/28/2022
CA	LUST ORANGE	List of Underground Storage Tank Cleanups	Health Care Agency	04/08/2022	05/18/2022	08/03/2022
CA	UST ORANGE	List of Underground Storage Tank Facilities	Health Care Agency	05/24/2022	08/01/2022	10/20/2022
CA	MS PLACER	Master List of Facilities	Placer County Health and Human Services	05/25/2022	05/26/2022	06/01/2022
CA	CUPA PLUMAS	CUPA Facility List	Plumas County Environmental Health	03/31/2019	04/23/2019	06/26/2019
CA	LUST RIVERSIDE	Listing of Underground Tank Cleanup Sites	Department of Environmental Health	07/07/2022	07/08/2022	09/21/2022
CA	UST RIVERSIDE	Underground Storage Tank Tank List	Department of Environmental Health	07/07/2022	07/08/2022	09/21/2022
CA	CS SACRAMENTO	Toxic Site Clean-Up List	Sacramento County Environmental Management	06/18/2021	09/28/2021	12/14/2021
CA	ML SACRAMENTO	Master Hazardous Materials Facility List	Sacramento County Environmental Management	05/04/2022	06/30/2022	07/05/2022
CA	CUPA SAN BENITO	CUPA Facility List	San Benito County Environmental Health	07/27/2022	07/27/2022	10/11/2022
CA	PERMITS SAN BERNARDINO	Hazardous Material Permits	San Bernardino County Fire Department Hazardo	05/12/2022	05/12/2022	05/18/2022
CA	HMMD SAN DIEGO	Hazardous Materials Management Division Database	Hazardous Materials Management Division	05/31/2022	05/31/2022	08/18/2022
CA	LF SAN DIEGO	Solid Waste Facilities	Department of Health Services	10/27/2021	03/04/2022	05/31/2022
CA	SAN DIEGO CO LOP	Local Oversight Program Listing	Department of Environmental Health	07/22/2021	10/19/2021	01/13/2022
CA	SAN DIEGO CO SAM	Environmental Case Listing	San Diego County Department of Environmental	03/23/2010	06/15/2010	07/09/2010
CA	CUPA SAN FRANCISCO CO	CUPA Facility Listing	San Francisco County Department of Environmen	08/04/2022	08/04/2022	10/20/2022
CA	LUST SAN FRANCISCO	Local Oversite Facilities	Department Of Public Health San Francisco Cou	09/19/2008	09/19/2008	09/29/2008
CA	UST SAN FRANCISCO	Underground Storage Tank Information	Department of Public Health	08/04/2022	08/04/2022	10/20/2022
CA	SAN FRANCISCO MAHER	Maher Ordinance Property Listing	San Francisco Planning	01/18/2022	01/20/2022	04/27/2022
CA	UST SAN JOAQUIN	San Joaquin Co. UST	Environmental Health Department	06/22/2018	06/26/2018	07/11/2018
CA	CUPA SAN LUIS OBISPO	CUPA Facility List	San Luis Obispo County Public Health Departme	08/10/2022	08/11/2022	10/28/2022
CA	BI SAN MATEO	Business Inventory	San Mateo County Environmental Health Service	02/20/2020	02/20/2020	04/24/2020
CA	LUST SAN MATEO	Fuel Leak List	San Mateo County Environmental Health Service	03/29/2019	03/29/2019	05/29/2019
CA	CUPA SANTA BARBARA	CUPA Facility Listing	Santa Barbara County Public Health Department	09/08/2011	09/09/2011	10/07/2011
CA	CUPA SANTA CLARA	Cupa Facility List	Department of Environmental Health	05/16/2022	05/18/2022	08/04/2022
CA	HIST LUST SANTA CLARA	HIST LUST - Fuel Leak Site Activity Report	Santa Clara Valley Water District	03/29/2005	03/30/2005	04/21/2005
CA	LUST SANTA CLARA	LOP Listing	Department of Environmental Health	03/03/2014	03/05/2014	03/18/2014
CA	SAN JOSE HAZMAT	Hazardous Material Facilities	City of San Jose Fire Department	11/03/2020	11/05/2020	01/26/2021
CA	CUPA SANTA CRUZ	CUPA Facility List	Santa Cruz County Environmental Health	01/21/2017	02/22/2017	05/23/2017
CA	CUPA SHASTA	CUPA Facility List	Shasta County Department of Resource Manageme	06/15/2017	06/19/2017	08/09/2017
CA	LUST SOLANO	Leaking Underground Storage Tanks	Solano County Department of Environmental Man	06/04/2019	06/06/2019	08/13/2019
CA	UST SOLANO	Underground Storage Tanks	Solano County Department of Environmental Man	09/15/2021	09/16/2021	12/09/2021
CA	CUPA SONOMA	Cupa Facility List	County of Sonoma Fire & Emergency Services De	07/02/2021	07/06/2021	07/14/2021
CA	LUST SONOMA	Leaking Underground Storage Tank Sites	Department of Health Services	06/30/2021	06/30/2021	09/24/2021
CA	CUPA STANISLAUS	CUPA Facility List	Stanislaus County Department of Ennvironmenta	02/08/2022	02/10/2022	05/04/2022
CA	UST SUTTER	Underground Storage Tanks	Sutter County Environmental Health Services	05/03/2022	05/27/2022	08/11/2022
CA	CUPA TEHAMA	CUPA Facility List	Tehama County Department of Environmental Hea	07/27/2022	07/27/2022	10/11/2022
CA	CUPA TRINITY	CUPA Facility List	Department of Toxic Substances Control	07/13/2022	07/14/2022	09/29/2022
CA	CUPA TULARE	CUPA Facility List	Tulare County Environmental Health Services D	04/26/2021	04/28/2021	07/13/2021
CA	CUPA TUOLUMNE	CUPA Facility List	Divison of Environmental Health	04/23/2018	04/25/2018	06/25/2018
CA	BWT VENTURA	Business Plan, Hazardous Waste Producers, and Operating Unde	Ventura County Environmental Health Division	05/26/2022	07/21/2022	09/30/2022
CA	LF VENTURA	Inventory of Illegal Abandoned and Inactive Sites	Environmental Health Division	12/01/2011	12/01/2011	01/19/2012
CA	LUST VENTURA	Listing of Underground Tank Cleanup Sites	Environmental Health Division	05/29/2008	06/24/2008	07/31/2008
CA	MED WASTE VENTURA	Medical Waste Program List	Ventura County Resource Management Agency	05/26/2022	07/25/2022	10/05/2022
CA	UST VENTURA	Underground Tank Closed Sites List	Environmental Health Division	05/26/2022	06/07/2022	08/24/2022

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	UST YOLO	Underground Storage Tank Comprehensive Facility Report	Yolo County Department of Health	06/22/2022	06/30/2022	09/14/2022
CA	CUPA YUBA	CUPA Facility List	Yuba County Environmental Health Department	10/25/2022	10/26/2022	10/31/2022

STREET AND ADDRESS INFORMATION

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*** L07 ***

PAGE 3303 — STATE WATER RESOURCES CONTROL BOARD — 06/01/88

HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR TULARE COUNTY

CONTAINER TYPES: 1,2,3,4,5

(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
RALPH COPPING
28880 RD. 164 VISALIA CA 93277

II FACILITY

	MAILING ADDRESS / TOWNSHIP/RANGE/SECTION	DEALER/FOREMAN/SUPERVISOR / TELEPHONE	TYPE OF BUSINESS / NO. OF CONTAINERS
RALPH COPPING 28880 RD. 164 VISALIA CA 93277	28880 RD. 164 VISALIA CA 93277	(209) 747-0070	PRIVATE 1

CROSS STREET :

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: COPPING, RALPH (209) 747-0070 NIGHT: ( ) -

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 0000045349001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: /
C. YEAR INSTALLED : UNK
D. CAPACITY (GALLONS) : 260
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: REGULAR

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: UNKNOWN C. WALLING: UNKNOWN
D. MATERIAL : UNKNOWN
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : UNKNOWN
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
NONE P

URE TEST — COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12032 REGULAR MOTOR VEHICLE FUEL

*** M07 ***

APPENDIX H

QUALIFICATIONS
OF
ENVIRONMENTAL PROFESSIONALS

ARAM B. KALOUSTIAN, P.E.
Principal

Mr. Aram Kaloustian has diversified experience in environmental, mechanical and civil engineering including indoor air quality surveys for mold and ventilation systems, asbestos and lead-based paint assessments, Phase I environmental surveys, subsurface environmental site assessments, remedial design, remediation system installation and operation, negotiations with regulatory agencies, computer modeling, research of new environmental investigative and remedial technologies, safety engineering and project management.

Mr. Kaloustian has conducted numerous assessments involving indoor air quality, asbestos and lead-based paint surveys and associated remediation projects by establishing investigative protocol, implementing efficient assessment strategies, and applying the site specific and appropriate remedial recommendations to all assessed projects. Mr. Kaloustian has also designed a variety of protocols for remedial and post-remedial monitoring services for a wide variety of project sites.

Mr. Kaloustian has conducted numerous historical and background Phase I investigations involving review of files located at various county health departments, water quality control boards, state departments of health, air quality management districts, city building departments, city departments of public works and city fire departments. These investigations also involved searches of state and federal databases for hazardous waste sites, generators, transporters and treatment/storage/disposal facilities, title searches, aerial photo reviews and visual site inspections.

Mr. Kaloustian has extensive subsurface site assessment experience involving underground storage tanks, exploratory borings and monitoring wells, implementation of monitoring and sampling programs, evaluation of monitoring and sampling data, review of historical site and site vicinity information, agency negotiations, and assessment and remediation recommendations.

Mr. Kaloustian's remedial design experience includes various vapor extraction and groundwater remediation systems for remediation of soil and groundwater impacted by hydrocarbon contamination. Mr. Kaloustian has designed and implemented vapor extraction treatment systems that have included internal combustion engines, catalytic thermal oxidizers and carbon adsorption. Groundwater treatment systems have included spray aeration tanks, carbon adsorption and air strippers.

Regulatory compliance experience includes obtaining permits for removal of underground storage tanks, drilling exploratory borings, installation of monitoring wells, and installation of vapor extraction treatment systems and groundwater treatment systems. This has required working with local county health departments, city departments of public works, city fire departments, air quality management districts, a number of publicly owned treatment works and the California Regional Water Quality Control Board.

Mr. Kaloustian has also constructed and evaluated various computer models for site assessment and remediation including models used to evaluate the vacuum influence of vapor extraction systems, the radius of influence of groundwater extraction, fate and transport analysis of contaminant's, and aquifer test data.

Mr. Kaloustian has also participated and has been the lead engineer in the research and development of new investigative and remedial techniques involving indoor air quality, horizontal drilling; and treatment of contaminated soil and sludge materials using remedial surfactants, bioremediation, soil washing, encapsulation and modified oxidation. Additional research experience includes participation in the South Coast Air Quality Survey in 1987 for research involving atmospheric chemistry.

Throughout the years, Mr. Kaloustian has also maintained certification and continuing education for Hazardous Waste Operations and Emergency Response (29CFR1910.120) and supervisory training; and has developed site specific health and safety plans for site assessment and remediation. Mr. Kaloustian has also been responsible for the development and implementation of a safety procedures manual for environmental assessment and remediation firms.

Registrations:
Registered Professional Civil Engineer, State of California
Registered Professional Civil Engineer, State of Arizona
Registered Professional Civil Engineer, State of Hawaii
Registered Professional Civil Engineer, State of Texas
Registered Professional Civil Engineer, State of Utah
Registered Environmental Assessor, State of California (1994-1999)

Affiliations:
American Industrial Hygiene Association – Consultant Member
National Society of Professional Engineers – Member
California Ground Water Association - Member

Education:
M.S., Construction Engineering and Management, Stanford University
B.S., Engineering and Applied Science, California Institute of Technology
Indoor Air Quality Certification from the American Industrial Hygiene Association
OSHA 40-Hour Hazardous Waste Operations Training and Certification
Certified AHERA asbestos building inspector and management planner

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL, CIVIL & ENVIRONMENTAL

SUBSURFACE ENVIRONMENTAL SITE ASSESSMENT REPORT

Vacant Land
(APN: 111-290-015-000)
Farmersville, California 93223

Prepared For:

Pacific West Communities, Inc.
430 East State Street, #100
Eagle, Idaho 83616

KCE-2022-454E-R2
February 9, 2023

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I. INTRODUCTION

This report presents the results of subsurface environmental site assessment work conducted by KCE Matrix, Inc. (KCE Matrix) for the subject property. The purpose of this investigation was to assess subsurface soil for potential contamination from former agricultural land use at the property; and to assess subsurface soil-gas along the northwestern and southwestern most perimeter of the property for potential vapor intrusion and/or encroachment. The scope of work performed by KCE Matrix consisted of the following:

- Geologic logging during drilling of 40 exploratory soil borings.
- Soil sampling during drilling of 40 exploratory soil borings.
- Drilling and installation of 10 single-stage subsurface vapor probes.
- Soil-gas sampling of the 10 single-stage subsurface vapor probes.
- Project coordination and management.
- Sample delivery to a state certified environmental testing laboratory with corresponding chain of custody documentation.
- Laboratory analysis.
- Data analysis, interpretation, and preparation of this report summarizing the subsurface environmental assessment work conducted.

II. SITE DESCRIPTION

The property is located in a commercial/retail and residential area on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Street, in Farmersville, California. The property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed through the entire western property line along Farmersville Road and through vacant land located along the southern property line. A Location Map is shown in Appendix A, Figure 1, and a site plan of the property is presented in Appendix A, as Figure 2.

III. BACKGROUND

From November through December of 2022, a Phase I Environmental Site Assessment (ESA) was performed by KCE Matrix for the subject property. The results of the Phase I ESA were summarized in a report designated as (KCE-2022-454E-R1) dated December 6, 2022. Based on the Phase I ESA work performed, the following Recognized Environmental Condition (REC) was identified by KCE Matrix:

- REC – Historic agricultural land use. The subject property appears to have been used as agricultural land from at least approximately 1952 through 1984.

In addition, based on the Vapor Encroachment Screen (VES) conducted during the Phase I investigation, a Vapor Encroachment Condition (VEC) originating from the subject property could not be ruled out. Furthermore, a VEC originating from other nearby sites in the vicinity for the subject property could not be ruled out.

Based on the Phase I ESA performed, KCE Matrix recommended that subsurface environmental assessment work be performed for the subject property to determine whether or not the property had been impacted by the potential usage of pesticides over an extended period of time, and to assess any potential impact from metals (such as Arsenic and Lead). KCE Matrix also recommended that the proposed subsurface assessment work be conducted in a manner so as to address potential vapor encroachment conditions.

IV. FIELD ACTIVITIES

A. Historic Agricultural Land Use

Between January 11 and January 13, 2023, forty (40) subsurface exploratory soil borings (designated as EB-1 through EB-40) were drilled and sampled at the subject property, using hand-auger field drilling and sampling equipment at the locations shown in Appendix A, Figure 2. All 40 exploratory borings were drilled and sampled to a total depth of four feet below the ground surface (bgs).

Groundwater was not encountered in the 40 exploratory borings during the drilling and sampling work performed. Subsurface drilling and soil sampling activities were conducted by or under the supervision of KCE Matrix's California State Certified Professional Civil Engineer or Certified Engineering Geologist. The subsurface materials penetrated are described in the attached Field Borehole Logs as presented in Appendix D of this report.

A total of 80 soil samples were collected from the 40 exploratory borings at depths of two feet and four feet bgs for lithologic logging purposes. In addition, forty (40) of the 80 soil samples were selected for laboratory analysis from the 40 exploratory borings as follows:

- For borings EB-1 through EB-40 – soil samples collected at a depth of two feet bgs (40 samples)

The undisturbed soil samples were collected using hand-auger field drilling/sampling equipment. The sample containers were sealed, labeled, and stored in a cooler, on ice, until delivery to a state certified laboratory. All soil samples were vapor tested using a Photo Ionization Detector (PID). The PID used during this investigation has serial number 592-906766 and was calibrated with Isobutylene (i-C_4H_8) at a concentration of 100 parts per million by Volume (ppmV). The PID results for the soil vapors are reported on the attached Field Borehole Logs, which are included in Appendix D of this report.

B. Vapor Encroachment Condition

On January 19, 2023, ten single-stage soil vapor probes (designated as VP-1 through VP-10) were drilled and installed at the on-site locations shown in Appendix A, Figure 2.

The 10 single-stage vapor probes (designated as VP-1 through VP-10) were installed to a total depth of five feet bgs as measured from the ground surface. Each single-stage soil vapor probe was constructed by inserting a 1/4-inch Nylaflow sampling tube (which includes a vapor probe implant at the bottom of the tube) into the borehole, sealing off the annular space with the installation of a one-foot sand pack, installation of a one-foot dry granular bentonite above the sand pack, and installation of hydrated bentonite above the dry granular bentonite to the ground surface. A plastic stopcock was attached to the top of the vapor sampling tube for subsequent monitoring and sampling. A typical single-stage soil vapor probe construction diagram of the vapor probes constructed during this investigation is presented in Appendix E, Diagram 1.

On January 20, 2023, KCE Matrix collected soil-gas samples from the 10 single-stage vapor probes (designated as VP-1 through VP-10). The soil-gas samples were collected as follows:

- Ten (10) soil-gas samples collected from the 10 single-stage vapor probes VP-1 through VP-10, at a depth of five feet bgs (samples designated as VP-1(5) through VP-10(5)); and one field duplicate soil-gas sample collected from vapor probe VP-4 (sample designated as VP-4 (5)DUP)

The soil-gas sampling techniques used were based on the "Advisory – Active Soil Gas Investigations" established jointly by the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) and California Regional Water Quality Control Board (RWQCB) – Los Angeles Region and San Francisco Bay Region dated July of 2015. Soil-gas sampling activities were conducted by and/or under the supervision of KCE Matrix's California State Certified Professional Civil Engineer or Certified Engineering Geologist.

The soil-gas samples were collected using SUMMA canisters from the 10 single-stage vapor probes (designated as VP-1 through VP-10). The sampling rate for each soil-gas sample collected was approximately 200 cubic centimeters per minute (cc/min) using a SUMMA canister. Prior to purging or sampling, a shut-in test was conducted to check for leaks in the above-ground sampling

system. In addition, prior to collecting the soil-gas samples, a default of three purge-volumes was used as recommended by the DTSC/RWQCB guideline dated July 2015. Also, in order to verify proper collection of the soil-gas sample from the intended depth, a leak-test was performed for each soil-gas sample collected by placing a tracer gas mixture (n-pentane/n-hexane/n-heptane) above the bentonite seal for the probe.

V. GEOLOGY AND SUBSURFACE CONDITIONS

Based on the subsurface logging conducted by KCE Matrix during drilling of the 40 exploratory borings (designated as EB-1 through EB-40) during this investigation, the subsurface of the subject property appears to be underlain by sand to the maximum depth explored, approximately four feet bgs. Groundwater was not encountered during drilling activities.

KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on monitoring data collected from wells located at a site that is approximately 0.78-mile north of the subject site, the depth to groundwater was reported to range between 32.52 feet and 34.44 feet below the surface as monitored in May of 2012. Based on information as reported in the "Site Closure Summary" report dated April 1, 2003, for a property located approximately 0.75-mile south of the subject site, the highest depth to groundwater was reported as 13 feet below the top of well casings, and the lowest depth to groundwater was reported as 32 feet below the top of well casings, and the groundwater flow direction was reported to be towards the west.

VI. ANALYTICAL RESULTS

The soil and soil-gas samples collected during this investigation were analyzed by Jones Environmental, Inc. (JEI) in Santa Fe Springs, California. The samples were accompanied by properly executed chain of custody documentation. JEI is an environmental testing laboratory certified by the California State Department of Health Services (ELAP Certificate Number 2882).

A. Historic Agricultural Land Use

The 40 selected soil samples collected at a depth of two feet bgs from the 40 exploratory borings (designated as samples EB-1(2) through EB-40(2)) were analyzed for Organochlorine Pesticides (OCPs) by EPA method 8081A and for Arsenic and Lead by EPA method 6010B.

The analytical laboratory results of the 40 selected soil samples collected between January 11 and January 13, 2023 are presented in Appendix B, Tables 1 through 3. Copies of the laboratory reports and corresponding chain of custody documentation are presented in Appendix C of this report.

B. Vapor Encroachment Condition

The 11 soil-gas samples (designated as samples VP-1(5) through VP-10(5) and VP-4(5)DUP) collected on January 20, 2023, were analyzed for Volatile Organic Compounds (VOCs) and Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO) by EPA method 8260B.

The analytical laboratory results of the 11 soil-gas samples collected on January 20, 2023 are presented in Appendix B, Table 4. Copies of the laboratory report and corresponding chain of custody documentation are presented in Appendix C of this report.

VII. SUMMARY AND SAMPLE RESULTS

The following summarizes the subsurface environmental site assessment work performed for the subject property during this investigation:

A. Historic Agricultural Land Use

- Between January 11 and January 13, 2023, forty (40) exploratory soil borings (designated as EB-1 through EB-40) were drilled and sampled on site to a depth of four feet bgs. Groundwater was not encountered in any of the 40 borings during drilling activities.
- Between January 11 and January 13, 2023, a total of 80 soil samples were collected from the 40 exploratory borings on site (designated as EB-1 through EB-40). Forty (40) of the 80 soil samples were collected at a depth of two feet bgs; and the 40 other soil samples were collected at a depth of four feet bgs.
- As presented in Section VI of this report, forty (40) of 80 soil samples collected at a depth of two feet bgs were selected and analyzed for OCPs by EPA method 8081A and for Arsenic and Lead by EPA method 6010B.

Organochlorine Pesticides (OCPs)

- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for OCPs (designated as samples EB-1(2) through EB-40(2)) indicated no detectable concentrations of 19 of the 21 OCP constituents (OCPs identified as Aldrin, α-BHC, β-BHC, γ-BHC (Lindane), δ-BHC, γ-Chlordane, α-Chlordane, 4,4'-DDD, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin aldehyde, Endrin ketone, Heptachlor, Heptachlor epoxide, Methoxychlor and Toxaphene)
- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for OCPs indicated concentrations of two of the 21 OCP constituents as follows:
    - 4,4'-DDE ranging from 1.1 micrograms per Kilogram (µg/Kg) to 17.4 µg/Kg in 12 of the 40 soil samples (designated as samples EB-1(2), EB-3(2), EB-4(2),

EB-13(2) through EB-15(2), EB-18(2), EB-22(2) EB-26(2), and EB-31(2) through EB-33(2)). 4,4'-DDE was not detected in the 28 other soil samples.

- 4,4'-DDT at 2.4 µg/Kg and 2.2 µg/Kg in two of the 40 soil samples (designated as samples EB-13(2) and EB-31(2), respectively). 4,4'-DDT was not detected in the 38 other soil samples.

- The analytical results of the soil samples collected and analyzed for OCPs from the 40 soil borings are presented in Appendix B, Table 1.

Arsenic

- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for Arsenic (designated as samples EB-1(2) through EB-40(2)) indicated concentrations of Arsenic at 5.2 milligrams per Kilogram (mg/Kg) and 5.3 mg/Kg in two of the 40 soil samples collected (designated as samples EB-3(2) and EB-24(2), respectively). Arsenic was not detected in the 38 other soil samples collected and analyzed.

- The analytical results of the soil samples collected and analyzed for Arsenic from the 40 soil borings are presented in Appendix B, Table 2.

Lead

- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for Lead (designated as samples EB-1(2) through EB-40(2)) indicated concentrations of Lead ranging from 2.6 mg/Kg to 5.6 mg/Kg.

- The analytical results of the selected soil samples collected and analyzed for Lead from the 40 soil borings are presented in Appendix B, Table 3.

B. Vapor Encroachment Condition

- On January 19, 2023, ten single-stage soil-vapor probes (designated as VP-1 through VP-10) were drilled and installed at the subject site. The 10 single-stage vapor probes (designated as VP-1 through VP-10) were installed at a depth of five feet bgs as measured from the ground surface.

- On January 20, 2023, ten soil-gas samples were collected from the 10 single-stage vapor probes (designated as VP-1 through VP-10); and one duplicate soil-gas sample was collected from vapor probe VP-4. The 11 soil-gas samples collected were analyzed for VOCs and TPH-GRO by EPA method 8260B.

TPH-GRO, BTEX and MTBE

- The analytical results of the 11 soil-gas samples collected from the 10 single-stage vapor probes (designated as VP-1 through VP-10) indicated concentrations of TPH-GRO, BTEX and MTBE as follows:

Sample ID	TPH-GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
VP-1(5)	ND	ND	12	ND	ND	ND
VP-2(5)	ND	ND	21	ND	ND	ND
VP-3(5)	ND	ND	40	14	28	ND
VP-4(5)	ND	ND	46	22	56	ND
VP-4(5)DUP	ND	ND	44	19	46	ND
VP-5(5)	ND	ND	25	ND	17	ND
VP-6(5)	ND	ND	39	8	38	ND
VP-7(5)	ND	ND	88	18	69	ND
VP-8(5)	ND	ND	62	14	56	ND
VP-9(5)	ND	ND	56	11	59	ND
VP-10(5)	ND	ND	74	17	72	ND

*Results are presented in micrograms per cubic meter ($\mu g/m^3$)

OTHER VOCs

- The analytical results of the 11 soil-gas samples collected from the 10 single-stage vapor probes (designated as VP-1 through VP-10) indicated no detectable concentrations of other VOCs except as follows:
    - Concentrations of 1,2,4-Trimethylbenzene ranging from 9 $\mu g/m^3$ to 18 $\mu g/m^3$ in eight of the 11 soil-gas samples (designated as VP-4(5), VP-4(5)DUP, VP-5(5) through VP-10(5)). Concentrations of 1,2,4-Trimethylbenzene were not detected in the three other soil-gas samples (designated as VP-1(5) through VP-3(5)).
    - A concentration of Chloroform at 21 $\mu g/m^3$ in one of the 11 soil-gas samples (designated as VP-4(5)). Concentrations of Chloroform were not detected in the ten other soil-gas samples (designated as VP-1(5) through VP-3(5), VP-4(5)DUP and VP-5(5) through VP-10(5)).

VIII. EVALUATION

The RWQCB – San Francisco Bay Region has developed a method of performing risk assessment for subsurface environmental investigations. The extensive work performed to create the methodology and a detailed description of this method are presented in the document entitled "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final – November 2007." Most recently, the derivation and application of ESLs is presented in a user's guide prepared by the RWQCB - San Francisco Bay Region (Interim Final January 2019 – Rev.2) and the ESLs are listed in the associated tables. This method establishes and presents Environmental Screening Levels (ESLs) for over 100 commonly released and detected contaminants that have been found in subsurface soil, groundwater, sub-slab/soil-gas and indoor air at sites where such releases of hazardous materials may have occurred.

The ESLs were developed to address environmental protection goals. For unauthorized releases into subsurface soil, use of the ESLs were intended to provide protection of human health to direct

exposure from the chemicals of concern, to protect against vapor intrusion into buildings, to protect against leaching of the chemicals of concern to groundwater, protection of terrestrial biota and protection against adverse nuisance conditions. The ESLs are considered conservative. Within certain limits, the risk to human health and the environment can be considered to be insignificant at sites where concentrations of the chemicals of concern do not exceed the established ESLs. Furthermore, the detection of the chemicals of concern at concentrations in excess of an established ESL does not necessarily mean that significant risk exists at the given site. However, such conditions do generally indicate that additional site-specific investigation and evaluation of potential risk and environmental concern is warranted. For the purposes of this investigation, the RWQCB ESLs for residential (Tier 1) and commercial (Tier 2) land use have been used to evaluate the data obtained during this assessment.

A. Historic Agricultural Land Use

Organochlorine Pesticides (OCPs)

When comparing the analytical results of the soil samples collected and analyzed for the 21 OCP constituents during this assessment to the RWQCB (Tier 1) and (Tier 2) ESLs, the results indicate the following:

- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for OCPs (designated as samples EB-1(2) through EB-40(2)) indicate no detectable concentrations of 19 of the 21 OCP constituents (OCPs identified as Aldrin, α-BHC, β-BHC, γ-BHC (Lindane), δ-BHC, γ-Chlordane, α-Chlordane, 4,4'-DDD, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin aldehyde, Endrin ketone, Heptachlor, Heptachlor epoxide, Methoxychlor and Toxaphene).

    - With regard to 18 of these 19 OCP constituents, the laboratory reporting limits are less than the RWQCB Tier 1 ESLs; and as such, the analytical results of these 18 OCP constituents are all less than the RWQCB Tier 1 ESLs.

    - With regard to one of these 19 OCP constituents (Heptachlor epoxide), this OCP constituent has RWQCB Tier 1 ESL of 0.18 µg/Kg; a Tier 2 ESL of 6.0 µg/Kg; and a residential Direct Exposure Human Health (Cancer Risk) ESL of 62 µg/Kg. The analytical laboratory reporting limit of Heptachlor epoxide is 0.4 µg/Kg; which is greater than the Tier 1 ESL and significantly less than the Tier 2 ESL and the residential Direct Exposure Human Health ESL.

- With regard to two of the 21 OCP (4,4'-DDE and4,4'-DDT) detected in the 40 soil samples collected from a depth of two feet bgs, the results indicate the following:

    - 4,4'-DDE: twelve (12) of the 40 soil samples (designated as samples EB-1(2), EB-3(2), EB-4(2), EB-13(2) through EB-15(2), EB-18(2), EB-22(2) EB-26(2), and EB-31(2) through EB-33(2)) indicate concentrations of 4,4'-DDE ranging from 1.1 µg/Kg to 17.4 µg/Kg, which are less than the Tier 1 ESL of 330 µg/Kg

and the Tier 2 ESL of 650 µg/Kg. 4,4'-DDE was not detected in the 28 other soil samples.

- 4,4'-DDT: two (2) of the 40 soil samples (designated as samples EB-13(2) and EB-31(2)) indicate concentrations of 4,4'-DDT at 2.4 µg/Kg and 2.2 µg/Kg respectively, which are greater than the Tier 1 ESL of 1.1 µg/Kg but significantly less than the Tier 2 ESL of 5,600 µg/Kg. In addition, when comparing the concentrations of 4,4'-DDT detected in the soil samples to residential (cancer risk) Direct Exposure Human Health Risk ESL for 4,4'-DDT (1.9 mg/Kg or 1,900 µg/Kg), the concentrations of 4,4'-DDT detected in the soil samples are significantly less than this ESL. 4,4'-DDT was not detected in the 38 other soil samples.

Arsenic

Arsenic has RWQCB (Tier 1) and (Tier 2) ESLs (0.067 mg/Kg and 0.31 mg/Kg, respectively) that are less than the analytical laboratory reporting limit of 5.0 mg/Kg. Therefore, the analytical laboratory results of Arsenic cannot be compared to the RWQCB ESLs.

The California Department of Toxic Substances Control (DTSC) has published Human Health Risk Assessment (HHRA) Note 11 regarding ambient levels for Arsenic in soils in five Southern California counties: Los Angeles, Orange, Riverside, San Bernardino, and San Diego. Specifically, DTSC established a regional ambient screening level of 12 milligrams per kilogram (mg/kg) for Arsenic, which is approximately 100 times the risk-based screening level for residential soil of 0.11 mg/kg developed by DTSC. This regional ambient level was previously established by DTSC as the upper bound of Arsenic in soil from multiple Los Angeles Unified School District sites, and DTSC formally established this ambient level for Southern California with the publication of HHRA Note 11.

The analytical laboratory results of the soil samples collected during this investigation indicate the following:

- Two of the 40 soil samples collected at a depth of two feet bgs (designated as EB-3(2), and EB-24(2)) indicate concentrations of Arsenic at 5.1 mg/Kg and 5.3 mg/Kg, respectively. The 38 other samples collected at a depth of two feet bgs indicate no detectable concentrations of Arsenic (laboratory reporting limit of 5.0 mg/Kg). Therefore, the analytical results of all 40 soil samples collected and analyzed are less than the DTSC ambient screening level of 12 mg/Kg.

Lead

With regard to Lead, the RWQCB ESLs for soil are as follows:

- Lead – RWQCB ESL, Tier 1 (residential) – 32 mg/kg
- Lead – RWQCB ESL, Tier 2 (commercial) – 32 mg/kg

- Lead – RWQCB ESL, Direct Exposure Human Health Risk – 82 mg/Kg

As presented in this report, the analytical results of all 40 soil samples collected from exploratory borings EB-1 through EB-40 at a depth of two feet bgs, indicate concentrations of Lead ranging from 2.6 mg/Kg to 5.6 mg/Kg and are therefore less than the RWQCB Tier 1 and Tier 2 ESLs for residential and commercial land use.

B. Vapor Encroachment Condition

For the purposes of this investigation, the RWQCB ESLs for both residential (Tier 1) and commercial (Tier 2) land use have been used to evaluate the soil-gas data obtained during this assessment.

As presented in this report, 10 soil-gas samples were collected from the 10 single-stage vapor probes (designated as VP-1 through VP-10) and one duplicate soil-gas sample was collected from vapor probe VP-4 in January of 2023 by KCE Matrix. The concentrations of the contaminants of concern detected in the soil-gas samples collected in January of 2023 are summarized in the table below:

Sample ID	TPH-GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
VP-1(5)	ND	ND	12	ND	ND	ND
VP-2(5)	ND	ND	21	ND	ND	ND
VP-3(5)	ND	ND	40	14	28	ND
VP-4(5)	ND	ND	46	22	56	ND
VP-4(5)DUP	ND	ND	44	19	46	ND
VP-5(5)	ND	ND	25	ND	17	ND
VP-6(5)	ND	ND	39	8	38	ND
VP-7(5)	ND	ND	88	18	69	ND
VP-8(5)	ND	ND	62	14	56	ND
VP-9(5)	ND	ND	56	11	59	ND
VP-10(5)	ND	ND	74	17	72	ND
Tier 1 ESLs (Residential)	3,300	3.2	10,000	37	3,500	360
Tier 2 ESLs (Commercial/Industrial)	3,300	14	44,000	160	15,000	1,600

*Results are presented in micrograms per cubic meter ($\mu g/m^3$)

When comparing the analytical results of the subsurface soil-gas samples collected and analyzed during this assessment to the RWQCB ESLs as listed above, the results indicate the following:

- For TPH-GRO, Benzene and MTBE – All 11 soil-gas samples (designated as VP-1(5) through VP-10(5) and VP-4(5)DUP) collected and analyzed at a depth of five feet bgs

indicate no detectable concentrations of these contaminants of concern; and are therefore all less than the RWQCB Tier 1 ESL.

- For Toluene, Ethylbenzene and Total Xylenes – The 11 soil-gas samples (designated as VP-1(5) through VP-10(5) and VP-4(5)DUP) collected and analyzed at a depth of five feet bgs indicate various concentrations of these contaminants of concern; and the concentrations detected are all less than the RWQCB Tier 1 ESLs.

- For VOCs (other than BTEX and MTBE) – The 11 soil-gas samples collected from the 10 single-stage vapor probes indicate no detectable concentrations of VOCs for a majority of the samples and constituents analyzed. Of the few concentrations of these other VOCs that were detected, none were greater than the Tier 1 ESLs, except for Chloroform which was detected in only one of the 11 soil-gas samples collected (sample designated as VP-4(5) at a concentration of 21 µg/m^3. This concentration of Chloroform detected is similar to and only slightly greater than the Tier 1 and Tier 2 ESLs of 18 µg/m^3 for Chloroform. In addition, the duplicate sample collected from this same vapor probe (sample designated as VP-4(5)DUP) indicates no detectable concentration of Chloroform.

IX. CONCLUSIONS

A. Historic Agricultural Land Use

Organochlorine Pesticides (OCPs)

With regard to OCPs: Based on the subsurface environmental site assessment work performed and the evaluation of the data as presented in this report, two of the 21 OCP constituents were detected at various concentrations in subsurface soil at depths of two feet bgs. The concentrations of one of these two OCP constituents (4,4'-DDE) were below the RWQCB Tier 1 and Tier 2 ESLs. The concentrations of the one other OCP constituent (4,4'-DDE) were greater than the RWQCB Tier 1 ESL, but less than the Tier 2 and the RWQCB Direct Exposure Human Health Risk ESLs. Based on these results, KCE Matrix recommends no further subsurface soil assessment and/or remediation work in relation to OCPs for the subject site.

Arsenic

With regard to Arsenic: Based on the subsurface environmental site assessment work performed and the evaluation of the data as presented in this report, Arsenic was detected in only two of the 40 soil samples collected and analyzed. The concentrations of Arsenic detected are below the DTSC ambient screening level of 12 mg/Kg. Based on these results, KCE Matrix recommends no further subsurface soil assessment and/or remediation work in relation to Arsenic for the subject site.

Lead

With regard to Lead: Based on the subsurface environmental site assessment work performed and the evaluation of the data as presented in this report, Lead was detected at various concentrations in the 40 soil samples collected and analyzed. The concentrations of Lead in all 40 soil samples are less than the RWQCB Tier 1 and Tier 2 ESLs. Based on these results, KCE Matrix recommends no further subsurface soil assessment and/or remediation work in relation to Lead for the subject site.

B. Vapor Encroachment Condition

Based on the subsurface environmental site assessment work performed and the evaluation of the data as presented in this report, the results of soil-gas samples collected and analyzed indicate concentrations of the contaminants of concern that are less than the RWQCB Tier 1 and Tier 2 ESLs. In addition, the analytical results of the soil samples collected during this investigation indicate concentrations that are less than the RWQCB Tier 1 and Tier 2 ESLs. Based on these results, the Vapor Encroachment Conditions for the subject property has been adequately assessed and KCE Matrix recommends no further subsurface soil and/or soil-gas assessment and/or remediation for the subject site.

C. Conclusions

Based on the results of the subsurface ESA performed as presented in this report with regard to pesticides, Arsenic and Lead; the REC identified in the Phase I ESA report designated as (KCE-2022-454E-R1) dated December 6, 2022 as prepared by KCE Matrix, has been adequately assessed and KCE Matrix no longer considers the historical agricultural land use at the subject property as a REC.

Based on the results of the subsurface ESA performed as presented in this report, the Vapor Encroachment Condition identified in the Phase I ESA report designated as (KCE-2022-454E-R1) dated December 6, 2022 as prepared by KCE Matrix, has been adequately assessed and KCE Matrix concludes that a Vapor Encroachment Condition does not exist at the subject property.

X. LIMITATIONS

Site-specific subsurface conditions such as soil deposits and rock formations may vary in thickness, lithology, saturation strength and other properties across any site beyond what available documentation indicates. Therefore, it is possible that undocumented or concealed improvements or alterations to the property could exist beyond the inquiry of the activities conducted during this site assessment and associated remedial activities. In addition, environmental changes, either naturally occurring or artificially induced, may cause changes or alterations (which can be significant) to the property as compared to the conditions found at the time that this assessment was conducted.

Based on the best available investigative technologies, no amount of assessment can guarantee that the subject property does not contain contaminants or hazardous substances. The activities conducted during this limited investigation cannot identify all potential concerns for the subject property, and do not eliminate the possibility that the subject property is completely free of environmental concerns.

KCE Matrix has analyzed and evaluated the information collected during this investigation and associated remedial action using what we believe to be the currently applicable engineering techniques and principles. KCE Matrix assumes no liability from other parties involved in losses sustained as a result of decisions made based on interpretations of this report. KCE Matrix makes no warranty, either expressed or implied, regarding the work conducted, except that our services were performed in accordance with the generally accepted professional principles and practices existing for such work.

This report and all information obtained during this site assessment and associated remedial activities are considered confidential and will not be released without written permission by the owner of the subject property, the owner authorized entity conducting this assessment, or as required by law. The owner of the subject property is typically responsible for mitigation of contamination, corrective or remedial action, and disclosure of any information obtained during this site assessment and associated remedial activities or information contained in this report.

XI. SIGNATURE AND CERTIFICATION

KCE Matrix appreciates the opportunity to have provided services for this project. Should you have any questions regarding this report and the work performed, please do not hesitate to contact our office at 818-559-5500.

Sincerely,

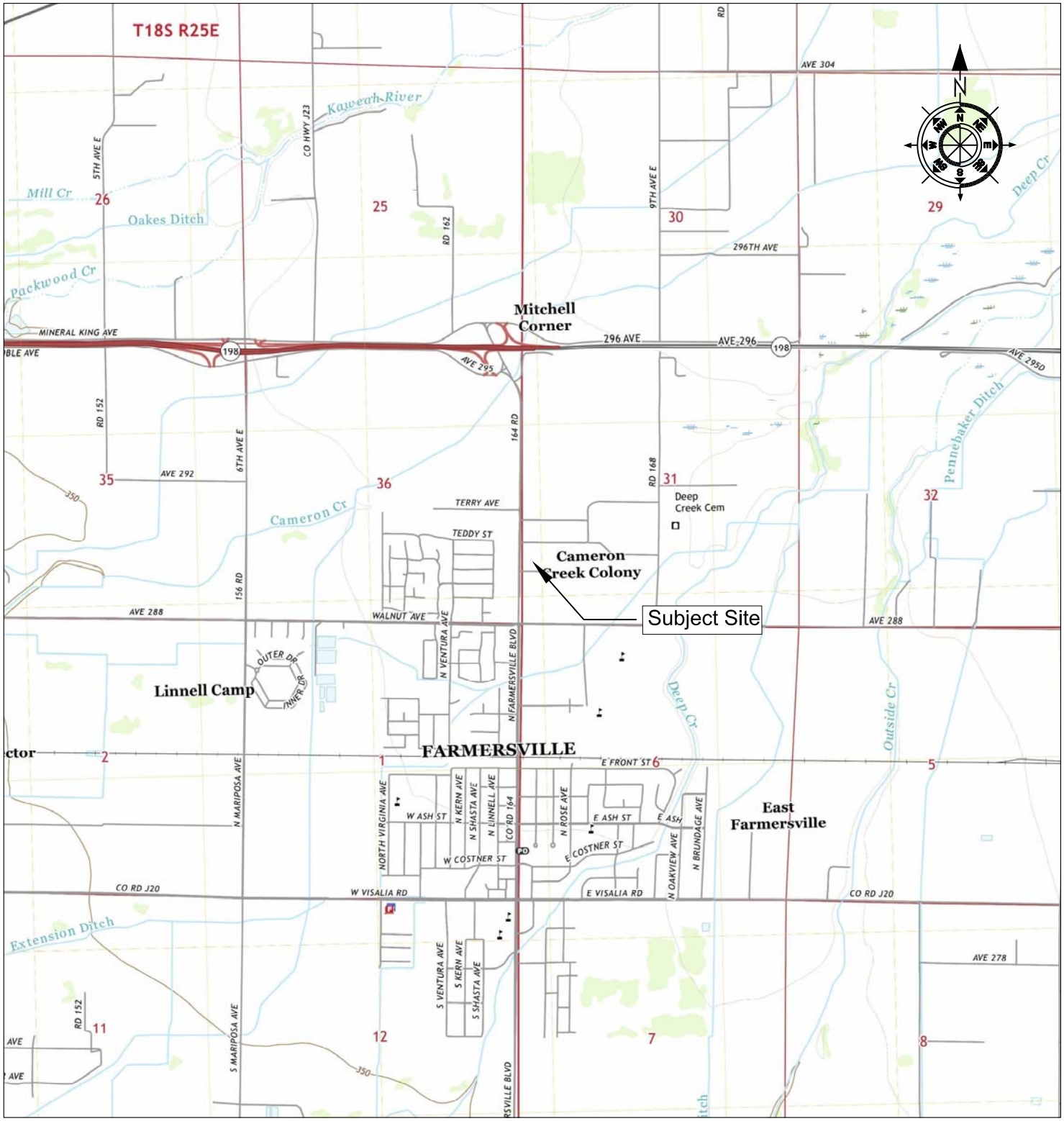
KCE Matrix, Inc.

Aram B. Kaloustian, P.E.
Project Manager

License No. C52428
Expiration Date: 12/31/24

APPENDIX A

(FIGURES 1 AND 2)



Map Center: Latitude 36.3153, Longitude -119.2059
Subject site is located on the Exeter quadrangle (Map Source Year: 2021)

0 0.5 1.0
Approx. scale Mile

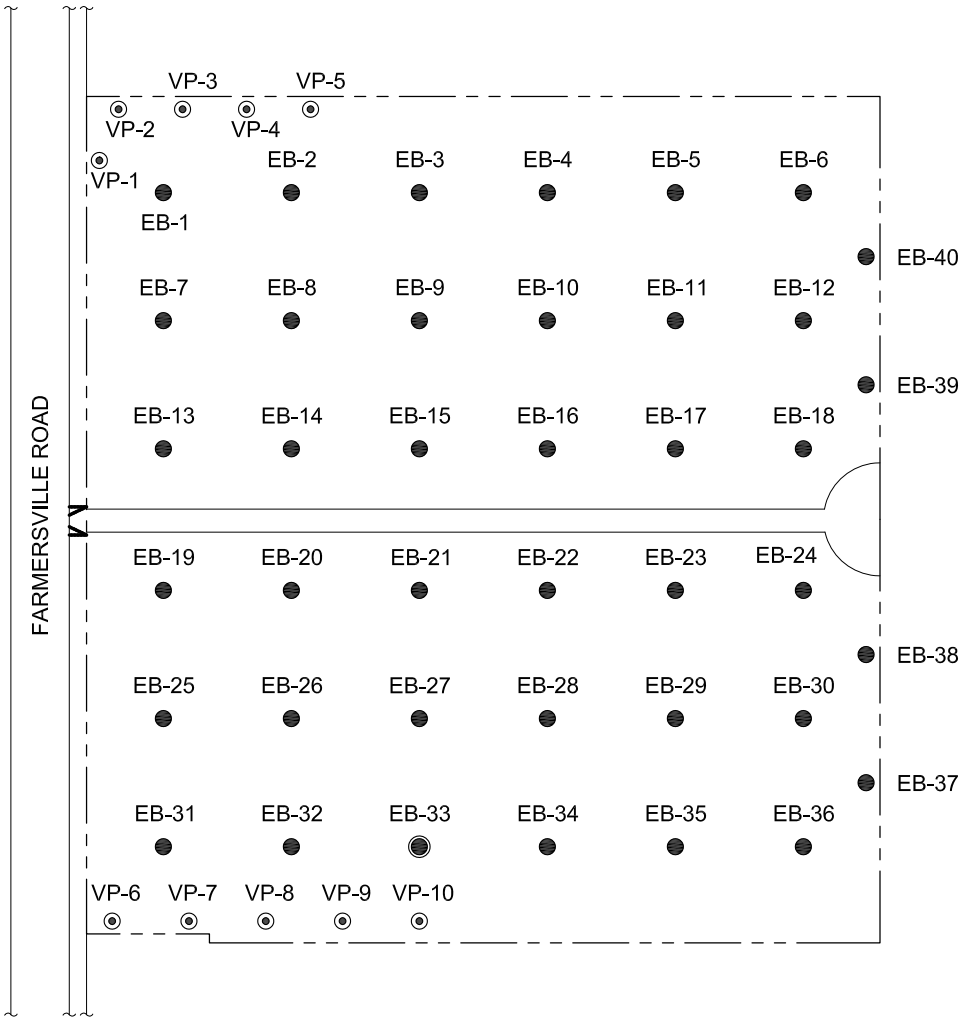
LOCATION MAP

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

FIGURE 1



LEGEND

- Subsurface Vapor Probe (On January 19 and 20, 2023)
- Soil Boring (Between January 11 and 13, 2023)

0 150 300

Approx. scale feet

SITE PLAN - EXPLORATORY SOIL BORING AND SUBSURFACE VAPOR PROBE LOCATIONS

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

FIGURE 2

APPENDIX B

(TABLES 1 THROUGH 4)

KCE-2022-454E-R2

TABLE 1

ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 11, 12 and 13, 2023 by KCE Matrix, Inc.)

Sample Identification	Depth	Organochlorine Pesticides (EPA 8081A)																				
		Aldrin	α-BHC	β-BHC	γ-BHC (Lindane)	δ-BHC	γ-Chlordane	α-Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
	(Feet)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)
EB-1(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-2(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-3(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-4(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-5(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-6(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-7(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-8(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-9(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-10(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-11(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-12(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-13(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	17.4	**2.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-14(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-15(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-16(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-17(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-18(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-19(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-20(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-21(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-22(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-23(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-24(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-25(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-26(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-27(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-28(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-29(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-30(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-31(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	8.5	**2.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-32(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-33(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-34(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-35(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-36(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-37(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-38(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-39(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-40(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RWQCB Tier 1 ESL's (µg/Kg)		2.4	-	-	7.4	-	8.5	8.5	2700	330	1.1	0.46	9.8	9.8	9.8	1.1	1.1	1.1	120	0.18	13	510
RWQCB Tier 2 ESL's (µg/Kg)		100	-	-	7.4	-	8.5	8.5	12,000	650	5,600	6.3	9.8	9.8	9.8	1.1	1.1	1.1	500	6.0	13	2,200

Bold result indicates concentration in excess of RWQCB Tier 1 ESL

ND = Not Detected at or above Reporting Limit

µg/Kg = micrograms per Kilogram

TABLE 2

ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES

Vacant Land
APN: 111-290-015-000, Farmersville, California 93223
(Soil samples collected on January 11, 12 and 13, 2023 by KCE Matrix, Inc.)

Sample Identification	Depth (Feet)	EPA 6010B by 3050B Arsenic (mg/kg)
EB-1(2)	2	ND
EB-2(2)	2	ND
EB-3(2)	2	**5.1**
EB-4(2)	2	ND
EB-5(2)	2	ND
EB-6(2)	2	ND
EB-7(2)	2	ND
EB-8(2)	2	ND
EB-9(2)	2	ND
EB-10(2)	2	ND
EB-11(2)	2	ND
EB-12(2)	2	ND
EB-13(2)	2	ND
EB-14(2)	2	ND
EB-15(2)	2	ND
EB-16(2)	2	ND
EB-17(2)	2	ND
EB-18(2)	2	ND
EB-19(2)	2	ND
EB-20(2)	2	ND
EB-21(2)	2	ND
EB-22(2)	2	ND
EB-23(2)	2	ND
EB-24(2)	2	**5.3**
EB-25(2)	2	ND
EB-26(2)	2	ND
EB-27(2)	2	ND
EB-28(2)	2	ND
EB-29(2)	2	ND
EB-30(2)	2	ND
EB-31(2)	2	ND
EB-32(2)	2	ND
EB-33(2)	2	ND
EB-34(2)	2	ND
EB-35(2)	2	ND
EB-36(2)	2	ND
EB-37(2)	2	ND
EB-38(2)	2	ND
EB-39(2)	2	ND
EB-40(2)	2	ND

RWQCB Tier 1 ESLs (mg/Kg)	0.067
RWQCB Tier 2 ESLs (mg/Kg)	0.31

Bold result indicates concentration in excess of RWQCB Tier 1 ESL

ND = Not Detected
mg/kg = milligrams per Kilogram

TABLE 3

ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES

Vacant Land
APN: 111-290-015-000, Farmersville, California 93223
(Soil samples collected on January 11, 12 and 13, 2023 by KCE Matrix, Inc.)

Sample Identification	Depth (Feet)	EPA 6010B by 3050B Lead (mg/kg)
EB-1 (2)	2	3.4
EB-2 (2)	2	2.6
EB-3 (2)	2	4.3
EB-4 (2)	2	2.9
EB-5 (2)	2	3.5
EB-6 (2)	2	3.1
EB-7 (2)	2	3.1
EB-8 (2)	2	2.8
EB-9 (2)	2	3.9
EB-10 (2)	2	3.6
EB-11 (2)	2	2.9
EB-12 (2)	2	2.7
EB-13 (2)	2	5.6
EB-14 (2)	2	2.6
EB-15 (2)	2	2.9
EB-16 (2)	2	3.9
EB-17 (2)	2	3.1
EB-18 (2)	2	4.3
EB-19 (2)	2	3.0
EB-20 (2)	2	3.2
EB-21 (2)	2	3.2
EB-22 (2)	2	2.9
EB-23 (2)	2	3.5
EB-24 (2)	2	3.5
EB-25 (2)	2	3.3
EB-26 (2)	2	3.5
EB-27 (2)	2	2.8
EB-28 (2)	2	3.1
EB-29 (2)	2	3.4
EB-30 (2)	2	3.3
EB-31 (2)	2	4.7
EB-32 (2)	2	3.8
EB-33 (2)	2	3.4
EB-34 (2)	2	3.2
EB-35 (2)	2	3.1
EB-36 (2)	2	3.1
EB-37 (2)	2	3.4
EB-38 (2)	2	3.5
EB-39 (2)	2	3.2
EB-40 (2)	2	3.0

RWQCB Tier 1 ESLs (mg/Kg)	32
RWQCB Tier 2 ESLs (mg/Kg)	32

Bold result indicates concentration in excess of RWQCB Tier 1 ESL

ND = Not Detected
mg/kg = milligrams per kilogram

TABLE 4

ANALYTICAL LABORATORY RESULTS FOR SUBSURFACE SOIL VAPOR SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 20, 2023 by KCE Matrix, Inc.)

Sample ID / Depth (ft) / Organics	VP-1(5)	VP-2(5)	VP-3(5)	VP-4(5)	VP-4(5)DUP	VP-5(5)
	5	5	5	5	5	5
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
Benzene	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	21	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
Freon 12	ND	ND	ND	ND	ND	ND
Freon 11	ND	ND	ND	ND	ND	ND
Freon 113	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	14	22	19	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Toluene	12	21	40	46	44	25
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	18	14	10
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND
m,p-Xylene	ND	ND	28	44	36	17

TPH = Total Petroleum Hydrocarbons

ND = Not Detected at or above Reporting Limit

mg/Kg = milligrams per Kilogram

TABLE 4

ANALYTICAL LABORATORY RESULTS FOR SUBSURFACE SOIL VAPOR SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 20, 2023 by KCE Matrix, Inc.)

Sample ID / Depth (ft) / Organics	VP-1(5)	VP-2(5)	VP-3(5)	VP-4(5)	VP-4(5)DUP	VP-5(5)
	5	5	5	5	5	5
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
o-Xylene	ND	ND	ND	12	10	ND
Methyl-tert-butylether	ND	ND	ND	ND	ND	ND
Ethyl-tert-butylether	ND	ND	ND	ND	ND	ND
Di-isopropylether	ND	ND	ND	ND	ND	ND
tert-amylmethylether	ND	ND	ND	ND	ND	ND
tert-Butylalcohol	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (C4-C12)	ND	ND	ND	ND	ND	ND
n-Hexane (LCC)	ND	ND	ND	ND	ND	ND
n-Pentane (LCC)	ND	ND	ND	ND	ND	ND
Isopropanol (LCC)	ND	ND	ND	ND	ND	ND
n-Propanol (LCC)	ND	ND	ND	ND	ND	ND

TPH = Total Petroleum Hydrocarbons
ND = Not Detected at or above Reporting Limit
mg/Kg = milligrams per Kilogram

TABLE 4

ANALYTICAL LABORATORY RESULTS FOR SUBSURFACE SOIL VAPOR SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 20, 2023 by KCE Matrix, Inc.)

Sample ID / Depth (ft) / Organics	VP-6(5)	VP-7(5)	VP-8(5)	VP-9(5)	VP-10(5)
	5	5	5	5	5
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
Freon 12	ND	ND	ND	ND	ND
Freon 11	ND	ND	ND	ND	ND
Freon 113	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
Ethylbenzene	8	18	14	11	17
Isopropylbenzene	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND
Toluene	39	88	62	56	74
1,1,1-Trichloroethane	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	10	13	9	11	13
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND
m,p-Xylene	29	52	42	47	56

TPH = Total Petroleum Hydrocarbons

ND = Not Detected at or above Reporting Limit

mg/Kg = milligrams per Kilogram

TABLE 4

ANALYTICAL LABORATORY RESULTS FOR SUBSURFACE SOIL VAPOR SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 20, 2023 by KCE Matrix, Inc.)

Sample ID / Depth (ft) / Organics	VP-6(5)	VP-7(5)	VP-8(5)	VP-9(5)	VP-10(5)
	5	5	5	5	5
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
o-Xylene	9	17	14	12	16
Methyl-tert-butylether	ND	ND	ND	ND	ND
Ethyl-tert-butylether	ND	ND	ND	ND	ND
Di-isopropylether	ND	ND	ND	ND	ND
tert-amylmethylether	ND	ND	ND	ND	ND
tert-Butylalcohol	ND	ND	ND	ND	ND
Gasoline Range Organics (C4-C12)	ND	ND	ND	ND	ND
n-Hexane (LCC)	ND	ND	ND	ND	ND
n-Pentane (LCC)	ND	ND	ND	ND	ND
Isopropanol (LCC)	ND	ND	ND	ND	ND
n-Propanol (LCC)	ND	ND	ND	ND	ND

TPH = Total Petroleum Hydrocarbons
ND = Not Detected at or above Reporting Limit
mg/Kg = milligrams per Kilogram

APPENDIX C

(LABORATORY REPORTS
AND CHAIN OF CUSTODY DOCUMENTATION)

JONES ENVIRONMENTAL, INC.

714-449-9937
562-646-1611

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

30 January 2023

Viken Melkonian
KCE Matrix
1648 West Glenoaks Blvd., Ste. 102
Glendale, CA 91201

Re: KCE-2022-454E

Enclosed are the results of analyses for samples received by the laboratory on 01/23/23. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Colby Wakeman
Lab Director

JONES ENVIRONMENTAL, INC.

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VP-1(5)	JEI230058-01	Soil Gas	01/20/2023 08:38	01/23/2023 13:21
VP-2(5)	JEI230058-02	Soil Gas	01/20/2023 08:54	01/23/2023 13:21
VP-3(5)	JEI230058-03	Soil Gas	01/20/2023 09:11	01/23/2023 13:21
VP-4(5)	JEI230058-04	Soil Gas	01/20/2023 09:28	01/23/2023 13:21
VP-4(5) DUP	JEI230058-05	Soil Gas	01/20/2023 09:44	01/23/2023 13:21
VP-5(5)	JEI230058-06	Soil Gas	01/20/2023 09:45	01/23/2023 13:21
VP-6(5)	JEI230058-07	Soil Gas	01/20/2023 10:19	01/23/2023 13:21
VP-7(5)	JEI230058-08	Soil Gas	01/20/2023 10:36	01/23/2023 13:21
VP-8(5)	JEI230058-09	Soil Gas	01/20/2023 10:53	01/23/2023 13:21
VP-9(5)	JEI230058-10	Soil Gas	01/20/2023 11:10	01/23/2023 13:21
VP-10(5)	JEI230058-11	Soil Gas	01/20/2023 11:26	01/23/2023 13:21

Jones Environmental, Inc.

Colby Wakeman
Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

JONES ENVIRONMENTAL, INC.

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

DETECTIONS SUMMARY

Sample ID: VP-1(5) **Laboratory ID:** JEI230058-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	12	8	µg/m3	EPA 8260	

Sample ID: VP-2(5) **Laboratory ID:** JEI230058-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	21	8	µg/m3	EPA 8260	

Sample ID: VP-3(5) **Laboratory ID:** JEI230058-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	14	8	µg/m3	EPA 8260	
Toluene	40	8	µg/m3	EPA 8260	
m,p-Xylene	28	16	µg/m3	EPA 8260	

Sample ID: VP-4(5) **Laboratory ID:** JEI230058-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloroform	21	8	µg/m3	EPA 8260	
Ethylbenzene	22	8	µg/m3	EPA 8260	
Toluene	46	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	18	8	µg/m3	EPA 8260	
m,p-Xylene	44	16	µg/m3	EPA 8260	
o-Xylene	12	8	µg/m3	EPA 8260	

Sample ID: VP-4(5) DUP **Laboratory ID:** JEI230058-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	19	8	µg/m3	EPA 8260	
Toluene	44	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	14	8	µg/m3	EPA 8260	
m,p-Xylene	36	16	µg/m3	EPA 8260	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

DETECTIONS SUMMARY

Sample ID: VP-4(5) DUP **Laboratory ID:** JEI230058-05

Analyte	Result	Reporting Limit	Units	Method	Notes
o-Xylene	10	8	µg/m3	EPA 8260	

Sample ID: VP-5(5) **Laboratory ID:** JEI230058-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	25	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	10	8	µg/m3	EPA 8260	
m,p-Xylene	17	16	µg/m3	EPA 8260	

Sample ID: VP-6(5) **Laboratory ID:** JEI230058-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	8	8	µg/m3	EPA 8260	
Toluene	39	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	10	8	µg/m3	EPA 8260	
m,p-Xylene	29	16	µg/m3	EPA 8260	
o-Xylene	9	8	µg/m3	EPA 8260	

Sample ID: VP-7(5) **Laboratory ID:** JEI230058-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	18	8	µg/m3	EPA 8260	
Toluene	88	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	13	8	µg/m3	EPA 8260	
m,p-Xylene	52	16	µg/m3	EPA 8260	
o-Xylene	17	8	µg/m3	EPA 8260	

Sample ID: VP-8(5) **Laboratory ID:** JEI230058-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	14	8	µg/m3	EPA 8260	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

DETECTIONS SUMMARY

Sample ID: VP-8(5) **Laboratory ID:** JEI230058-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	62	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	9	8	µg/m3	EPA 8260	
m,p-Xylene	42	16	µg/m3	EPA 8260	
o-Xylene	14	8	µg/m3	EPA 8260	

Sample ID: VP-9(5) **Laboratory ID:** JEI230058-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	11	8	µg/m3	EPA 8260	
Toluene	56	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	11	8	µg/m3	EPA 8260	
m,p-Xylene	47	16	µg/m3	EPA 8260	
o-Xylene	12	8	µg/m3	EPA 8260	

Sample ID: VP-10(5) **Laboratory ID:** JEI230058-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	17	8	µg/m3	EPA 8260	
Toluene	74	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	13	8	µg/m3	EPA 8260	
m,p-Xylene	56	16	µg/m3	EPA 8260	
o-Xylene	16	8	µg/m3	EPA 8260	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-1(5)
JEI230058-01(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	12	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-1(5)
JEI230058-01(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	ND	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	

Surrogate: Toluene-d8	*101.38%*	*60 - 140*
Surrogate: Dibromofluoromethane	*85.10%*	*60 - 140*
Surrogate: 4-Bromofluorobenzene	*97.37 %*	*60 - 140*

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1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-2(5)

JEI230058-02(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	21	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-2(5)
JEI230058-02(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	ND	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*101.75 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*86.29 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*98.57 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-3(5)
JEI230058-03(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	14	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	40	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-3(5)
JEI230058-03(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	28	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*100.27 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*88.12 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*96.37 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-4(5)

JEI230058-04(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	21	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	22	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	46	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	18	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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Lab Director

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-4(5)
JEI230058-04(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	44	16	µg/m3	"	"		"	"	
o-Xylene	12	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.46 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*90.26 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*99.45 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-4(5) DUP

JEI230058-05(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	19	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	44	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	14	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-4(5) DUP

JEI230058-05(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	36	16	µg/m3	"	"		"	"	
o-Xylene	10	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*99.91 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*84.44 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*94.66 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-5(5)
JEI230058-06(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	25	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	10	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-5(5)
JEI230058-06(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	17	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.79 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*93.61 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*101.68 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-6(5)

JEI230058-07(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	8	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	39	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	10	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-6(5)
JEI230058-07(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	29	16	µg/m3	"	"		"	"	
o-Xylene	9	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.28 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*97.07 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*102.11 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-7(5)

JEI230058-08(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	18	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	88	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	13	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-7(5)

JEI230058-08(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	52	16	µg/m3	"	"		"	"	
o-Xylene	17	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*97.50 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*96.49 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*101.48 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-8(5)

JEI230058-09(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	14	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	62	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	9	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-8(5)
JEI230058-09(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	42	16	µg/m3	"	"		"	"	
o-Xylene	14	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.97 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*94.40 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*102.87 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-9(5)
JEI230058-10(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	11	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	56	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	11	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-9(5)
JEI230058-10(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	47	16	µg/m3	"	"		"	"	
o-Xylene	12	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*99.48 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*91.66 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*102.37 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-10(5)
JEI230058-11(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	17	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	74	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	13	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-10(5)
JEI230058-11(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	56	16	µg/m3	"	"		"	"	
o-Xylene	16	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.19 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*98.29 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*102.79 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
CCV 1										
Benzene	10	8	%	10		104	80 - 120		120	
Chlorobenzene	10	8	%	10		99	80 - 120		120	
1,1-Dichloroethene	8	8	%	10		81	80 - 120		120	
cis-1,2-Dichloroethene	10	8	%	10		96	80 - 120		120	
Ethylbenzene	10	8	%	10		97	80 - 120		120	
Tetrachloroethene	10	8	%	10		97	80 - 120		120	
Toluene	10	8	%	10		103	80 - 120		120	
1,1,1-Trichloroethane	9	8	%	10		87	80 - 120		120	
Trichloroethene	9	8	%	10		91	80 - 120		120	
Vinyl chloride	9	8	%	10		93	80 - 120		120	
LCS 1										
Benzene	2.89	8	%	2.5		116	70 - 130			
Chlorobenzene	2.89	8	%	2.5		116	70 - 130			
1,1-Dichloroethene	2.10	8	%	2.5		84	60 - 140			
cis-1,2-Dichloroethene	2.49	8	%	2.5		100	70 - 130			
Ethylbenzene	2.78	8	%	2.5		111	70 - 130			
Tetrachloroethene	2.86	8	%	2.5		114	70 - 130			
Toluene	3.04	8	%	2.5		122	70 - 130			
1,1,1-Trichloroethane	2.18	8	%	2.5		87	70 - 130			
Trichloroethene	2.43	8	%	2.5		97	70 - 130			
Vinyl chloride	1.52	8	%	2.5		61	60 - 140			
Surrogate: Toluene-d8		*103.94 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*88.11 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*96.36 %*	*60 - 140*							
LCSD 1										
Benzene	2.83	8	%	2.5		113		2.00		
Chlorobenzene	2.77	8	%	2.5		111		4.10		
1,1-Dichloroethene	2.30	8	%	2.5		92		9.07		
cis-1,2-Dichloroethene	2.38	8	%	2.5		95		4.67		

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
LCSD 1										
Ethylbenzene	2.85	8	%	2.5		114		2.40		
Tetrachloroethene	2.73	8	%	2.5		109		4.52		
Toluene	2.92	8	%	2.5		117		3.95		
1,1,1-Trichloroethane	2.13	8	%	2.5		85		2.20		
Trichloroethene	2.37	8	%	2.5		95		2.46		
Vinyl chloride	1.56	8	%	2.5		63		2.82		
Surrogate: Toluene-d8		*104.81 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*85.90 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*99.48 %*	*60 - 140*							
Method Blank 1										
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							
tert-Butylbenzene	ND	12	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
1,2-Dichlorobenzene	ND	16	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Methylene chloride	ND	8	µg/m3							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
Method Blank 1										
Naphthalene	ND	40	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Styrene	ND	8	µg/m3							
1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
Dibromomethane	ND	8	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
Isopropanol (LCC)	ND	80	µg/m3							
n-Propanol (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		*104.34 %*		*60 - 140*						
Surrogate: Dibromofluoromethane		*90.89 %*		*60 - 140*						
Surrogate: 4-Bromofluorobenzene		*95.64 %*		*60 - 140*						
Sample Blank 1										
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
Sample Blank 1										
tert-Butylbenzene	ND	12	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
1,2-Dichlorobenzene	ND	16	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Methylene chloride	ND	8	µg/m3							
Naphthalene	ND	40	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Styrene	ND	8	µg/m3							
1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
Sample Blank 1										
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
Dibromomethane	ND	8	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
Isopropanol (LCC)	ND	80	µg/m3							
n-Propanol (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		*102.92 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*88.33 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*96.19 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
CCV 1										
Benzene	10	8	%	10		104	80 - 120		120	
Chlorobenzene	10	8	%	10		100	80 - 120		120	
1,1-Dichloroethene	9	8	%	10		91	80 - 120		120	
cis-1,2-Dichloroethene	10	8	%	10		97	80 - 120		120	
Ethylbenzene	10	8	%	10		99	80 - 120		120	
Tetrachloroethene	9	8	%	10		92	80 - 120		120	
Toluene	10	8	%	10		101	80 - 120		120	
1,1,1-Trichloroethane	10	8	%	10		99	80 - 120		120	
Trichloroethene	9	8	%	10		93	80 - 120		120	
Vinyl chloride	9	8	%	10		88	80 - 120		120	
LCS 1										
Benzene	2.69	8	%	2.5		107	70 - 130			
Chlorobenzene	2.84	8	%	2.5		114	70 - 130			
1,1-Dichloroethene	2.76	8	%	2.5		111	60 - 140			
cis-1,2-Dichloroethene	2.71	8	%	2.5		108	70 - 130			
Ethylbenzene	2.47	8	%	2.5		99	70 - 130			
Tetrachloroethene	2.44	8	%	2.5		98	70 - 130			
Toluene	2.71	8	%	2.5		108	70 - 130			
1,1,1-Trichloroethane	2.51	8	%	2.5		101	70 - 130			
Trichloroethene	2.56	8	%	2.5		102	70 - 130			
Vinyl chloride	2.45	8	%	2.5		98	60 - 140			
Surrogate: Toluene-d8		*99.24 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*97.85 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*105.19 %*	*60 - 140*							
LCSD 1										
Benzene	2.93	8	%	2.5		117		8.66		
Chlorobenzene	2.83	8	%	2.5		113		0.29		
1,1-Dichloroethene	2.80	8	%	2.5		112		1.18		
cis-1,2-Dichloroethene	2.83	8	%	2.5		113		4.27		

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
LCSD 1										
Ethylbenzene	2.69	8	%	2.5		108		8.43		
Tetrachloroethene	2.60	8	%	2.5		104		6.12		
Toluene	2.79	8	%	2.5		112		2.91		
1,1,1-Trichloroethane	2.59	8	%	2.5		104		2.92		
Trichloroethene	2.58	8	%	2.5		103		0.55		
Vinyl chloride	2.61	8	%	2.5		104		6.35		
Surrogate: Toluene-d8		*98.30 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*96.10 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*104.54 %*	*60 - 140*							
Method Blank 1										
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							
tert-Butylbenzene	ND	12	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
1,2-Dichlorobenzene	ND	16	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Methylene chloride	ND	8	µg/m3							

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Lab Director

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
Method Blank 1										
Naphthalene	ND	40	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Styrene	ND	8	µg/m3							
1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
Dibromomethane	ND	8	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
Isopropanol (LCC)	ND	80	µg/m3							
n-Propanol (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		*100.10 %*		*60 - 140*						
Surrogate: Dibromofluoromethane		*97.95 %*		*60 - 140*						
Surrogate: 4-Bromofluorobenzene		*101.04 %*		*60 - 140*						
Sample Blank 1										
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
Sample Blank 1										
tert-Butylbenzene	ND	12	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
1,2-Dichlorobenzene	ND	16	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Methylene chloride	ND	8	µg/m3							
Naphthalene	ND	40	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Styrene	ND	8	µg/m3							
1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
Sample Blank 1										
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
Dibromomethane	ND	8	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
Isopropanol (LCC)	ND	80	µg/m3							
n-Propanol (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		*97.78 %*		*60 - 140*						
Surrogate: Dibromofluoromethane		*96.62 %*		*60 - 140*						
Surrogate: 4-Bromofluorobenzene		*102.70 %*		*60 - 140*						

Jones Environmental, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Colby Wakeman
Lab Director

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714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry
RPD	Relative Percent Difference
E	Estimated Concentration; concentration exceeds calibration range.
LCC	Leak Check Compound
MDL	Compound Reported to Method Detection Limit

Jones Environmental, Inc.

Colby Wakeman
Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Soil-Gas Chain of Custody Record

Client: KCE Matrix, Inc.
Project Name: Vacant Land
Project Address: APN: 111-290-015-000
Farmersville, California
Email: viken@kcematrixinc.com
Phone: (818) 559 5500
Report To: KCE Matrix, Inc.
Sampler: Viken Melkonian

Date: 1/23/2023
Client Project #: KCE-2022-454E

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: Y / N
Flow Rate: 200 cc/min
If different than above, see Notes.

Report Options: EDD ____ EDF* - 10% Surcharge____ *Global ID ____

LAB USE ONLY
Jones Project # JEI230058
Page 1 of 1 2
Sample Condition as Recieved: Sealed □ yes □ no
Sample Container: Summa
If different than above, see Notes.

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- ☒ Normal
- □ Mobile Lab

Tracer:
- ☒ n-pentane
- ☒ n-hexane
- ☒ ~~n-heptane~~
- □ Helium
- □ 1,1-DFA
- ☒ IPA
- x n-propanol

Reporting Limits Requested: □ Commercial ☒ Residential
Units: µg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Pump Used	Magnehelic	Laboratory Sample ID	Canister ID	Canister Start Pressure	Canister End Pressure	Sampling Start Time	Sampling End Time	Sample Matrix: Soil Gas (SG), Air (A)	EPA 8260B (VOC's + TPH-GRO)	Oxygen by ASTM D1946	Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
VP-1(5)	3	3,280	1/20/23			JEI230058-01	01799	-30	0	8:32	8:38	SG	X			1	
VP-2(5)	3	3,280	1/20/23			JEI230058-02	01826	-30	0	8:48	8:54	SG	X			1	
VP-3(5)	3	3,280	1/20/23			JEI230058-03	01220	-30	0	9:05	9:11	SG	X			1	
VP-4(5)	3	3,280	1/20/23			JEI230058-04	01784	-30	0	9:22	9:28	SG	X			1	
VP-4(5)DUP	3	3,280	1/20/23			JEI230058-05	01506	-30	0	9:38	9:44	SG	X			1	
VP-5(5)	3	3,280	1/20/23			JEI230058-06	01754	-30	0	9:39	9:45	SG	X			1	
VP-6(5)	3	3,280	1/20/23			JEI230058-07	01176	-30	-3	10:13	10:19	SG	X			1	
VP-7(5)	3	3,280	1/20/23			JEI230058-08	01780	-30	0	10:30	10:36	SG	X			1	
VP-8(5)	3	3,280	1/20/23			JEI230058-09	01800	-30	0	10:47	10:53	SG	X			1	
VP-9(5)	3	3,280	1/20/23			JEI230058-10	01772	-30	0	11:04	11:10	SG	X			1	

Total Number of Containers

Relinquished By (Signature)	Printed Name	Company	Date	Time
	Viken Melkonian	KCE Matrix, Inc.	1/23/23	1125
	MARTIN YOUNG	JEL	1/23/23	1310

Received By (Signature)	Printed Name	Company	Date	Time
	MARTIN YOUNG	JEL	1/23/23	1125
	K. Horchler	Jones Env.	1/23/23	1321

Received By Laboratory (Signature)

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain of Custody Record

Client: KCE Matrix, Inc.
Project Name: Vacant Land
Project Address: APN: 111-290-015-000
Farmersville, California
Email: viken@kcematrixinc.com
Phone: (818) 559 5500
Report To: KCE Matrix, Inc.
Sampler: Viken Melkonian

Date: 1/23/2023
Client Project #: KCE-2022-454E

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: Y / N
Flow Rate: 200 cc/min
If different than above, see Notes.

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- ☒ Normal
- □ Mobile Lab

Tracer:
- ☒ n-pentane
- ☒ n-hexane
- ~~☒ n-heptane~~
- □ Helium
- □ 1,1-DFA
- ☒ IPA
- x n-propanol

Reporting Limits Requested: □ Commercial ☒ Residential
Units: µg/m³

LAB USE ONLY
Jones Project # JEI230058
Page 24 of 42
Sample Condition as Recieved: Sealed □ yes □ no
Sample Container: Summa
If different than above, see Notes.

Sample ID	Purge Number	Purge Volume (mL)	Date	Pump Used	Magnehelic	Laboratory Sample ID	Canister ID	Canister Start Pressure	Canister End Pressure	Sampling Start Time	Sampling End Time	Sample Matrix: Soil Gas (SG), Air (A)	EPA 8260B (VOC's + TPH-GRO)	Oxygen by ASTM D1946	Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
VP-10(5)	3	3,280	1/20/23			JEI230058-11	01759	-30	0	11:21	11:26	SG	X			1	

Relinquished By (Signature): Viken Melkonian
Printed Name: Viken Melkonian
Company: KCE Matrix, Inc.
Date: 01/23/23 Time: 1126

Relinquished By (Signature): MARTIN YOUNG
Printed Name: MARTIN YOUNG
Company: JEL
Date: 1/23/23 Time: 1310

Received By (Signature): MARTIN YOUNG
Printed Name: MARTIN YOUNG
Company: JEL
Date: 01/23/23 Time: 1126

Received By Laboratory (Signature)
Printed Name
Company
Date: Time:

11 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	01/23/23
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	01/11-13/23
		Date Received:	01/13/23
Project:	Vacant Land	**Date Analyzed:**	01/17&18/23
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

ANALYSES REQUESTED

Soil:

1. EPA 6010B – Lead (Pb), Arsenic (As)
2. EPA 8081A by 3546 – Chlorinated Pesticides by GC/ECD

Approval:

Douglas A. Fowler, M.S.
Senior Chemist

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-1(2)**	**EB-2(2)**	**EB-3(2)**	**EB-4(2)**	**EB-5(2)**		
Jones ID:	**ST-21515-01**	**ST-21515-02**	**ST-21515-03**	**ST-21515-04**	**ST-21515-05**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	**5.1**	ND	ND	5.0	mg/kg
Lead, Pb	**3.4**	**2.6**	**4.3**	**2.9**	**3.5**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011701	I23011701	I23011701	I23011701	I23011701		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-6(2)**	**EB-7(2)**	**EB-8(2)**	**EB-9(2)**	**EB-10(2)**		
Jones ID:	**ST-21515-06**	**ST-21515-07**	**ST-21515-08**	**ST-21515-09**	**ST-21515-10**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**3.1**	**3.1**	**2.8**	**3.9**	**3.6**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011701	I23011701	I23011701	I23011701	I23011701		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-11(2)**	**EB-12(2)**	**EB-13(2)**	**EB-14(2)**	**EB-15(2)**		
Jones ID:	**ST-21515-11**	**ST-21515-12**	**ST-21515-13**	**ST-21515-14**	**ST-21515-15**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**2.9**	**2.7**	**5.6**	**2.6**	**2.9**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011701	I23011701	I23011701	I23011701	I23011701		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-16(2)**	**EB-17(2)**	**EB-18(2)**	**EB-19(2)**	**EB-20(2)**		
Jones ID:	**ST-21515-16**	**ST-21515-17**	**ST-21515-18**	**ST-21515-19**	**ST-21515-20**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**3.9**	**3.1**	**4.3**	**3.0**	**3.2**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011701	I23011701	I23011701	I23011701	I23011701		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-21(2)**	**EB-22(2)**	**EB-23(2)**	**EB-24(2)**	**EB-25(2)**		
Jones ID:	**ST-21515-21**	**ST-21515-22**	**ST-21515-23**	**ST-21515-24**	**ST-21515-25**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	**5.3**	ND	5.0	mg/kg
Lead, Pb	**3.2**	**2.9**	**3.5**	**3.5**	**3.3**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011702	I23011702	I23011702	I23011702	I23011702		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-26(2)**	**EB-27(2)**	**EB-28(2)**	**EB-29(2)**	**EB-30(2)**		
Jones ID:	**ST-21515-26**	**ST-21515-27**	**ST-21515-28**	**ST-21515-29**	**ST-21515-30**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**3.5**	**2.8**	**3.1**	**3.4**	**3.3**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011702	I23011702	I23011702	I23011702	I23011702		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-31(2)**	**EB-32(2)**	**EB-33(2)**	**EB-34(2)**	**EB-35(2)**		
Jones ID:	**ST-21515-31**	**ST-21515-32**	**ST-21515-33**	**ST-21515-34**	**ST-21515-35**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**4.7**	**3.8**	**3.4**	**3.2**	**3.1**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011702	I23011702	I23011702	I23011702	I23011702		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-36(2)**	**EB-37(2)**	**EB-38(2)**	**EB-39(2)**	**EB-40(2)**		
Jones ID:	**ST-21515-36**	**ST-21515-37**	**ST-21515-38**	**ST-21515-39**	**ST-21515-40**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**3.1**	**3.4**	**3.5**	**3.2**	**3.0**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011702	I23011702	I23011702	I23011702	I23011702		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Batch ID: **I23011701** **Prepared:** 1/17/2023 **Analyzed:** 1/17/2023

Analytes:	Result	Spike Level	% REC	% RPD	% REC Limits	Reporting Limit	Units
METHOD BLANK:	**I230117-MB1**						
Arsenic, As	ND					5.0	mg/kg
Lead, Pb	ND					0.5	mg/kg
LCS:	**I230117-LCS1**						
Arsenic, As	**181**	200	91%		80 - 120		mg/kg
Lead, Pb	**48.4**	50.0	97%		80 - 120		mg/kg
LCSD:	**I230117-LCSD1**						
Arsenic, As	**184**	200	**92%**	1.6%	80 - 120		mg/kg
Lead, Pb	**48.7**	50.0	**97%**	0.6%	80 - 120		mg/kg
CCV:	**I230117-CCV1**						
Arsenic, As	**1.03**	1.00	**103%**		90-110		mg/L
Lead, Pb	**1.04**	1.00	**104%**		90-110		mg/L

CCV = Continuing Calibration Verification
LCS = Laboratory Control Sample
LCSD= Laboratory Control Sample Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:** **Date Received:**	1/11-13/2023 1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Batch ID: **I23011702** **Prepared:** 1/17/2023 **Analyzed:** 1/17/2023

Analytes:	Result	Spike Level	% REC	% RPD	% REC Limits	Reporting Limit	Units
METHOD BLANK:	**I230117-MB2**						
Arsenic, As	ND					5.0	mg/kg
Lead, Pb	ND					0.5	mg/kg
LCS:	**I230117-LCS2**						
Arsenic, As	**188**	200	94%		80 - 120		mg/kg
Lead, Pb	**50.3**	50.0	101%		80 - 120		mg/kg
LCSD:	**I230117-LCSD2**						
Arsenic, As	**177**	200	**89%**	6.0%	80 - 120		mg/kg
Lead, Pb	**47.5**	50.0	**95%**	5.7%	80 - 120		mg/kg
CCV:	**I230117-CCV2**						
Arsenic, As	**1.07**	1.00	**107%**		90-110		mg/L
Lead, Pb	**1.09**	1.00	**109%**		90-110		mg/L

CCV = Continuing Calibration Verification
LCS = Laboratory Control Sample
LCSD= Laboratory Control Sample Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-1(2)**	**EB-2(2)**	**EB-3(2)**	**EB-4(2)**	**EB-5(2)**		
Jones ID:	**ST-21515-01**	**ST-21515-02**	**ST-21515-03**	**ST-21515-04**	**ST-21515-05**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	**2.1**	ND	**1.8**	**1.1**	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	104%	119%	102%	115%	99%	30 - 120	
Decachlorobiphenyl	118%	115%	120%	115%	116%	30 - 120	
Batch:	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-6(2)**	**EB-7(2)**	**EB-8(2)**	**EB-9(2)**	**EB-10(2)**		
Jones ID:	**ST-21515-06**	**ST-21515-07**	**ST-21515-08**	**ST-21515-09**	**ST-21515-10**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	ND	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	115%	107%	86%	106%	105%	30 - 120	
Decachlorobiphenyl	109%	119%	118%	115%	119%	30 - 120	
Batch:	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-11(2)**	**EB-12(2)**	**EB-13(2)**	**EB-14(2)**	**EB-15(2)**		
Jones ID:	**ST-21515-11**	**ST-21515-12**	**ST-21515-13**	**ST-21515-14**	**ST-21515-15**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	**17.4**	**1.3**	**1.4**	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	**2.4**	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	112%	113%	95%	97%	94%	30 - 120	
Decachlorobiphenyl	116%	119%	113%	105%	114%	30 - 120	
Batch:	ECD4_ 011723_02	ECD4_ 011723_02	ECD4_ 011723_02	ECD4_ 011723_02	ECD4_ 011723_02		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-16(2)**	**EB-17(2)**	**EB-18(2)**	**EB-19(2)**	**EB-20(2)**		
Jones ID:	**ST-21515-16**	**ST-21515-17**	**ST-21515-18**	**ST-21515-19**	**ST-21515-20**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	**1.2**	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	95%	104%	103%	111%	112%	30 - 120	
Decachlorobiphenyl	116%	119%	116%	119%	116%	30 - 120	
Batch:	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-21(2)**	**EB-22(2)**	**EB-23(2)**	**EB-24(2)**	**EB-25(2)**		
Jones ID:	**ST-21515-21**	**ST-21515-22**	**ST-21515-23**	**ST-21515-24**	**ST-21515-25**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	**1.1**	ND	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	109%	96%	100%	115%	93%	30 - 120	
Decachlorobiphenyl	117%	119%	119%	116%	119%	30 - 120	
Batch:	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-26(2)**	**EB-27(2)**	**EB-28(2)**	**EB-29(2)**	**EB-30(2)**		
Jones ID:	**ST-21515-26**	**ST-21515-27**	**ST-21515-28**	**ST-21515-29**	**ST-21515-30**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	**1.6**	ND	ND	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	105%	104%	101%	117%	81%	30 - 120	
Decachlorobiphenyl	119%	120%	118%	119%	104%	30 - 120	
Batch:	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-31(2)**	**EB-32(2)**	**EB-33(2)**	**EB-34(2)**	**EB-35(2)**		
Jones ID:	**ST-21515-31**	**ST-21515-32**	**ST-21515-33**	**ST-21515-34**	**ST-21515-35**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	**8.5**	**3.1**	**1.7**	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	**2.2**	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	93%	106%	107%	69%	91%	30 - 120	
Decachlorobiphenyl	117%	120%	120%	81%	120%	30 - 120	
Batch:	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-36(2)**	**EB-37(2)**	**EB-38(2)**	**EB-39(2)**	**EB-40(2)**		
Jones ID:	**ST-21515-36**	**ST-21515-37**	**ST-21515-38**	**ST-21515-39**	**ST-21515-40**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	ND	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	103%	70%	96%	105%	78%	30 - 120	
Decachlorobiphenyl	120%	86%	120%	114%	112%	30 - 120	
Batch:	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**METHOD BLANK #1**	**METHOD BLANK #2**		
Jones ID:	**MB2-011723ECD4**	**MB2-011723ECD4**	**Reporting Limit**	**Units**
Analytes:				
α-BHC	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	0.4	ug/kg
β-BHC	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	0.4	ug/kg
Aldrin	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	0.8	ug/kg
Endrin	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	20	ug/kg
Dilution Factor	1	1		
Surrogate Recovery:			**QC Limits**	
TCMX	114%	112%	30 - 120	
Decachlorobiphenyl	113%	116%	30 - 120	
Batch:	ECD4_011723_02	ECD4_011823_01		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

BATCH: **ECD4_ 011723_02** **Prepared:** 1/17/2023 **Analyzed:** 1/17/2023

EPA 8081A – Chlorinated Pesticides by GC/ECD

	LCS	LCSD	% RPD	Spike Level	% Recovery Limits	Units
	LCS2-011723ECD4	LCSD2-011723ECD4				
Analytes:						
α-BHC	111	120	8%	100	60 - 140	ppb
Heptachlor	110	119	8%	100	60 - 140	ppb
Aldrin	113	122	8%	100	60 - 140	ppb
Heptachlor Epoxide	113	123	8%	100	60 - 140	ppb
γ-Chlordane	113	124	9%	100	60 - 140	ppb
Endosulfan I	112	122	9%	100	60 - 140	ppb
4,4'-DDE	116	127	9%	100	60 - 140	ppb
Dieldrin	125	136	8%	100	60 - 140	ppb
Endrin	119	129	8%	100	60 - 140	ppb
4,4'-DDD	117	129	10%	100	60 - 140	ppb
Endosulfan II	129	135	5%	100	60 - 140	ppb
4,4'-DDT	116	129	11%	100	60 - 140	ppb
Endrin Ketone	131	133	2%	100	60 - 140	ppb
Surrogate Recoveries:						
TCMX	117%	118%			30 - 120	
Decachlorobiphenyl	116%	118%			30 - 120	

LCS= Laboratory Control Sample
LCSD= Laboratory Control Sample Duplicate
RPD = Relative Percent Difference

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

BATCH: **ECD4_ 011723_02** **Prepared:** 1/17/2023 **Analyzed:** 1/17/2023

EPA 8081A – Chlorinated Pesticides by GC/ECD

	Result	Spike Level	% Recovery	% Recovery Limits	Units
CCV:	CCV2-011723ECD4				
Analytes:					
α-BHC	51.2	50	102%	80-120	ppb
Heptachlor	52.6	50	105%	80-120	ppb
Aldrin	52.6	50	105%	80-120	ppb
Heptachlor Epoxide	53.3	50	107%	80-120	ppb
γ-Chlordane	51.9	50	104%	80-120	ppb
Endosulfan I	55.4	50	111%	80-120	ppb
4,4'-DDE	105	100	105%	80-120	ppb
Dieldrin	107	100	107%	80-120	ppb
Endrin	108	100	108%	80-120	ppb
4,4'-DDD	98.7	100	99%	80-120	ppb
Endosulfan II	108	100	108%	80-120	ppb
4,4'-DDT	109	100	109%	80-120	ppb
Endrin Ketone	113	100	113%	80-120	ppb
Surrogate Recovery:					
TCMX	103%			80-120	
Decachlorobiphenyl	116%			80-120	

CCV= Continuing Calibration Verification

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

BATCH: **ECD4_ 011823_01** **Prepared:** 1/18/2023 **Analyzed:** 1/18/2023

EPA 8081A – Chlorinated Pesticides by GC/ECD

	LCS	LCSD	% RPD	Spike Level	% Recovery Limits	Units
	LCS1-011823ECD4	LCSD1-011823ECD4				
Analytes:						
α-BHC	121	114	6%	100	60 - 140	ppb
Heptachlor	118	111	6%	100	60 - 140	ppb
Aldrin	123	116	6%	100	60 - 140	ppb
Heptachlor Epoxide	124	117	6%	100	60 - 140	ppb
γ-Chlordane	123	116	6%	100	60 - 140	ppb
Endosulfan I	122	116	5%	100	60 - 140	ppb
4,4'-DDE	126	120	5%	100	60 - 140	ppb
Dieldrin	136	129	5%	100	60 - 140	ppb
Endrin	121	115	5%	100	60 - 140	ppb
4,4'-DDD	135	127	6%	100	60 - 140	ppb
Endosulfan II	140	132	6%	100	60 - 140	ppb
4,4'-DDT	119	112	6%	100	60 - 140	ppb
Endrin Ketone	136	137	1%	100	60 - 140	ppb
Surrogate Recoveries:						
TCMX	120%	115%			30 - 120	
Decachlorobiphenyl	118%	120%			30 - 120	

LCS= Laboratory Control Sample
LCSD= Laboratory Control Sample Duplicate
RPD = Relative Percent Difference

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

BATCH: **ECD4_ 011823_01** **Prepared:** 1/18/2023 **Analyzed:** 1/18/2023

EPA 8081A – Chlorinated Pesticides by GC/ECD

	Result	Spike Level	% Recovery	% Recovery Limits	Units
CCV:	CCV1-011823ECD4				
Analytes:					
α-BHC	47.6	50	95%	80-120	ppb
Heptachlor	47.6	50	95%	80-120	ppb
Aldrin	48.3	50	97%	80-120	ppb
Heptachlor Epoxide	48.1	50	96%	80-120	ppb
γ-Chlordane	47.2	50	94%	80-120	ppb
Endosulfan I	49.6	50	99%	80-120	ppb
4,4'-DDE	94.8	100	95%	80-120	ppb
Dieldrin	96.0	100	96%	80-120	ppb
Endrin	86.4	100	86%	80-120	ppb
4,4'-DDD	91.2	100	91%	80-120	ppb
Endosulfan II	98.6	100	99%	80-120	ppb
4,4'-DDT	89.7	100	90%	80-120	ppb
Endrin Ketone	101	100	101%	80-120	ppb
Surrogate Recovery:					
TCMX	98%			80-120	
Decachlorobiphenyl	110%			80-120	

CCV= Continuing Calibration Verification

ST-21515

CHAIN OF CUSTODY

KCE Matrix, Inc.

Sampled By:
Viken Melkonian
(Print Name) (Signature)

Vacant Land - (KCE-2022-454E)
Project Name/Location

APN: 111-290-015-000
Project Address

Farmersville, California 93223
City, State, Zip Code

Date	Time	Sample ID	Sample Description	Grab	Comp	# of Containers	Preserved? (Y/N)	Analyses Requested: Organo-Chloro Pesticides (EPA 608/8081A)	Aresnic (EPA 6010B)	Lead (EPA 6010B)								Comments and Remarks
1/11/23		EB-1(2)	Soil	X		1	N	X	X	X								ST-21515-01
1/11/23		EB-2(2)	Soil	X		1	N	X	X	X								ST-21515-02
1/11/23		EB-3(2)	Soil	X		1	N	X	X	X								ST-21515-03
1/11/23		EB-4(2)	Soil	X		1	N	X	X	X								ST-21515-04
1/11/23		EB-5(2)	Soil	X		1	N	X	X	X								ST-21515-05
1/11/23		EB-6(2)	Soil	X		1	N	X	X	X								ST-21515-06
1/11/23		EB-7(2)	Soil	X		1	N	X	X	X								ST-21515-07
1/11/23		EB-8(2)	Soil	X		1	N	X	X	X								ST-21515-08
1/11/23		EB-9(2)	Soil	X		1	N	X	X	X								ST-21515-09
1/11/23		EB-10(2)	Soil	X		1	N	X	X	X								ST-21515-10

Work Requested/Turnaround Time:

24 Hrs ☐ Normal ☒

48 Hrs ☐ 72 Hrs ☐

Other:

(Relinquished By)

(Date) (Time)

(Received By)

(Relinquished By)

1/13/23 1510
(Date) (Time)

(Received By)

(Relinquished By)

1/13/23 1704
(Date) (Time)

(Received By)

(Relinquished By)

(Date) (Time)

(Received By)

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ST-21515

CHAIN OF CUSTODY

KCE Matrix, Inc.

Sampled By:
Viken Melkonian
(Print Name) (Signature)

Vacant Land - (KCE-2022-454E)
Project Name/Location

APN: 111-290-015-000
Project Address

Farmersville, California 93223
City, State, Zip Code

Date	Time	Sample ID	Sample Description	Grab	Comp	# of Containers	Preserved? (Y/N)	Organo-Chloro Pesticides (EPA 608/8081A)	Aresnic (EPA 6010B)	Lead (EPA 6010B)								Comments and Remarks
								Analyses Requested										
1/11/23		EB-11(2)	Soil	X		1	N	X	X	X								ST-21515-11
1/11/23		EB-12(2)	Soil	X		1	N	X	X	X								ST-21515-12
1/12/23		EB-13(2)	Soil	X		1	N	X	X	X								ST-21515-13
1/12/23		EB-14(2)	Soil	X		1	N	X	X	X								ST-21515-14
1/12/23		EB-15(2)	Soil	X		1	N	X	X	X								ST-21515-15
1/12/23		EB-16(2)	Soil	X		1	N	X	X	X								ST-21515-16
1/12/23		EB-17(2)	Soil	X		1	N	X	X	X								ST-21515-17
1/12/23		EB-18(2)	Soil	X		1	N	X	X	X								ST-21515-18
1/12/23		EB-19(2)	Soil	X		1	N	X	X	X								ST-21515-19
1/12/23		EB-20(2)	Soil	X		1	N	X	X	X								ST-21515-20

Work Requested/Turnaround Time:

24 Hrs ☐ Normal ☒

48 Hrs ☐ 72 Hrs ☐

Other:

(Relinquished By)

(Date) (Time)

(Received By)

(Relinquished By)
1/13/23 1518
(Date) (Time)
(Received By)

(Relinquished By)
1/13/23 1704
(Date) (Time)
(Received By)

(Relinquished By)
(Date) (Time)
(Received By)

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ST-21515

CHAIN OF CUSTODY

KCE Matrix, Inc.

Sampled By:
Viken Melkonian
(Print Name)
(Signature)

Vacant Land - (KCE-2022-454E)
Project Name/Location

APN: 111-290-015-000
Project Address

Farmersville, California 93223
City, State, Zip Code

Date	Time	Sample ID	Sample Description	Grab	Comp	# of Containers	Preserved? (Y/N)	Organo-Chloro Pesticides (EPA 608/8081A)	Aresnic (EPA 6010B)	Lead (EPA 6010B)								Comments and Remarks
								Analyses Requested										
1/12/23		EB-21(2)	Soil	X		1	N	X	X	X								ST-21515-21
1/12/23		EB-22(2)	Soil	X		1	N	X	X	X								ST-21515-22
1/12/23		EB-23(2)	Soil	X		1	N	X	X	X								ST-21515-23
1/12/23		EB-24(2)	Soil	X		1	N	X	X	X								ST-21515-24
1/12/23		EB-25(2)	Soil	X		1	N	X	X	X								ST-21515-25
1/12/23		EB-26(2)	Soil	X		1	N	X	X	X								ST-21515-26
1/12/23		EB-27(2)	Soil	X		1	N	X	X	X								ST-21515-27
1/12/23		EB-28(2)	Soil	X		1	N	X	X	X								ST-21515-28
1/12/23		EB-29(2)	Soil	X		1	N	X	X	X								ST-21515-29
1/12/23		EB-30(2)	Soil	X		1	N	X	X	X								ST-21515-30

Work Requested/Turnaround Time:

24 Hrs ☐ Normal ☒

48 Hrs ☐ 72 Hrs ☐

Other:

(Relinquished By)
(Date)
(Time)
(Received By)

(Relinquished By)
1/13/23 1510
(Date) (Time)
(Received By)

(Relinquished By)
1/13/23 1704
(Date) (Time)
(Received By)

(Relinquished By)
(Date)
(Time)
(Received By)

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ST-21515

CHAIN OF CUSTODY

KCE Matrix, Inc.

Sampled By:
Viken Melkonian
(Print Name) (Signature)

Vacant Land - (KCE-2022-454E)
Project Name/Location

APN: 111-290-015-000
Project Address

Farmersville, California 93223
City, State, Zip Code

Date	Time	Sample ID	Sample Description	Grab	Comp	# of Containers	Preserved? (Y/N)	Analyses Requested: Organo-Chloro Pesticides (EPA 608/8081A)	Aresnic (EPA 6010B)	Lead (EPA 6010B)							Comments and Remarks
1/12/23		EB-31(2)	Soil	X		1	N	X	X	X							ST-21515-31
1/13/23		EB-32(2)	Soil	X		1	N	X	X	X							ST-21515-32
1/13/23		EB-33(2)	Soil	X		1	N	X	X	X							ST-21515-33
1/13/23		EB-34(2)	Soil	X		1	N	X	X	X							ST-21515-34
1/13/23		EB-35(2)	Soil	X		1	N	X	X	X							ST-21515-35
1/13/23		EB-36(2)	Soil	X		1	N	X	X	X							ST-21515-36
1/13/23		EB-37(2)	Soil	X		1	N	X	X	X							ST-21515-37
1/13/23		EB-38(2)	Soil	X		1	N	X	X	X							ST-21515-38
1/13/23		EB-39(2)	Soil	X		1	N	X	X	X							ST-21515-39
1/13/23		EB-40(2)	Soil	X		1	N	X	X	X							ST-21515-40

Work Requested/Turnaround Time:

24 Hrs ☐ Normal ☒

48 Hrs ☐ 72 Hrs ☐

Other:

(Relinquished By)

(Date) (Time)

(Received By)

(Relinquished By)
1/13/23 1510
(Date) (Time)
(Received By)

(Relinquished By)
1/13/23 1704
(Date) (Time)
(Received By)

(Relinquished By)
(Date) (Time)
(Received By)

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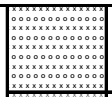
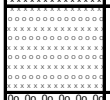
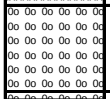
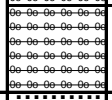
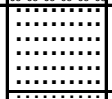
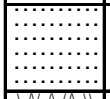
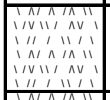
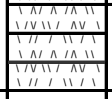
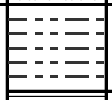
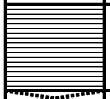
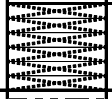
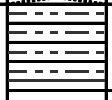
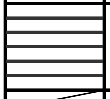
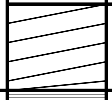
APPENDIX D

(BORING LOGS)

KCE MATRIX	SOIL CLASSIFICATION CHART		PROJECT ID: KCE-2022-454E
MAJOR DIVISION	GROUP SYMBOL		SOIL DESCRIPTION
GRAVELS (More than 1/2 of course fraction > No. 4 sieve size)		GW	Well-graded gravels, sandy gravels
		GP	Gap-graded or uniform gravels, sandy gravels
		GM	Silty gravels, silty sandy gravels
		GC	Clayey gravels, clayey sandy gravels
SANDS (More than 1/2 of course fraction < No. 4 sieve size)		SW	Well-graded, gravelly sands
		SP	Gap-graded or uniform sands, gravelly sands
		SM	Silty sands, silty gravelly sands
		SC	Clayey sands, clayey gravelly sands
SILTS & CLAYS Low Compressibility Liquid Limit < 50		ML	Silts, very fine sands, silty or clayey fine sands, micaceous silts
		CL	Low plasticity clays, sandy or silty clays
		OL	Organic silts and clays of low plasticity
SILTS & CLAYS High Compressibility Liquid Limit > 50		MH	Micaceous silts, diatomaceous silts, volcanic ash
		CH	Highly plastic clays and sandy clays
		OH	Organic silts and clays of high plasticity
HIGHLY ORGANIC SOILS		Pt	Peat, sandy peats, and clayey peat
DUAL (TRANSITION SOILS)	Soil characteristics are transitional between the soil classifications listed above		

CLASSIFICATION CHART (Unified Soil Classification System)

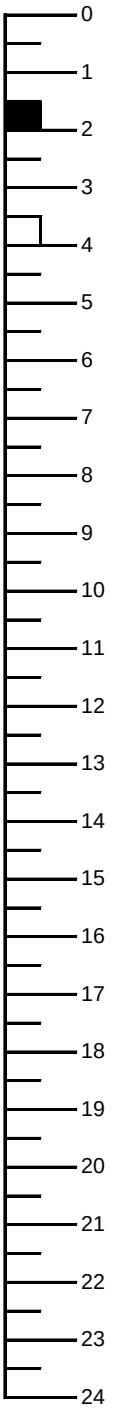
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-1

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-1 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-1 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

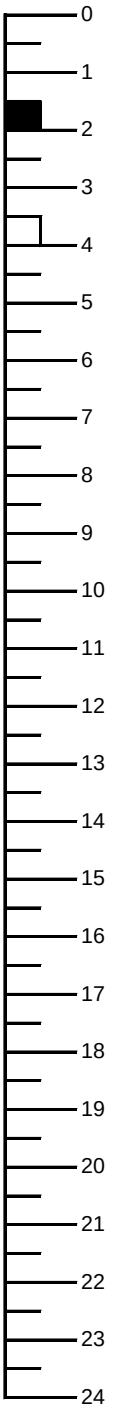


FIELD BOREHOLE LOG

Borehole Number: EB-2

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-2 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-2 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



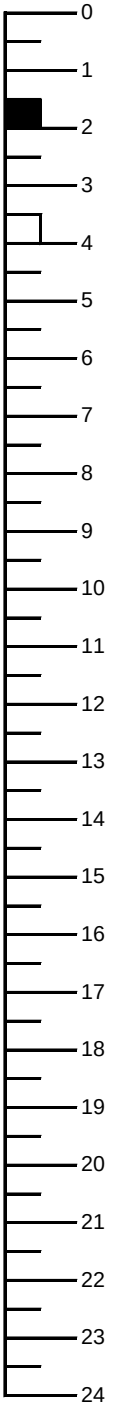
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-3

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-3 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-3 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



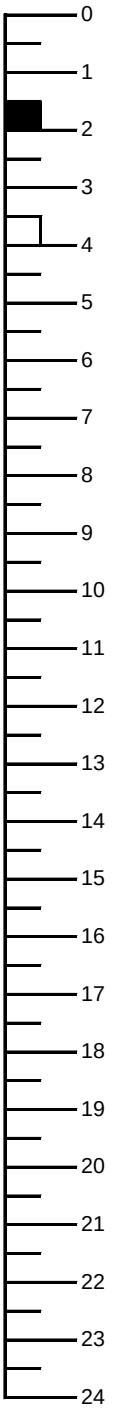
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-4

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-4 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-4 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



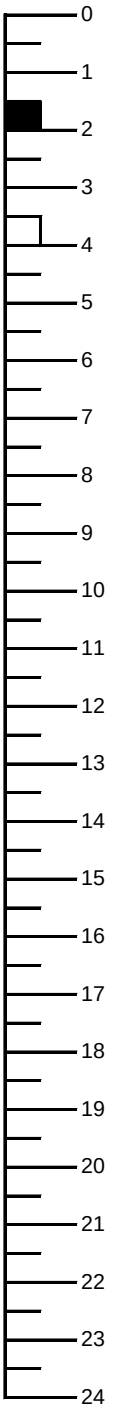
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-5

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-5 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-5 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

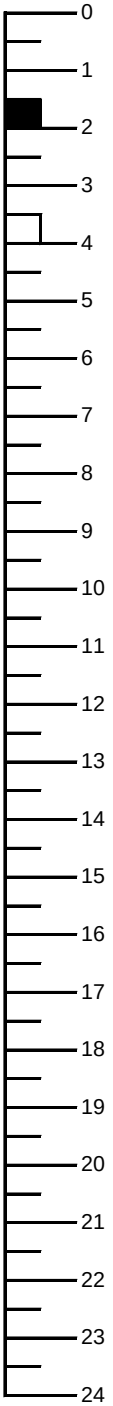


FIELD BOREHOLE LOG

Borehole Number: EB-6

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-6 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-6 (3.5-4.0)	0.1	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

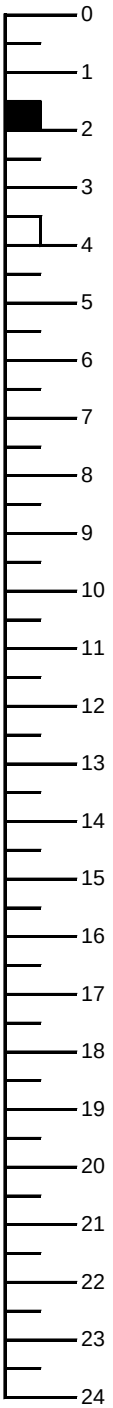


FIELD BOREHOLE LOG

Borehole Number: EB-7

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-7 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-7 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

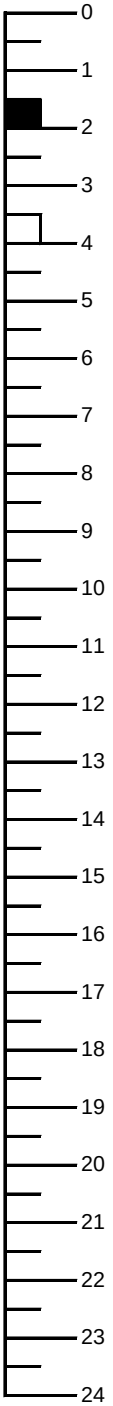


FIELD BOREHOLE LOG

Borehole Number: EB-8

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-8 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-8 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



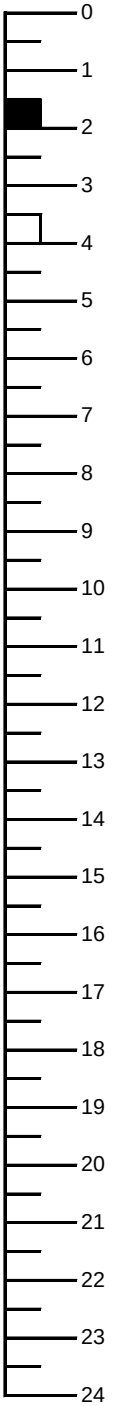
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-9

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-9 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-9 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

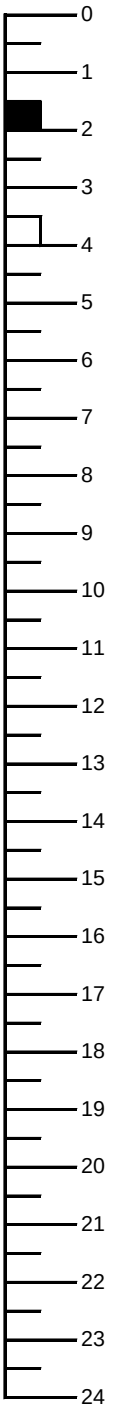


FIELD BOREHOLE LOG

Borehole Number: EB-10

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-10 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-10 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

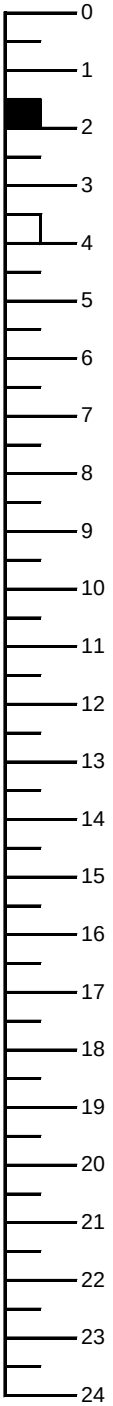


FIELD BOREHOLE LOG

Borehole Number: EB-11

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-11 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-11 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



FIELD BOREHOLE LOG

Borehole Number: EB-12

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

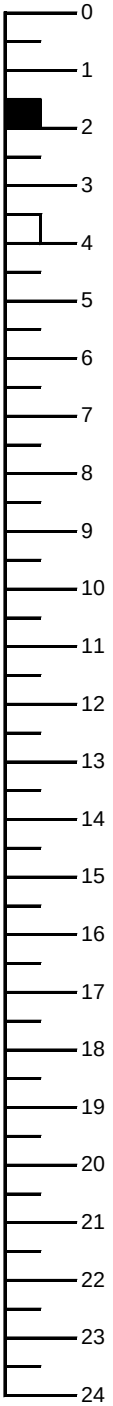
Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-12 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-12 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

FIELD BOREHOLE LOG

Borehole Number: EB-13

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-13 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-13 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

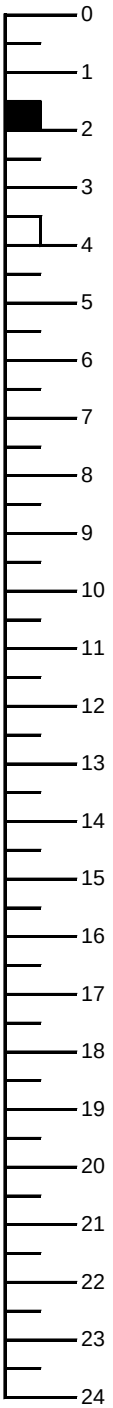


FIELD BOREHOLE LOG

Borehole Number: EB-14

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-14 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-14 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



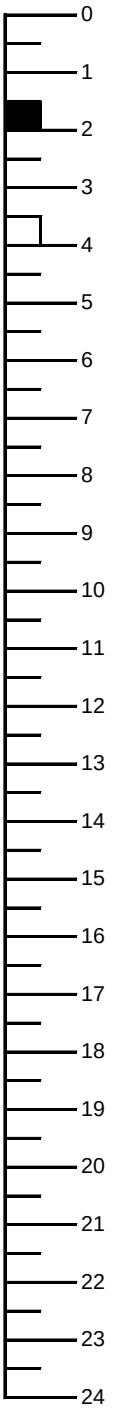
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-15

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-15 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-15 (3.5-4.0)	0.1	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



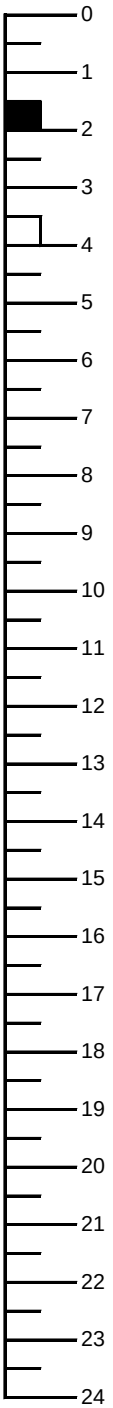
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-16

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-16 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-16 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

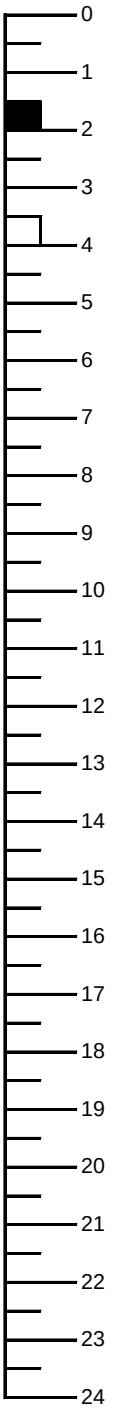


FIELD BOREHOLE LOG

Borehole Number: EB-17

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-17 (1.5-2.0)	0.1	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-17 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



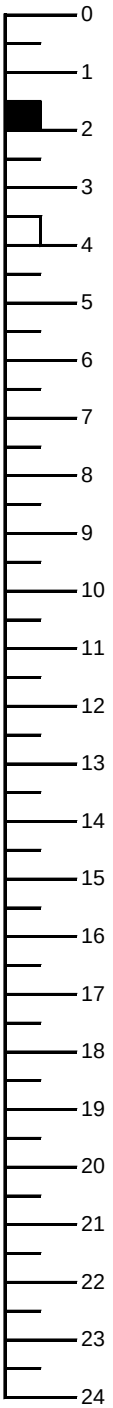
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-18

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-18 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-18 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

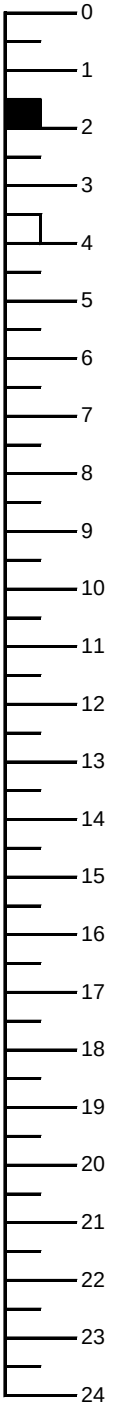


FIELD BOREHOLE LOG

Borehole Number: EB-19

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-19 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-19 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

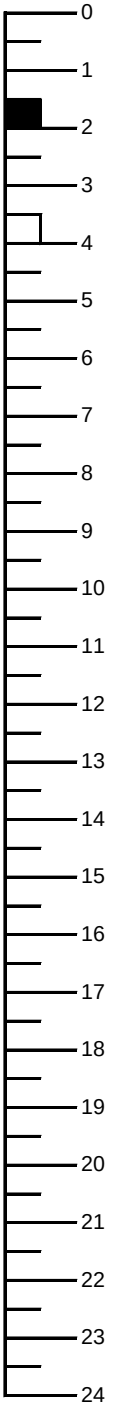


FIELD BOREHOLE LOG

Borehole Number: EB-20

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-20 (1.5-2.0)	0.1	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-20 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



FIELD BOREHOLE LOG

Borehole Number: EB-21

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-21 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-21 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

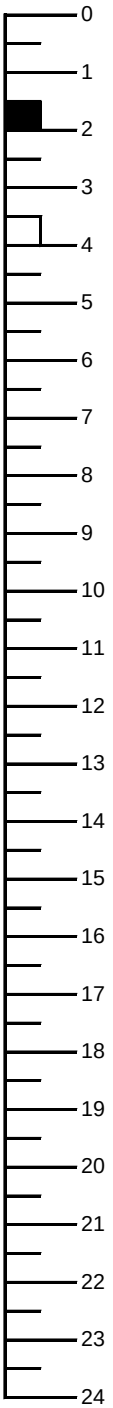
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-22

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-22 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-22 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



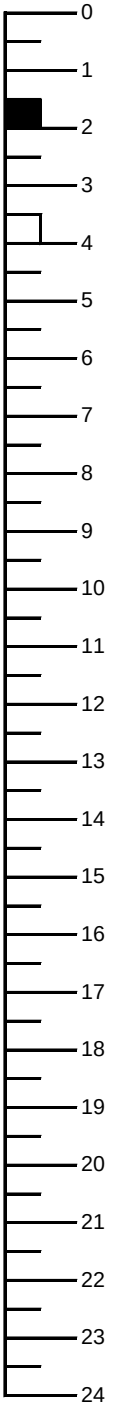
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-23

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-23 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-23 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

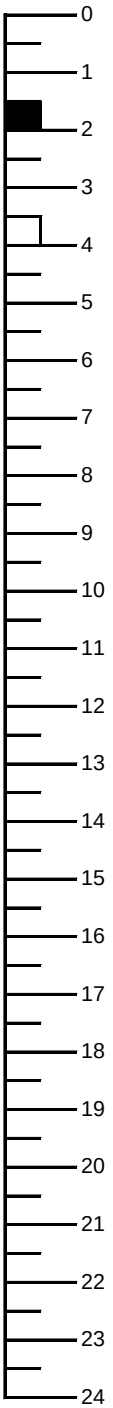


FIELD BOREHOLE LOG

Borehole Number: EB-24

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-24 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-24 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

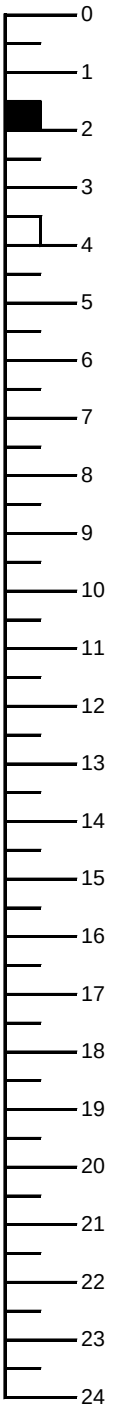


FIELD BOREHOLE LOG

Borehole Number: EB-25

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-25 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-25 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



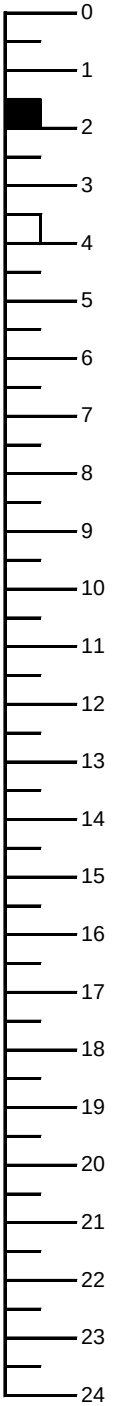
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-26

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-26 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-26 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



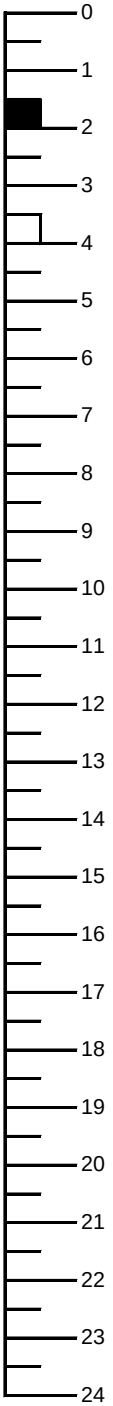
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-27

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-27 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-27 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

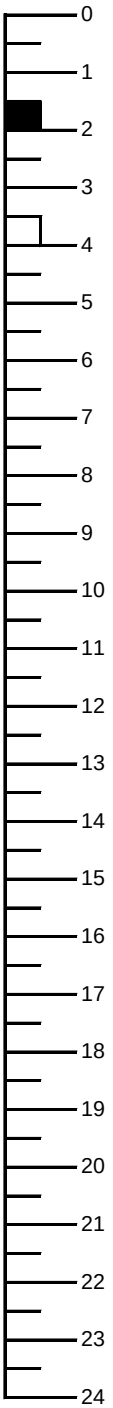


FIELD BOREHOLE LOG

Borehole Number: EB-28

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-28 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-28 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



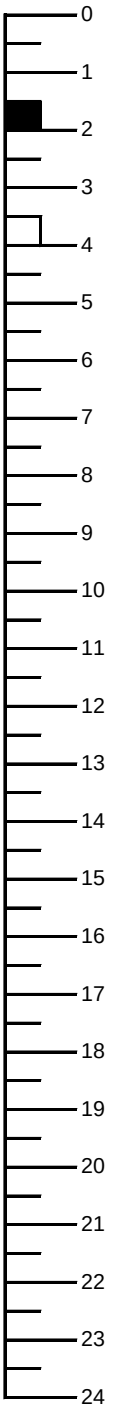
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-29

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-29 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-29 (3.5-4.0)	0.1	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

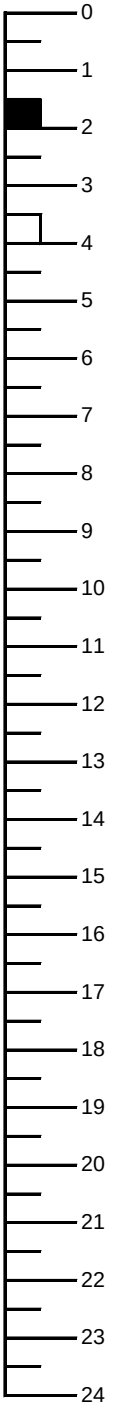


FIELD BOREHOLE LOG

Borehole Number: EB-30

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-30 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-30 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



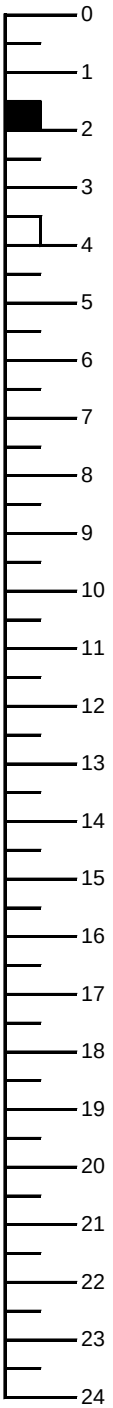
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-31

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-31 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-31 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

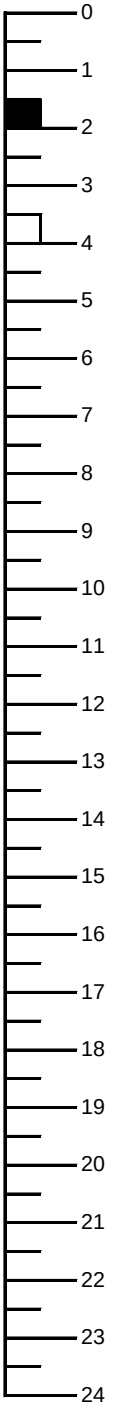


FIELD BOREHOLE LOG

Borehole Number: EB-32

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-32 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-32 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



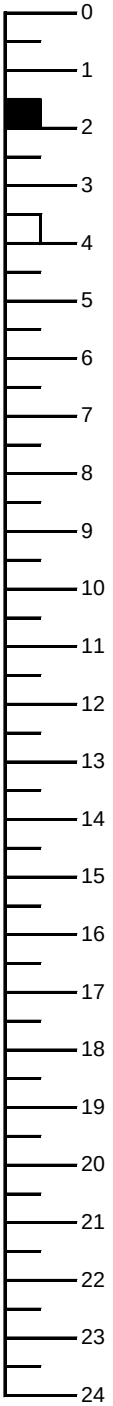
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-33

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-33 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-33 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

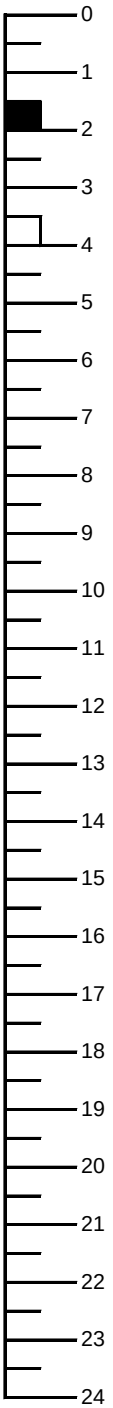


FIELD BOREHOLE LOG

Borehole Number: EB-34

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-34 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-34 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

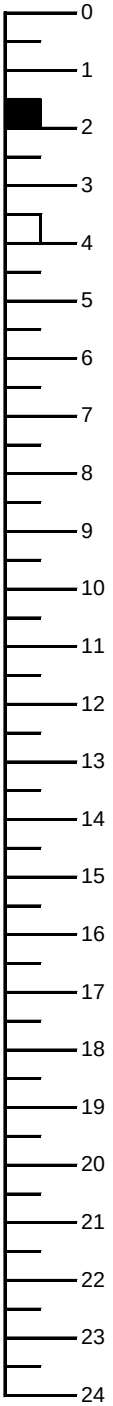


FIELD BOREHOLE LOG

Borehole Number: EB-35

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-35 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-35 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

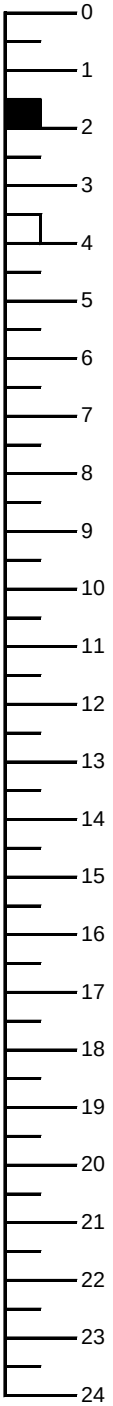


FIELD BOREHOLE LOG

Borehole Number: EB-36

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-36 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-36 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

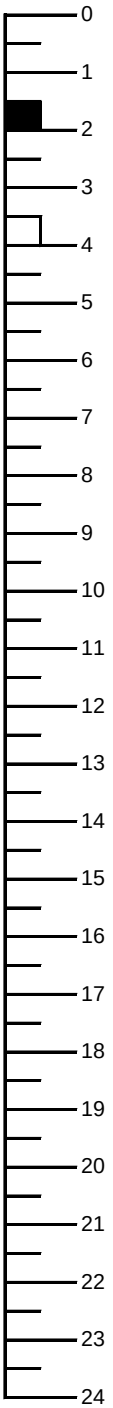


FIELD BOREHOLE LOG

Borehole Number: EB-37

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-37 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-37 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

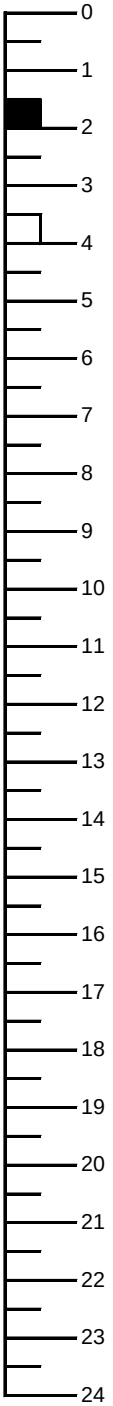


FIELD BOREHOLE LOG

Borehole Number: EB-38

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-38 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-38 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

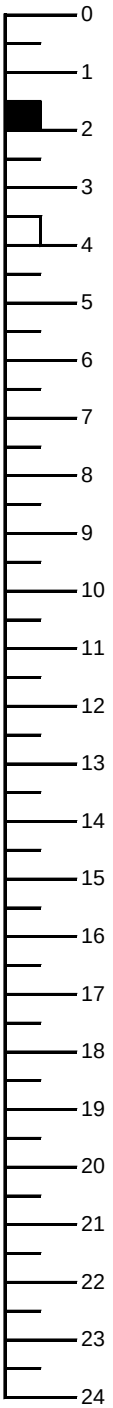


FIELD BOREHOLE LOG

Borehole Number: EB-39

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-39 (1.5-2.0)	0.1	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-39 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



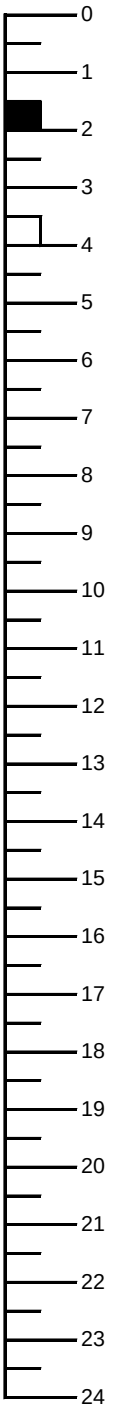
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-40

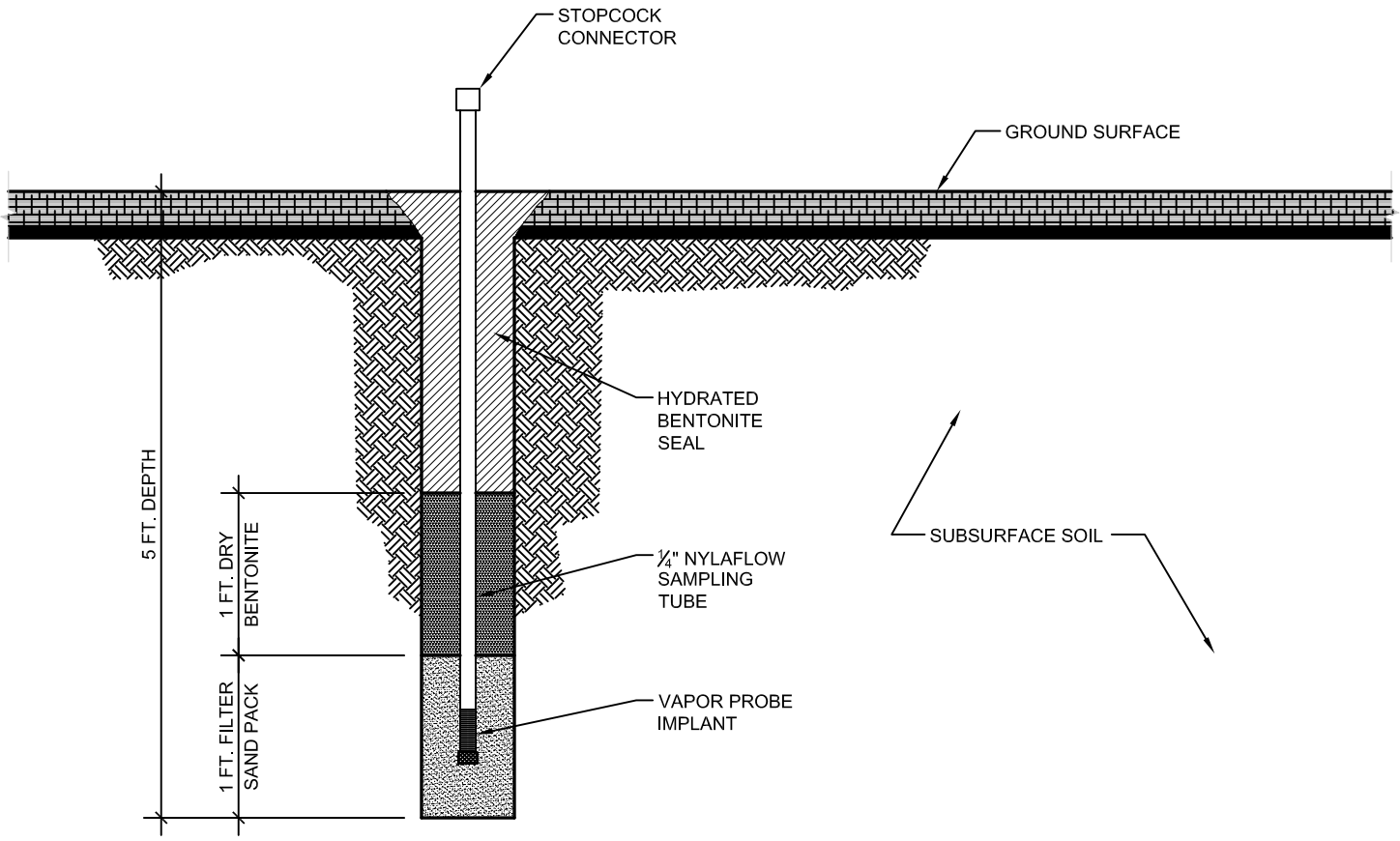
Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-40 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-40 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



APPENDIX E

(VAPOR PROBE CONSTRUCTION DIAGRAM 1)



SINGLE-STAGE SOIL-GAS SAMPLING PROBE CONSTRUCTION DIAGRAM

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

DIAGRAM 1

APPENDIX F

SITE PHOTOGRAPHS

Subject Property - Facing North

Subject Property - Facing North

Subject Property - Facing North

Subject Property - Facing Northwest

Subject Property - Facing North

Subject Property - Facing Northwest

Site Vicinity - Residential Properties

Site Vicinity - Residential Properties

Site Vicinity - Commercial Properties, Along Farmersville Road

Site Vicinity - Commercial Properties, Along Farmersville Road

Site Vicinity - Farmersville Road, Facing North

Site Vicinity - Farmersville Road, Facing South

APPENDIX G

VAPOR ENCROACHMENT SCREEN

Vacant Land
APN 111-290-015-000
Farmersville, CA 93292

Inquiry Number: 8187223.2s
December 4, 2025

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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SECTION	PAGE
Executive Summary	**ES1**
Primary Map	**2**
Secondary Map	**3**
Map Findings	**4**
Record Sources and Currency	**GR-1**

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by EDR. The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

STANDARD ENVIRONMENTAL RECORDS	Default Area of Concern (Miles)*	property	1/10	> 1/10
Lists of Federal NPL (Superfund) sites	1.0	0	0	0
Lists of Federal Delisted NPL sites	1.0	0	0	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders	0.5	0	0	0
Lists of Federal CERCLA sites with NFRAP	0.5	0	0	0
Lists of Federal RCRA facilities undergoing Corrective Action	1.0	0	0	0
Lists of Federal RCRA TSD facilities	0.5	0	0	0
Lists of Federal RCRA generators	0.25	0	0	0
Federal institutional controls / engineering controls registries	0.5	0	0	0
Federal ERNS list	property	0	-	-
Lists of state- and tribal (Superfund) equivalent sites	1.0	0	0	0
Lists of state- and tribal hazardous waste facilities	1.0	0	0	0
Lists of state and tribal landfills and solid waste disposal facilities	0.5	0	0	0
Lists of state and tribal leaking storage tanks	0.5	0	0	0
Lists of state and tribal registered storage tanks	0.25	0	0	0
State and tribal institutional control / engineering control registries	not searched	-	-	-
Lists of state and tribal voluntary cleanup sites	0.5	0	0	0
Lists of state and tribal brownfield sites	0.5	0	0	0

ADDITIONAL ENVIRONMENTAL RECORDS				
Local Brownfield lists	0.5	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites	0.5	0	0	0
Local Lists of Hazardous waste / Contaminated Sites	1.0	0	0	0
Local Lists of Registered Storage Tanks	0.25	0	2	1
Local Land Records	0.5	0	0	0
Records of Emergency Release Reports	0.5	0	0	0
Other Ascertainable Records	1.0	0	1	1

EDR HIGH RISK HISTORICAL RECORDS				
EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	property	0	-	-

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	property	0	-	-

*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

VACANT LAND
APN 111-290-015-000
FARMERSVILLE, CA 93292

COORDINATES

Latitude (North):	36.314985 - 36° 18′ 53.940125″
Longitude (West):	119.205813 - 119° 12′ 20.917969″
Elevation:	365 ft. above sea level

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

ADDITIONAL ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
RAL COPPING HIST UST: HIST UST	28880 RD 164	<1/10 SSW	◆ A1	8
RALPH COPPING HIST UST: HIST UST	28880 ROAD 164	<1/10 SSW	◆ A2	9
T YOUNG DIESEL ELECTRIC RCRA NonGen / NLR: RCRA NonGen / NLR	29022 ROAD 164	<1/10 NNW	▲ 3	9
CLAUDES BUGGIES INC SWEEPS UST: SWEEPS UST HIST UST: HIST UST	28813 FARMERSVILLE BLVD	1/10 - 1/3 SSW	◆ B4	12
CB PERFORMANCE PRODUCTS INC CUPA Listings: CUPA	1715 N FARMERSVILLE BLVD	1/10 - 1/3 SW	◆ B5	13

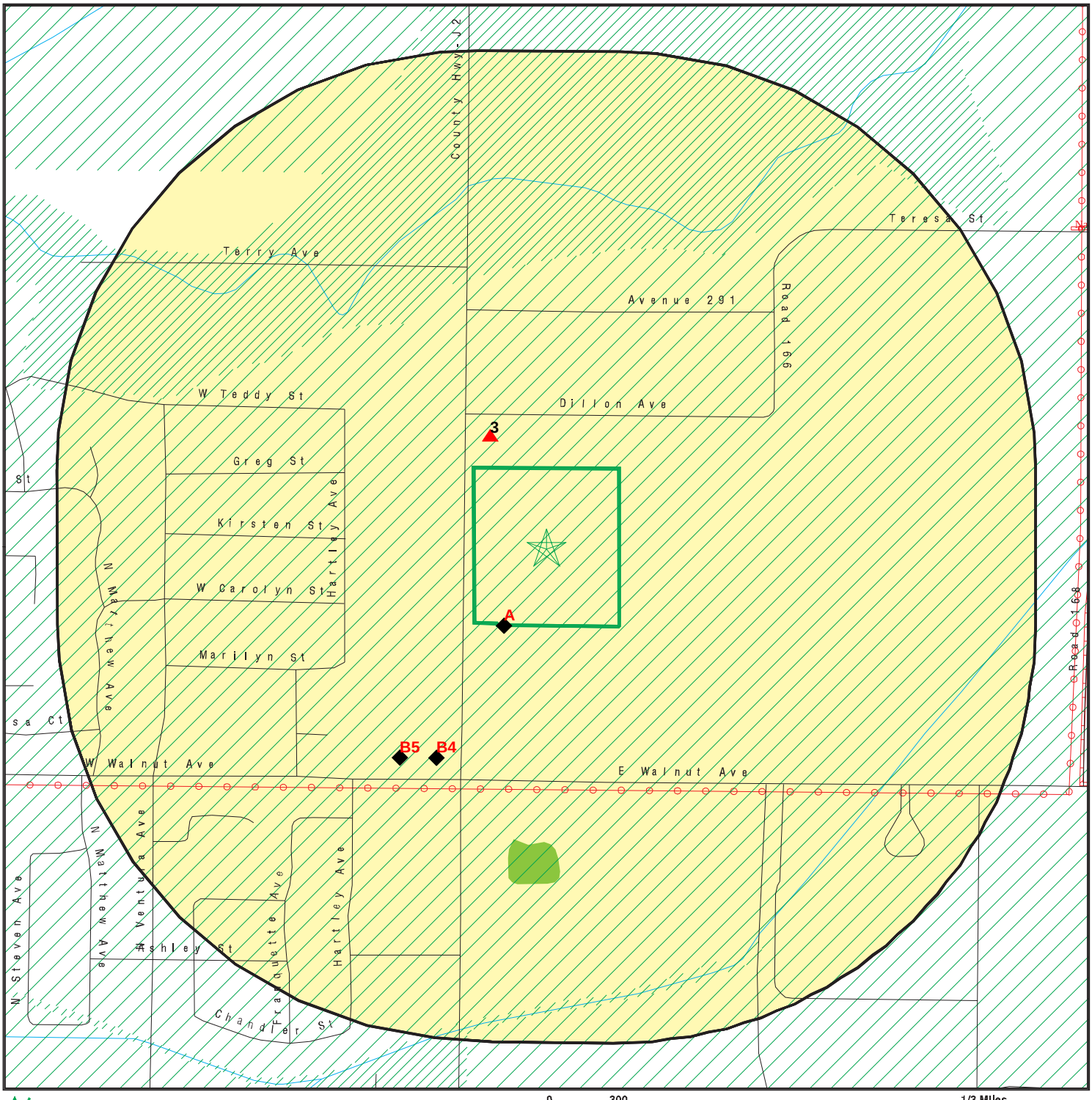
EDR HIGH RISK HISTORICAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

EDR RECOVERED GOVERNMENT ARCHIVES

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

PRIMARY MAP - 8187223.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Vacant Land	CLIENT:	KCE Matrix
ADDRESS:	APN 111-290-015-000 Farmersville CA 93292	CONTACT:	Hagop T.
		INQUIRY #:	8187223.2s
LAT/LONG:	36.314985 / 119.205813	DATE:	December 01, 2025 1:22 pm

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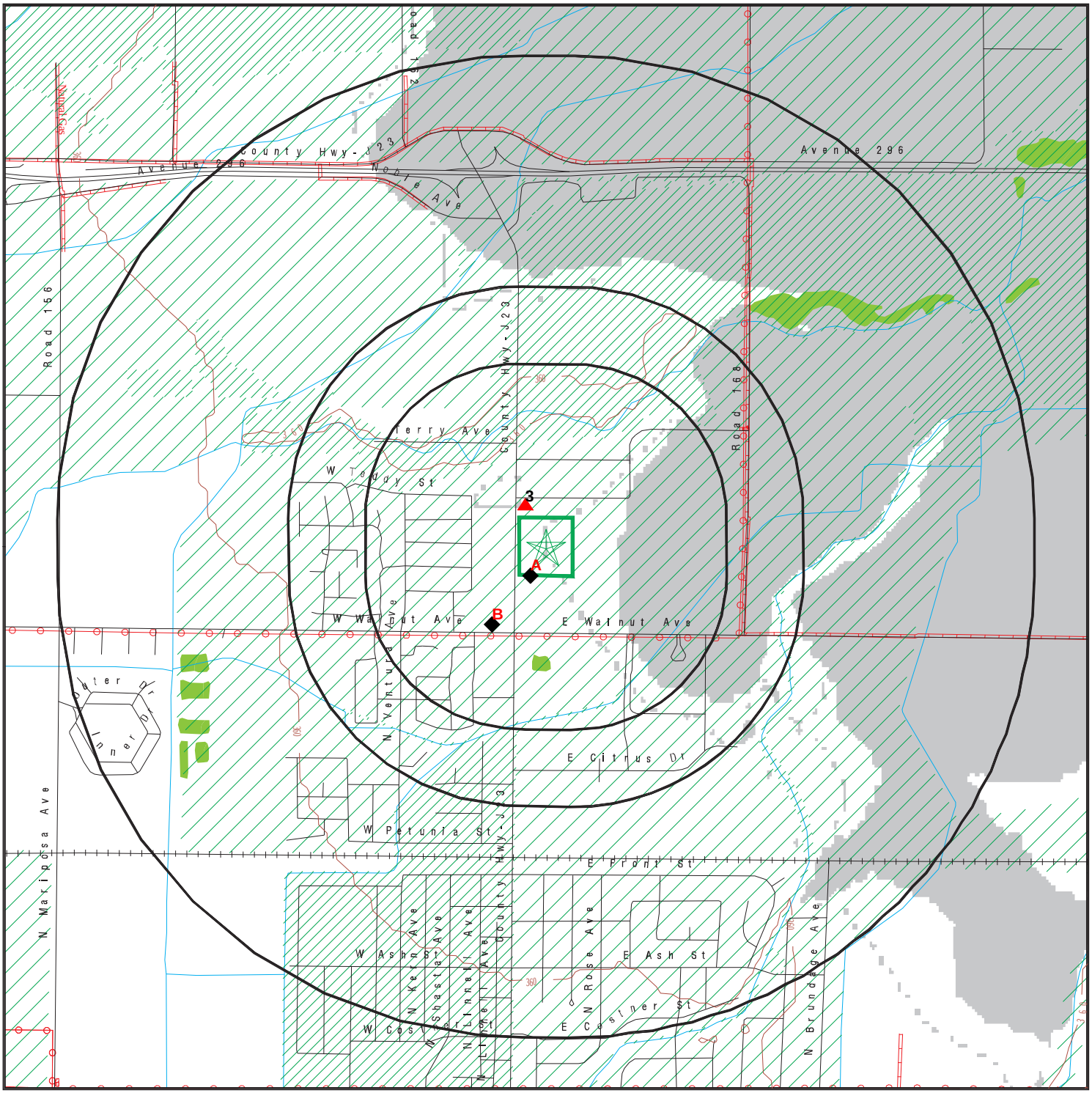
SECONDARY MAP - 8187223.2S



0 1/3 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vacant Land	CLIENT: KCE Matrix
ADDRESS: APN 111-290-015-000 Farmersville CA 93292	CONTACT: Hagop T.
LAT/LONG: 36.314985 / 119.205813	INQUIRY #: 8187223.2s DATE: December 01, 2025 1:22 pm

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MAP FINDINGS

LEGEND

FACILITY NAME **FACILITY ADDRESS, CITY, ST, ZIP**		EDR SITE ID NUMBER
◆ **MAP ID#**	Direction Distance Range (Distance feet / miles) Relative Elevation Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.

Worksheet:

Comments:
Comments may be added on the online Vapor Encroachment Worksheet.

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

RAL COPPING 28880 RD 164, VISALIA, CA, 93277			S118414367
◆ A1	SSW <1/10	(4 ft. / 0.001 mi.)	Local Lists of Registered Storage Tanks
	1 ft. Lower Elevation	364 ft. Above Sea Level	

Worksheet:

HIST UST: Local Lists of Registered Storage Tanks

Name:	RAL COPPING
Address:	28880 RD 164
City,State,Zip:	VISALIA, CA 93277
File Number:	0002bcc2
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0002bcc2.pdf
Region:	Not Reported
Facility ID:	Not Reported
Facility Type:	Not Reported
Other Type:	Not Reported
Contact Name:	Not Reported
Telephone:	Not Reported
Owner Name:	Not Reported
Owner Address:	Not Reported
Owner City,St,Zip:	Not Reported
Total Tanks:	Not Reported
Tank Num:	Not Reported
Container Num:	Not Reported
Year Installed:	Not Reported
Tank Capacity:	Not Reported
Tank Used for:	Not Reported
Type of Fuel:	Not Reported
Container Construction Thickness:	Not Reported
Leak Detection:	Not Reported

RAL COPPING, 28880 RD 164, VISALIA, CA 93277 (Continued)

Click here for Geo Tracker PDF: http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_HISTUST_PDF&img_id=0002bcc2

RALPH COPPING 28880 ROAD 164, VISALIA, CA, 93277			U001583452
◆ A2	SSW <1/10	(4 ft. / 0.001 mi.)	Local Lists of Registered Storage Tanks
	1 ft. Lower Elevation	364 ft. Above Sea Level	

Worksheet:

HIST UST: Local Lists of Registered Storage Tanks

Name:	RALPH COPPING
Address:	28880 ROAD 164
City,State,Zip:	VISALIA, CA 93277
File Number:	Not Reported
URL:	Not Reported
Region:	STATE
Facility ID:	00000045349
Facility Type:	Other
Other Type:	PRIVATE
Contact Name:	Not Reported
Telephone:	2097470070
Owner Name:	RALPH COPPING
Owner Address:	28880 RD. 164
Owner City,St,Zip:	VISALIA, CA 93277
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not Reported
Tank Capacity:	00000260
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not Reported
Leak Detection:	None

T YOUNG DIESEL ELECTRIC 29022 ROAD 164, VISALIA, CA, 93292-0000			1024793181
▲ 3	NNW <1/10	(127 ft. / 0.024 mi.)	Other Ascertainable Records
	Equal Elevation	365 ft. Above Sea Level	

Worksheet:

RCRA Listings: Other Ascertainable Records

Date Form Received by Agency:	19950111
Handler Name:	T Young Diesel Electric
Handler Address:	29022 Road 164

T YOUNG DIESEL ELECTRIC, 29022 ROAD 164, VISALIA, CA 93292-0000 (Continued)

Handler City,State,Zip:	VISALIA, CA 93292-0000
EPA ID:	CAL000130104
Contact Name:	THAD YOUNG OWNER
Contact Address:	29022 ROAD 164
Contact City,State,Zip:	VISALIA, CA 93292
Contact Telephone:	559-747-5502
Contact Fax:	000-000-0000
Contact Email:	TYDEOFCA@YAHOO.COM
Contact Title:	Not Reported
EPA Region:	09
Land Type:	Not Reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not Reported
Biennial Report Cycle:	Not Reported
Accessibility:	Not Reported
Active Site Indicator:	Handler Activities
State District Owner:	Not Reported
State District:	Not Reported
Mailing Address:	29022 ROAD 164
Mailing City,State,Zip:	VISALIA, CA 93292-9258
Owner Name:	Thad Young
Owner Type:	Other
Operator Name:	Thad Young Owner
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not Reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not Reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking

T YOUNG DIESEL ELECTRIC, 29022 ROAD 164, VISALIA, CA 93292-0000 (Continued)

Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not Reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	THAD YOUNG
Legal Status:	Other
Date Became Current:	Not Reported
Date Ended Current:	Not Reported
Owner/Operator Address:	29022 ROAD 164
Owner/Operator City,State,Zip:	VISALIA, CA 93292-9258
Owner/Operator Telephone:	559-747-5502
Owner/Operator Telephone Ext:	Not Reported
Owner/Operator Fax:	Not Reported
Owner/Operator Email:	Not Reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	THAD YOUNG OWNER
Legal Status:	Other
Date Became Current:	Not Reported
Date Ended Current:	Not Reported
Owner/Operator Address:	29022 ROAD 164
Owner/Operator City,State,Zip:	VISALIA, CA 93292
Owner/Operator Telephone:	559-747-5502
Owner/Operator Telephone Ext:	Not Reported
Owner/Operator Fax:	Not Reported
Owner/Operator Email:	Not Reported

Historic Generators:

Receive Date:	19950111
Handler Name:	T YOUNG DIESEL ELECTRIC

T YOUNG DIESEL ELECTRIC, 29022 ROAD 164, VISALIA, CA 93292-0000 (Continued)

Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not Reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not Reported
Electronic Manifest Broker:	Not Reported

List of NAICS Codes and Descriptions:

NAICS Code:	811412
NAICS Description:	Appliance Repair And Maintenance

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

CLAUDES BUGGIES INC
28813 FARMERSVILLE BLVD, FARMERSVILLE, CA, 93223 U001581412

◆ B4	SSW 1/10 - 1/3	(593 ft. / 0.112 mi.)	Local Lists of Registered Storage Tanks
	2 ft. Lower Elevation	363 ft. Above Sea Level	

Worksheet:

SWEEPS UST: Local Lists of Registered Storage Tanks

Name:	CLAUDES BUGGIES INC
Address:	28813 FARMERSVILLE
City:	FARMERSVILLE
Status:	Active
Comp Number:	57012
Number:	9
Board Of Equalization:	44-030297
Referral Date:	04-20-88
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1237-987
SWRCB Tank Id:	54-000-057012-000001
Tank Status:	A
Capacity:	1500
Active Date:	04-20-88
Tank Use:	M.V. FUEL

CLAUDES BUGGIES INC, 28813 FARMERSVILLE BLVD, FARMERSVILLE, CA 93223 (Continued)

STG:	P
Content:	UNKNOWN
Number Of Tanks:	1

HIST UST: Local Lists of Registered Storage Tanks

Name:	CLAUDES BUGGIES INC
Address:	28813 FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
File Number:	0002377e
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0002377e.pdf
Region:	STATE
Facility ID:	00000057012
Facility Type:	Other
Other Type:	AUTO PARTS DIST.
Contact Name:	R. TOMLINSON
Telephone:	2097338222
Owner Name:	CLAUDES BUGGIES INC.
Owner Address:	28813 FARMERSVILLE BLVD.
Owner City,St,Zip:	FARMERSVILLE, CA 93223
Total Tanks:	0001
Tank Num:	001
Container Num:	001237-987
Year Installed:	1977
Tank Capacity:	00001500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not Reported
Leak Detection:	Stock Inventor
Click here for Geo Tracker PDF:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_HISTUST_PDF&img_id=0002377e

CB PERFORMANCE PRODUCTS INC 1715 N FARMERSVILLE BLVD, FARMERSVILLE, CA, 93223			S120051214
◆ B5	SW 1/10 - 1/3	(652 ft. / 0.123 mi.)	Other Ascertainable Records
	2 ft. Lower Elevation	363 ft. Above Sea Level	

Worksheet:

CUPA TULARE: Other Ascertainable Records

Name:	CB PERFORMANCE PRODUCTS INC
Address:	1715 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	Not Reported
Facility ID:	FA1349367
APN:	128-210-057
Latitude:	36.338668449
Longitude:	-119.37041146

CB PERFORMANCE PRODUCTS INC, 1715 N FARMERSVILLE BLVD, FARMERSVILLE, CA 93223 (Continued)

PE:	2254
TB Fin Fees Description:	HW - SMALL GENERATOR
Current Status:	02
CD Fin billing Status Description:	Inactive, non-billable
Name:	CB PERFORMANCE PRODUCTS INC
Address:	1715 N FARMERSVILLE BLVD
City,State,Zip:	FARMERSVILLE, CA 93223
CERS ID:	Not Reported
Facility ID:	FA1349367
APN:	128-210-057
Latitude:	36.338668449
Longitude:	-119.37041146
PE:	2277
TB Fin Fees Description:	CUPA OVERSIGHT CA SURCHARGE
Current Status:	02
CD Fin billing Status Description:	Inactive, non-billable

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
ENVIRONMENTAL RECORDS						
Federal NPL site list						
US	NPL	National Priority List	EPA	09/29/2025	10/01/2025	10/28/2025
US	Proposed NPL	Proposed National Priority List Sites	EPA	09/29/2025	10/01/2025	10/28/2025
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
Federal CERCLIS list						
US	SEMS	Superfund Enterprise Management System	EPA	09/29/2025	10/01/2025	10/28/2025
Federal RCRA CORRACTS facilities list						
US	CORRACTS	Corrective Action Report	EPA	06/02/2025	06/03/2025	06/16/2025
Federal RCRA TSD facilities list						
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
Federal RCRA generators list						
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
Federal institutional controls / engineering controls registries						
US	LUCIS	Land Use Control Information System	Department of the Navy	03/11/2025	04/02/2025	06/24/2025
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	10/30/2025	11/11/2025	11/12/2025
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	10/30/2025	11/11/2025	11/12/2025
Federal ERNS list						
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	06/10/2025	06/12/2025	06/16/2025
State and tribal - equivalent NPL						
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	07/17/2025	07/17/2025	10/08/2025
State and tribal - equivalent CERCLIS						
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	07/17/2025	07/17/2025	10/08/2025
State and tribal landfill / solid waste disposal						
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	07/31/2025	07/31/2025	10/21/2025
State and tribal leaking storage tank lists						
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	05/22/2025	07/10/2025	10/02/2025
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	04/21/2025	07/10/2025	10/02/2025
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/21/2025	07/10/2025	10/02/2025
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	05/27/2025	07/10/2025	10/02/2025
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	05/22/2025	07/10/2025	10/02/2025
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/21/2025	07/10/2025	10/02/2025
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/21/2025	07/10/2025	10/02/2025
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/21/2025	07/10/2025	10/02/2025
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
State and tribal registered storage tank lists						
CA	UST	Active UST Facilities	SWRCB	08/29/2025	08/29/2025	11/18/2025
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	08/25/2025	09/03/2025	11/19/2025
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	04/21/2025	07/10/2025	10/02/2025
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	05/27/2025	07/10/2025	10/02/2025
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/21/2025	07/10/2025	10/02/2025
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/21/2025	07/10/2025	10/02/2025
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/21/2025	07/10/2025	10/02/2025
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	05/22/2025	07/10/2025	10/02/2025
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	05/22/2025	07/10/2025	10/02/2025
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/21/2025	07/10/2025	10/02/2025
US	FEMA UST	Underground Storage Tank Listing	FEMA	06/06/2025	08/26/2025	11/12/2025
State and tribal voluntary cleanup sites						
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	07/17/2025	07/17/2025	10/08/2025
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
State and tribal Brownfields sites						
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	06/12/2025	06/12/2025	09/05/2025
Other Records						
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	06/30/2025	07/29/2025	10/28/2025
US	ROD	Records Of Decision	EPA	10/30/2025	11/03/2025	11/18/2025
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	09/29/2025	10/01/2025	10/28/2025
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
CA	SWRCY	Recycler Database	Department of Conservation	08/29/2025	08/29/2025	11/17/2025
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	07/28/2025	07/29/2025	10/21/2025
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	03/03/2023	03/03/2023	06/09/2023
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	07/30/2021	02/03/2023	02/10/2023
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	06/02/2025	06/03/2025	06/16/2025
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	04/04/2025	06/02/2025	08/12/2025
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2023	10/16/2024	01/14/2025
US	EPA WATCH LIST	EPA Watch List	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	09/29/2025	10/01/2025	10/28/2025
US	Delisted NPL	National Priority List Deletions	EPA	09/29/2025	10/01/2025	10/28/2025
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	09/29/2025	10/01/2025	10/28/2025
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	06/02/2025	06/04/2025	06/16/2025
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	06/11/2025	06/12/2025	06/16/2025
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	06/30/2025	07/17/2025	10/13/2025
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	04/04/2025	06/02/2025	08/12/2025
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	09/19/2025	10/01/2025	11/24/2025
US	DOD	Department of Defense Sites	USGS	06/07/2021	07/13/2021	03/09/2022
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	07/23/2025	07/23/2025	07/29/2025
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	05/15/2025	05/15/2025	07/29/2025
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/08/2025	08/18/2025	11/12/2025
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	07/01/2025	07/01/2025	09/24/2025
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	04/08/2025	05/20/2025	08/12/2025
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	PRP	Potentially Responsible Parties	EPA	06/26/2025	07/01/2025	07/29/2025
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2023	08/11/2025	11/10/2025
US	TSCA	Toxic Substances Control Act	EPA	12/31/2020	06/14/2022	03/24/2023

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	SSTS	Section 7 Tracking Systems	EPA	07/14/2025	07/14/2025	10/13/2025
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	PADS	PCB Activity Database System	EPA	08/12/2025	09/30/2025	11/24/2025
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/11/2025	08/12/2025	11/04/2025
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	FINDS	Facility Index System/Facility Registry System	EPA	09/04/2025	10/01/2025	11/18/2025
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RMP	Risk Management Plans	Environmental Protection Agency	07/01/2025	07/29/2025	10/28/2025
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2023	02/19/2025	03/07/2025
US	PWS	Public Water System Data	EPA	12/17/2013	01/09/2014	10/15/2014
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	02/07/2024	11/13/2024	11/19/2024
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/10/2025	09/10/2025	11/12/2025
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2022	03/21/2024	06/12/2024
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	05/31/2025	07/10/2025	10/03/2025
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	06/12/2025	06/12/2025	09/05/2025
CA	CUPA LIV-PLE	CUPA Facility Listing	Livermore-Pleasanton Fire Department	09/19/2024	11/05/2024	01/31/2025
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	08/21/2025	08/21/2025	11/07/2025
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	08/12/2025	08/26/2025	11/14/2025
CA	DRYCLEAN MOJAVE	Mojave Desert Air Quality Management District Drycleaner Fac	Mojave Desert Air Quality Management District	05/02/2025	05/02/2025	07/18/2025
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	08/20/2025	08/20/2025	11/07/2025
CA	DRYCLEAN EAST KERN	Eastern Kern Air Pollution Control District District Dryclea	Eastern Kern Air Pollution Control District	08/21/2024	08/22/2024	11/05/2024
CA	DRYCLEAN BUTTE	Butte County Air Quality Management DistrictDrycleaner Facil	Butte County Air Quality Management District	04/03/2025	05/07/2025	07/29/2025
CA	DRYCLEAN MONTERY BAY	Monterey Bay Air Quality Management District Drycleaner Faci	Monterey Bay Air Quality Management District	04/15/2025	05/07/2025	07/29/2025
CA	DRYCLEAN SAN LUIS OB	San Luis Obispo County Air Pollution Control District Drycle	San Luis Obispo County Air Pollution Control	05/02/2025	05/07/2025	07/29/2025
CA	DRYCLEAN VENTURA	Drycleaner Facility Listing	Ventura County Air Pollution Control District	05/05/2025	05/07/2025	07/29/2025
CA	DRYCLEAN YOLO-SOLANO	Yolo-Solano Air Quality Management District Drycleaner Facil	Yolo-Solano Air Quality Management District	05/15/2025	05/15/2025	07/29/2025
CA	DRYCLEAN GLENN	Glenn County Air Pollution Control District Drycleaner Facil	Glenn County Air Pollution Control District	08/26/2024	08/28/2024	11/13/2024
CA	DRYCLEAN FEATHER RVR	Feather River Air Quality Management District Drycleaner Fac	Feather River Air Quality Management District	03/08/2023	03/09/2023	06/05/2023
CA	DRYCLEAN N SONOMA	Norther Sonoma County County Air Pollution Control District	Santa Barbara County Air Pollution Control Di	08/23/2024	08/26/2024	11/05/2024
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	08/21/2025	08/26/2025	11/14/2025
CA	DRYCLEAN AMADOR	Amador Air District Drycleaner Facility Listing	Amador Air Quality Management District	04/26/2023	04/27/2023	07/13/2023
CA	DRYCLEAN N SIERRA	Northern Sierra Air Quality Management District Drycleaner F	Northern Sierra Air Quality Management Distri	08/22/2024	08/22/2024	11/05/2024
CA	DRYCLEAN SHASTA	Shasta County Air Quality Management District District Drycl	Shasta County Air Quality Management District	08/29/2024	09/05/2024	11/13/2024
CA	DRYCLEAN TEHAMA	Tehama County Air Pollution Control District Drycleaner Faci	Tehama County Air Pollution Control District	04/24/2019	04/24/2019	05/01/2023
CA	DRYCLEAN SANTA BARB	Santa Barbara County Air Pollution Control District Dryclean	Santa Barbara County Air Pollution Control Di	02/19/2019	04/17/2019	05/01/2023
CA	DRYCLEAN N COAST	North Coast Unified Air Quality Management District Dryclean	North Coast Unified Air Quality Management Di	11/30/2016	04/19/2019	05/01/2023
CA	DRYCLEAN CALAVERAS	Calaveras County Environmental Management Agency Drycleaner	Calaveras County Environmental Management Age	06/17/2019	06/19/2019	05/01/2023
CA	DRYCLEAN PLACER	Placer County Air Quality Management District Drycleaner Fac	Placer County Air Quality Management District	05/15/2023	05/17/2023	08/14/2023
CA	DRYCLEAN IMPERIAL	Imperial County Air Pollution Control District Drycleaner Fa	Imperial County Air Pollution Control Distric	10/02/2024	10/03/2024	12/20/2024
CA	DRYCLEAN SACRAMENTO	Sacramento Metropolitan Air Quality Management DistrictDrycl	Sacramento Metropolitan Air Quality Managemen	09/03/2024	09/05/2024	11/13/2024

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	DRYCLEAN MENDOCINO	Mendocino County Air Quality Management District Drycleaner	Mendocino County Air Quality Management Distr	08/26/2024	09/03/2024	11/13/2024
CA	DRYCLEAN LAKE	Lake County Air Quality Management District Drycleaner Facil	Lake County Air Quality Management District	02/15/2024	02/16/2024	05/02/2024
CA	DRYCLEAN SAN JOAQUIN	San Joaquin Valley Air Pollution Control District District D	San Joaquin Valley Air Pollution Control Dist	05/05/2025	05/07/2025	07/28/2025
CA	DRYCLEAN GRANT	Grant Recipients List	California Air Resources Board	12/31/2021	01/26/2024	04/16/2024
CA	DRYCLEAN BAY AREA	Bay Area Air Quality Management District Drycleaner Facility	Bay Area Air Quality Management District	06/05/2025	06/11/2025	08/20/2025
CA	DRYCLEAN SAN DIEGO	San Diego County Air Pollution Control District Drycleaner F	San Diego County Air Pollution Control Distri	05/02/2025	05/08/2025	07/28/2025
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2023	03/11/2025	05/23/2025
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	07/14/2025	07/14/2025	10/03/2025
CA	FIN ASSURANCE 1	Financial Assurance Information Listing	Department of Toxic Substances Control	07/08/2025	07/09/2025	10/03/2025
CA	FIN ASSURANCE 2	Financial Assurance Information Listing	California Integrated Waste Management Board	08/08/2025	08/25/2025	11/10/2025
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	11/13/2025	11/17/2025	11/19/2025
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2024	06/30/2025	08/18/2025
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	08/07/2025	08/07/2025	11/03/2025
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	06/25/2025	06/25/2025	09/18/2025
CA	ICE	Inspection, Compliance and Enforcement	Department of Toxic Subsances Control	08/07/2025	08/07/2025	10/31/2025
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	08/29/2025	08/29/2025	11/17/2025
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	08/27/2025	08/28/2025	11/14/2025
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	MINES	Mines Site Location Listing	Department of Conservation	09/02/2025	09/03/2025	11/19/2025
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	08/05/2025	08/21/2025	11/10/2025
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	08/04/2025	08/05/2025	10/23/2025
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	08/21/2025	08/21/2025	11/10/2025
CA	PROC	Certified Processors Database	Department of Conservation	08/29/2025	08/29/2025	11/17/2025
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	06/04/2025	06/04/2025	08/27/2025
CA	SAN JOSE HAZMAT	Hazardous Material Facilities	City of San Jose Fire Department	11/03/2020	11/05/2020	01/26/2021
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	07/17/2025	07/17/2025	10/08/2025
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	08/29/2025	08/29/2025	11/18/2025
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	02/11/2021	07/01/2021	09/29/2021
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	PFAS ATSDR	PFAS Contamination Site Location Listing	Department of Health & Human Services	11/12/2024	07/21/2025	10/13/2025
US	PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing	Environmental Protection Agency	06/23/2025	06/26/2025	09/24/2025
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	08/29/2025	08/29/2025	11/18/2025
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	08/29/2025	08/29/2025	11/17/2025
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	08/29/2025	08/29/2025	11/17/2025
US	UST FINDER	UST Finder Database	Environmental Protection Agency	06/08/2023	10/04/2023	01/18/2024
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	06/26/2025	07/02/2025	08/18/2025

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	UST FINDER RELEASE	UST Finder Releases Database	Environmental Protecton Agency	06/08/2023	10/31/2023	01/18/2024
US	PCS	Permit Compliance System	EPA, Office of Water	12/16/2016	01/06/2017	03/10/2017
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	08/21/2025	08/21/2025	11/07/2025
US	PFAS ECHO FIRE TRAIN	Facilities in Industries that May Be Handling PFAS Listing	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
US	PFAS FEDERAL SITES	Federal Sites PFAS Information	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
US	PFAS TRIS	List of PFAS Added to the TRI	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
US	PFAS WQP	Ambient Environmental Sampling for PFAS	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	09/22/2025	09/23/2025	11/18/2025
CA	AQUEOUS FOAM	Former Fire Training Facility Assessments Listing	State Water Resources Control Board	09/02/2025	09/02/2025	11/18/2025
US	AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing	Environmental Protection Agency	09/25/2025	09/26/2025	11/24/2025
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	09/20/2025	09/26/2025	11/24/2025
US	PFAS PT 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
US	PFAS TSCA	PFAS Manufacture and Imports Information	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
CA	CERS HAZ WASTE	California Environmental Reporting System Hazardous Waste	CalEPA	04/14/2025	04/15/2025	07/07/2025
US	PFAS PROJECT	NORTHEASTERN UNIVERSITY PFAS PROJECT	Social Science Environmental Health Research	05/15/2024	03/06/2025	06/03/2025
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	09/02/2025	09/03/2025	11/19/2025
US	BIOSOLIDS	ICIS-NPDES Biosolids Facility Data	Environmental Protection Agency	07/06/2025	07/10/2025	10/02/2025
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	07/14/2025	07/15/2025	10/06/2025
CA	CHROME PLATING	Chrome Plating Facilities Listing	State Water Resources Control Board	09/02/2025	09/02/2025	11/18/2025
US	E MANIFEST	Hazardous Waste Electronic Manifest System	Environmental Protection Agency	06/02/2025	06/04/2025	08/13/2025
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/06/2021	05/21/2021	08/11/2021
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	07/14/2025	07/14/2025	10/06/2025
US	PFAS NPDES	Clean Water Act Discharge Monitoring Information	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/07/2025	08/07/2025	11/04/2025
US	MINES MRDS	Mineral Resources Data System	USGS	06/04/2024	11/22/2024	02/18/2025
US	PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
US	PFAS NPL	Superfund Sites with PFAS Detections Information	Environmental Protection Agency	06/23/2025	06/26/2025	08/27/2025
US	UXO	Unexploded Ordnance Sites	Department of Defense	07/31/2025	08/14/2025	11/04/2025
HISTORICAL USE RECORDS						
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
COUNTY RECORDS						
CA	CS ALAMEDA	Contaminated Sites	Alameda County Environmental Health Services	01/09/2019	01/11/2019	03/05/2019
CA	UST ALAMEDA	Underground Tanks	Alameda County Environmental Health Services	12/26/2023	12/26/2023	03/19/2024
CA	CUPA AMADOR	CUPA Facility List	Amador County Environmental Health	04/27/2023	04/27/2023	07/13/2023
CA	CUPA BUTTE	CUPA Facility Listing	Public Health Department	04/21/2017	04/25/2017	08/09/2017
CA	CUPA CALVERAS	CUPA Facility Listing	Calveras County Environmental Health	03/17/2025	03/19/2025	05/30/2025
CA	CUPA COLUSA	CUPA Facility List	Health & Human Services	04/06/2020	04/23/2020	07/10/2020
CA	SL CONTRA COSTA	Site List	Contra Costa Health Services Department	07/15/2025	07/16/2025	10/08/2025
CA	CUPA DEL NORTE	CUPA Facility List	Del Norte County Environmental Health Divisio	02/05/2025	02/12/2025	05/02/2025
CA	CUPA EL DORADO	CUPA Facility List	El Dorado County Environmental Management Dep	08/08/2022	08/09/2022	09/01/2022
CA	CUPA FRESNO	CUPA Resources List	Dept. of Community Health	06/28/2021	12/21/2021	03/03/2022
CA	CUPA GLENN	CUPA Facility List	Glenn County Air Pollution Control District	01/22/2018	01/24/2018	03/14/2018
CA	CUPA HUMBOLDT	CUPA Facility List	Humboldt County Environmental Health	08/12/2021	08/12/2021	11/08/2021
CA	CUPA IMPERIAL	CUPA Facility List	San Diego Border Field Office	07/08/2025	07/09/2025	10/03/2025
CA	CUPA INYO	CUPA Facility List	Inyo County Environmental Health Services	04/02/2018	04/03/2018	06/14/2018
CA	CUPA KERN	CUPA Facility List	Kern County Public Health	07/30/2025	07/30/2025	10/21/2025
CA	UST KERN	Underground Storage Tank Sites & Tank Listing	Kern County Environment Health Services Depar	07/30/2025	07/30/2025	10/21/2025
CA	CUPA KINGS	CUPA Facility List	Kings County Department of Public Health	12/03/2020	01/26/2021	04/14/2021
CA	CUPA LAKE	CUPA Facility List	Lake County Environmental Health	01/28/2025	01/29/2025	04/15/2025
CA	CUPA LASSEN	CUPA Facility List	Lassen County Environmental Health	07/31/2020	08/21/2020	11/09/2020
CA	AOCONCERN	Key Areas of Concerns in Los Angeles County		03/30/2009	03/31/2009	10/23/2009
CA	HMS LOS ANGELES	HMS: Street Number List	Department of Public Works	07/01/2025	07/09/2025	10/03/2025
CA	LF LOS ANGELES	List of Solid Waste Facilities	La County Department of Public Works	07/03/2025	07/03/2025	09/26/2025
CA	LF LOS ANGELES CITY	City of Los Angeles Landfills	Engineering & Construction Division	12/31/2023	10/03/2024	12/17/2024
CA	LOS ANGELES AST	Active & Inactive AST Inventory	Los Angeles Fire Department	06/01/2019	06/25/2019	08/22/2019
CA	LOS ANGELES CO LF METHANE	Methane Producing Landfills	Los Angeles County Department of Public Works	05/14/2024	07/09/2024	09/27/2024
CA	LOS ANGELES HM	Active & Inactive Hazardous Materials Inventory	Los Angeles Fire Department	06/03/2025	06/12/2025	09/05/2025
CA	LOS ANGELES UST	Active & Inactive UST Inventory	Los Angeles Fire Department	06/03/2025	06/12/2025	09/05/2025
CA	SITE MIT LOS ANGELES	Site Mitigation LA County List	Community Health Services	04/29/2025	07/10/2025	10/03/2025
CA	UST EL SEGUNDO	City of El Segundo Underground Storage Tank	City of El Segundo Fire Department	01/21/2017	04/19/2017	05/10/2017
CA	UST LONG BEACH	City of Long Beach Underground Storage Tank	City of Long Beach Fire Department	04/22/2019	04/23/2019	06/27/2019
CA	UST TORRANCE	City of Torrance Underground Storage Tank	City of Torrance Fire Department	07/16/2025	07/17/2025	10/09/2025
CA	CUPA MADERA	CUPA Facility List	Madera County Environmental Health	08/10/2020	08/12/2020	10/23/2020
CA	UST MARIN	Underground Storage Tank Sites	Public Works Department Waste Management	09/26/2018	10/04/2018	11/02/2018
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	09/22/2021	11/18/2021	11/22/2021
CA	CUPA MERCED	CUPA Facility List	Merced County Environmental Health	08/11/2025	08/12/2025	11/04/2025
CA	CUPA MONO	CUPA Facility List	Mono County Health Department	02/22/2021	03/02/2021	05/19/2021
CA	CUPA MONTEREY	CUPA Facility Listing	Monterey County Health Department	09/25/2025	09/26/2025	10/08/2025
CA	LUST NAPA	Sites With Reported Contamination	Napa County Department of Environmental Manag	01/09/2017	01/11/2017	03/02/2017
CA	UST NAPA	Closed and Operating Underground Storage Tank Sites	Napa County Department of Environmental Manag	09/05/2019	09/09/2019	10/31/2019
CA	CUPA NEVADA	CUPA Facility List	Community Development Agency	07/25/2025	07/29/2025	10/21/2025
CA	IND_SITE ORANGE	List of Industrial Site Cleanups Orange County	Health Care Agency	07/30/2025	07/30/2025	10/21/2025
CA	LUST ORANGE	List of Underground Storage Tank Cleanups	Health Care Agency	07/30/2025	07/30/2025	10/21/2025
CA	UST ORANGE	List of Underground Storage Tank Facilities	Health Care Agency	04/29/2025	04/30/2025	07/17/2025
CA	MS PLACER	Master List of Facilities	Placer County Health and Human Services	08/19/2025	08/19/2025	11/06/2025
CA	CUPA PLUMAS	CUPA Facility List	Plumas County Environmental Health	03/31/2019	04/23/2019	06/26/2019

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	LUST RIVERSIDE	Listing of Underground Tank Cleanup Sites	Department of Environmental Health	06/11/2024	06/12/2024	06/27/2024
CA	UST RIVERSIDE	Underground Storage Tank Tank List	Department of Environmental Health	03/06/2025	03/07/2025	05/22/2025
CA	CS SACRAMENTO	Toxic Site Clean-Up List	Sacramento County Environmental Management	11/07/2022	12/21/2022	03/16/2023
CA	ML SACRAMENTO	Master Hazardous Materials Facility List	Sacramento County Environmental Management	11/07/2022	12/09/2022	03/01/2023
CA	CUPA SAN BENITO	CUPA Facility List	San Benito County Environmental Health	07/25/2025	07/29/2025	10/21/2025
CA	PERMITS SAN BERNARDINO	Hazardous Material Permits	San Bernardino County Fire Department Hazardo	08/20/2025	08/20/2025	11/10/2025
CA	HMMD SAN DIEGO	Hazardous Materials Management Division Database	Hazardous Materials Management Division	08/21/2025	08/21/2025	11/10/2025
CA	LF SAN DIEGO	Solid Waste Facilities	Department of Health Services	10/01/2024	01/15/2025	03/28/2025
CA	SAN DIEGO CO LOP	Local Oversight Program Listing	Department of Environmental Health	07/22/2021	10/19/2021	01/13/2022
CA	SAN DIEGO CO SAM	Environmental Case Listing	San Diego County Department of Environmental	03/23/2010	06/15/2010	07/09/2010
CA	CUPA SAN FRANCISCO CO	CUPA Facility Listing	San Francisco County Department of Environmen	05/02/2025	05/07/2025	07/30/2025
CA	LUST SAN FRANCISCO	Local Oversite Facilities	Department Of Public Health San Francisco Cou	09/19/2008	09/19/2008	09/29/2008
CA	UST SAN FRANCISCO	Underground Storage Tank Information	Department of Public Health	07/10/2025	07/29/2025	10/20/2025
CA	SAN FRANCISCO MAHER	Maher Ordinance Property Listing	San Francisco Planning	07/13/2025	07/14/2025	10/06/2025
CA	UST SAN JOAQUIN	San Joaquin Co. UST	Environmental Health Department	06/22/2018	06/26/2018	07/11/2018
CA	CUPA SAN LUIS OBISPO	CUPA Facility List	San Luis Obispo County Public Health Departme	11/04/2025	11/05/2025	11/14/2025
CA	BI SAN MATEO	Business Inventory	San Mateo County Environmental Health Service	02/20/2020	02/20/2020	04/24/2020
CA	LUST SAN MATEO	Fuel Leak List	San Mateo County Environmental Health Service	03/29/2019	03/29/2019	05/29/2019
CA	CUPA SANTA BARBARA	CUPA Facility Listing	Santa Barbara County Public Health Department	09/08/2011	09/09/2011	10/07/2011
CA	CUPA SANTA CLARA	Cupa Facility List	Department of Environmental Health	08/08/2025	08/12/2025	11/03/2025
CA	HIST LUST SANTA CLARA	HIST LUST - Fuel Leak Site Activity Report	Santa Clara Valley Water District	03/29/2005	03/30/2005	04/21/2005
CA	LUST SANTA CLARA	LOP Listing	Department of Environmental Health	03/03/2014	03/05/2014	03/18/2014
CA	CUPA SANTA CRUZ	CUPA Facility List	Santa Cruz County Environmental Health	01/21/2017	02/22/2017	05/23/2017
CA	SITE MIT SANTA CRUZ	Site Mitigation Santa Cruz County List	Santa Cruz Environmental Health Services	12/03/2018	06/23/2023	07/13/2023
CA	CUPA SHASTA	CUPA Facility List	Shasta County Department of Resource Manageme	06/15/2017	06/19/2017	08/09/2017
CA	LUST SOLANO	Leaking Underground Storage Tanks	Solano County Department of Environmental Man	06/04/2019	06/06/2019	08/13/2019
CA	UST SOLANO	Underground Storage Tanks	Solano County Department of Environmental Man	09/15/2021	09/16/2021	12/09/2021
CA	CUPA SONOMA	Cupa Facility List	County of Sonoma Fire & Emergency Services De	07/02/2021	07/06/2021	07/14/2021
CA	LUST SONOMA	Leaking Underground Storage Tank Sites	Department of Health Services	06/30/2021	06/30/2021	09/24/2021
CA	CUPA STANISLAUS	CUPA Facility List	Stanislaus County Department of Ennvironmenta	02/08/2022	02/10/2022	05/04/2022
CA	UST SUTTER	Underground Storage Tanks	Sutter County Environmental Health Services	11/05/2024	11/20/2024	02/13/2025
CA	CUPA TEHAMA	CUPA Facility List	Tehama County Department of Environmental Hea	02/11/2025	02/12/2025	05/02/2025
CA	CUPA TRINITY	CUPA Facility List	Department of Toxic Substances Control	04/09/2025	04/10/2025	06/27/2025
CA	CUPA TULARE	CUPA Facility List	Tulare County Environmental Health Services D	10/07/2022	10/07/2022	12/21/2022
CA	CUPA TUOLUMNE	CUPA Facility List	Divison of Environmental Health	04/23/2018	04/25/2018	06/25/2018
CA	BWT VENTURA	Business Plan, Hazardous Waste Producers, and Operating Unde	Ventura County Environmental Health Division	06/26/2025	07/21/2025	10/09/2025
CA	LF VENTURA	Inventory of Illegal Abandoned and Inactive Sites	Environmental Health Division	12/01/2011	12/01/2011	01/19/2012
CA	LUST VENTURA	Listing of Underground Tank Cleanup Sites	Environmental Health Division	05/29/2008	06/24/2008	07/31/2008
CA	MED WASTE VENTURA	Medical Waste Program List	Ventura County Resource Management Agency	06/26/2025	07/17/2025	10/09/2025
CA	UST VENTURA	Underground Tank Closed Sites List	Environmental Health Division	08/26/2025	08/29/2025	11/18/2025
CA	UST YOLO	Underground Storage Tank Comprehensive Facility Report	Yolo County Department of Health	09/16/2025	09/17/2025	10/02/2025
CA	CUPA YUBA	CUPA Facility List	Yuba County Environmental Health Department	07/02/2025	07/29/2025	10/21/2025

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date

STREET AND ADDRESS INFORMATION

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APPENDIX H

QUALIFICATIONS
OF
ENVIRONMENTAL PROFESSIONALS

ARAM B. KALOUSTIAN, P.E.
Principal

Mr. Aram Kaloustian has diversified experience in environmental, mechanical and civil engineering including indoor air quality surveys for mold and ventilation systems, asbestos and lead-based paint assessments, Phase I environmental surveys, subsurface environmental site assessments, remedial design, remediation system installation and operation, negotiations with regulatory agencies, computer modeling, research of new environmental investigative and remedial technologies, safety engineering and project management.

Mr. Kaloustian has conducted numerous assessments involving indoor air quality, asbestos and lead-based paint surveys and associated remediation projects by establishing investigative protocol, implementing efficient assessment strategies, and applying the site specific and appropriate remedial recommendations to all assessed projects. Mr. Kaloustian has also designed a variety of protocols for remedial and post-remedial monitoring services for a wide variety of project sites.

Mr. Kaloustian has conducted numerous historical and background Phase I investigations involving review of files located at various county health departments, water quality control boards, state departments of health, air quality management districts, city building departments, city departments of public works and city fire departments. These investigations also involved searches of state and federal databases for hazardous waste sites, generators, transporters and treatment/storage/disposal facilities, title searches, aerial photo reviews and visual site inspections.

Mr. Kaloustian has extensive subsurface site assessment experience involving underground storage tanks, exploratory borings and monitoring wells, implementation of monitoring and sampling programs, evaluation of monitoring and sampling data, review of historical site and site vicinity information, agency negotiations, and assessment and remediation recommendations.

Mr. Kaloustian's remedial design experience includes various vapor extraction and groundwater remediation systems for remediation of soil and groundwater impacted by hydrocarbon contamination. Mr. Kaloustian has designed and implemented vapor extraction treatment systems that have included internal combustion engines, catalytic thermal oxidizers and carbon adsorption. Groundwater treatment systems have included spray aeration tanks, carbon adsorption and air strippers.

Regulatory compliance experience includes obtaining permits for removal of underground storage tanks, drilling exploratory borings, installation of monitoring wells, and installation of vapor extraction treatment systems and groundwater treatment systems. This has required working with local county health departments, city departments of public works, city fire departments, air quality management districts, a number of publicly owned treatment works and the California Regional Water Quality Control Board.

Mr. Kaloustian has also constructed and evaluated various computer models for site assessment and remediation including models used to evaluate the vacuum influence of vapor extraction systems, the radius of influence of groundwater extraction, fate and transport analysis of contaminant's, and aquifer test data.

Mr. Kaloustian has also participated and has been the lead engineer in the research and development of new investigative and remedial techniques involving indoor air quality, horizontal drilling; and treatment of contaminated soil and sludge materials using remedial surfactants, bioremediation, soil washing, encapsulation and modified oxidation. Additional research experience includes participation in the South Coast Air Quality Survey in 1987 for research involving atmospheric chemistry.

Throughout the years, Mr. Kaloustian has also maintained certification and continuing education for Hazardous Waste Operations and Emergency Response (29CFR1910.120) and supervisory training; and has developed site specific health and safety plans for site assessment and remediation. Mr. Kaloustian has also been responsible for the development and implementation of a safety procedures manual for environmental assessment and remediation firms.

Registrations:
Registered Professional Civil Engineer, State of California
Registered Professional Civil Engineer, State of Arizona
Registered Professional Civil Engineer, State of Hawaii
Registered Professional Civil Engineer, State of Texas
Registered Professional Civil Engineer, State of Utah
Registered Environmental Assessor, State of California (1994-1999)

Affiliations:
American Industrial Hygiene Association – Consultant Member
National Society of Professional Engineers – Member
California Ground Water Association - Member

Education:
M.S., Construction Engineering and Management, Stanford University
B.S., Engineering and Applied Science, California Institute of Technology
Indoor Air Quality Certification from the American Industrial Hygiene Association
OSHA 40-Hour Hazardous Waste Operations Training and Certification
Certified AHERA asbestos building inspector and management planner

APPENDIX D

RADON INFORMATION SUMMARY REPORT

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL, CIVIL & ENVIRONMENTAL

RADON INFORMATION SUMMARY REPORT

Vacant Land
Client Project Identification: Gardenia
(APN: 111-290-015-000)
Farmersville, California 93223

Prepared For:

Pacific West Communities, Inc.
430 East State Street, Suite 100
Eagle, Idaho 83616

KCE-2025-348E-LR1
January 7, 2026

RADON INFORMATION LETTER SUMMARY REPORT

Vacant Land
Client Project Identification
(APN: 111-290-015-000)
Farmersville, California 93223

INTRODUCTION

KCE Matrix, Inc. (KCE Matrix) was recently retained by Pacific West Communities, Inc. (referred to as "the client" and/or "the user" in this report) to conduct a Phase I Environmental Site Assessment (ESA) in accordance with the American Society of Testing and Materials (ASTM) standard practice E1527-21 for the property consisting of vacant land that has the Assessor's Parcel Number (APN) of 111-290-015-000, Farmersville, California (referred to as "the subject property" in this report). The results of the assessment work performed are presented in a Phase I ESA Report designated as (KCE-2025-348E-R1) dated January 5, 2026.

In addition to the Phase I environmental assessment work performed and as specifically requested by the client, this letter summary report has been prepared to provide additional information with regard to Radon for the subject property as related to and consistent with the United States Department of Housing and Urban Development (HUD) Notice CPD-23-103 dated January 11, 2024.

HUD NOTICE CPD-23-103 (GENERAL INFORMATION SUMMARY)

The HUD Notice CPD-23-103 describes departmental policy with regard to addressing Radon related matters during the Environmental Review Process. The referenced HUD notice does not impose Radon testing requirements; however, it does include guidance on strategies for considering Radon in the site contamination analysis.

The referenced HUD notice provides the following information:

- The most common pathway for human exposure to Radon is inhalation indoors.

- The goal for mitigating Radon in buildings is to reduce Radon concentrations in indoor air as low as reasonably achievable and practicable considering the efficacy of current industry-standard Radon reduction systems and environmental conditions (e.g., geology and climate).

- The most effective strategy to protect the health and safety of occupants is to prevent Radon from entering the building by using Radon resistant construction techniques.

- Another effective strategy is to reduce the level of Radon inside existing buildings by installing and operating a Radon reduction system. An effective Radon reduction system achieves two main goals: it reduces the concentration of Radon gas in a home by venting Radon safely outside the structure and removes the Radon gas from under the foundation before it can come into the home.

- Indoor air Radon levels vary across the United States and from parcel to parcel due to differences in geology, climate, seasonal variation, building construction, and other conditions. Additionally, because Radon cannot be seen, tasted, or smelled, the only method for determining the precise Radon level in a specific building is to test the indoor air.

HUD ENVIRONMENTAL REVIEW PROCESS FOR RADON

In order to satisfy environmental review as per 24 CFR 50.3(i) or 24 CFR 58.5(i), the HUD Notice CPD-23-103 recommends using the "best practice" method specified and provides alternative options if the "best practice" method is not implemented. The recommended "best practice" method is presented as follows:

> For Radon contamination analysis, HUD strongly recommends using the American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/AARST) Radon testing standards for single-family buildings and multi-family buildings, schools, and large buildings, including those constructed using Radon-resistant construction techniques. The ANSI/AARST standard describes how to conduct testing, interpret test results, and draft a Radon Test Report. Although testing is not required under the notice, testing is the only way to determine the Radon level within a given building.

If the "best practice" method described above is not used, one of the following alternative strategies must be used to consider Radon in the contamination analysis process:

- Do-it-yourself (DIY) Radon test kits may be used to measure Radon levels in single-family dwelling units. In HUD single-family buildings with multiple units, one DIY test kit must be used for each dwelling unit.

- In remote or other areas where there are no licensed/certified Radon professionals and/or DIY test kits cannot be shipped to a lab in sufficient time, the local government, such as a local health department or environmental department, may decide to purchase Radon monitoring equipment and train staff to use it. Monitoring equipment, such as continuous Radon monitors, should be used in accordance with the manufacturer's instructions and intended use and staff should ensure proper quality control and quality assurance practices are adhered to.

- Scientific data review. Available science-based information may be used to determine whether the project site is located in an area that has average documented Radon levels at or above 4 pCi/L.

- Environmental review preparers may not use the EPA Map of Radon Zones nor EPA State Maps of Radon Zones for considering radon levels at a project site for compliance with 24 CFR 50.3(i) or 24 CFR 58.5(i) because it is not appropriate for a site-specific analysis of Radon risk, which is required for a HUD environmental review.

- When conducting a scientific data review in lieu of testing, there must be a minimum of 10 documented test results over the previous 10 years for which data is available in a given county for the scientific data review approach to be utilized. If there are less than 10 documented results over this period, then there is a lack of scientific data for the purposes of the referenced Notice and no further consideration of Radon is needed if testing is infeasible or impracticable.

- Testing data utilized should cover the smallest geographic area for which the minimum amount of documented test results exist, up in size to the county in which the project is located. The best available data must be used. Best available data refers to the most current data that best indicates the level of Radon concentration at a project site. Whenever possible, utilize the average of the previous 10 years of data.

Under HUD's regulations 24 CFR 58.38(a)(3) or 50.11, HUD or the Responsible Entity (RE), is required to document the Radon evaluation as part of the contamination analysis in the Environmental Review Record (ERR).

If testing is not conducted and not otherwise required by program guidance, the documentation will need to provide evidence of average documented Radon test results covering the project site or its county, other science-based information suggesting Radon levels at the project site, or evidence of a lack thereof.

In instances where HUD grantees, applicants, and recipients are unable to obtain science-based data, environmental review preparers must consider the feasibility of Radon testing if they have not already. If the grantee, applicant, or recipient determines that testing is infeasible or impracticable, the environmental review must document the basis for this determination. Acceptable documentation in these scenarios where testing is infeasible and science-based data is not available includes but is not limited to: correspondence with state and local Radon control agencies indicating a lack of scientific data evidencing radon levels at the project site, a copy of Center for Disease Control (CDC) Environmental Health Tracking Network information showing the project site is located in a county with a lack of scientific data, and a basis for the conclusion that testing would be infeasible or impracticable. The RE, grantee, applicant, or recipient is not required to submit additional documentation substantiating their decision that testing is infeasible or impracticable.

When all of the above is documented in the ERR, no further consideration of Radon is needed and no further action with respect to Radon is needed for the environmental review.

RADON CONSIDERATIONS AND EVALUATION FOR THE SUBJECT PROPERTY

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The United States Environmental Protection Agency (EPA) and the California EPA have prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones as follows:

- Zone 1: Highest Potential - Counties that have a predicted average indoor radon screening level greater than 4 picocuries per liter (pCi/L), the US EPA Action Limit.

- Zone 2: Moderate Potential - Counties that have a predicted average indoor radon screening level between 2 and 4 pCi/L.

- Zone 3: Low Potential - Counties that have a predicted average indoor radon screening level less than 2 pCi/L.

KCE Matrix retained Environmental Data Resources, Inc. (EDR) to conduct a search of government and regulatory databases in an attempt to locate and obtain information about the subject site and other sites in the vicinity of the subject property that may affect the environmental quality of the property. The environmental disclosure report prepared by EDR provides a summary of information gathered with respect to assessment of Radon and reported the following:

- For Tulare County where the subject property is located, the Federal EPA Radon zone is reported as Zone 2, Moderate Potential; with average indoor levels of Radon between 2 and 4 pCi/L.

- With regard to the zip code where the subject property is located, 22 out of the 73 (30%) tests performed for Radon reported concentrations greater than 4 pCi/L and 51 out of 73 (70%) tests performed for Radon reported concentrations less than 4 pCi/L. Therefore, the average reported concentration of Radon detected for this geographic area (represented by a single zip code where the subject property is located) is less than 4 pCi/L.

- With regard to more specific Radon testing results for Tulare County which reportedly consisted of testing performed for 59 sites, the average concentrations of Radon detected were all less than 4 pCi/L.

The Radon assessment information summary as reported by EDR is presented in Appendix A of this report.

Furthermore, when specifically considering and evaluating Radon in relation to the HUD Notice CPD-23-103 for the subject property, the following considerations are applicable:

1. The recommended "best practice" cannot be implemented because there are no buildings on site currently. Also, there have never been any buildings on the subject site based on the site history information gathered during the recently performed Phase I ESA as referenced elsewhere in this letter summary report.

2. In reviewing the HUD Notice CPD-23-103, the considerations and recommended testing actions specified are applicable to testing and assessment of indoor air inside of buildings. Repeatedly and in various ways, the HUD Notice states that the only method for determining the precise Radon level in a specific building is to test the indoor air. Currently and historically, there have never been any buildings on the subject property based on the site history information gathered during the recently performed Phase I ESA as referenced elsewhere in this letter summary report. As such, compliance with the testing recommendations listed in the HUD Notice CPD-23-103 cannot be achieved.

3. As an alternative method of satisfying the HUD environmental review process for Radon, testing for Radon may be performed using Do-it-yourself (DIY) Radon test kits to test indoor air in some instances. As noted elsewhere in this report, there are no buildings currently on site and as such, indoor air cannot be tested using DIY Radon test kits.

4. As an alternative method of satisfying the HUD environmental review process for Radon, review of scientific data has been performed. The following Radon testing information for the vicinity of the subject property was obtained by researching the records as maintained by the CDC Environmental Health Tracking Network:

    a. Radon testing performed for Tulare County for the 10-year period from 2008 through 2017 indicated a mean Radon concentration of 3.0 pCi/L (pre-mitigation mean levels tested in buildings). Reference to this information as reported by the CDC is presented in Appendix B.

    b. Radon testing performed for Tulare County for the 10-year period from 2008 through 2017 indicated a median Radon concentration of 1.7 pCi/L (pre-mitigation median levels tested in buildings). Reference to this information as reported by the CDC is presented in Appendix B.

In summary, and based on the scientific data review performed during this assessment, the average concentration of Radon detected from multiple sources for the area where the subject property is located is reported as less than 4.0 pCi/L.

Based on the information presented in this letter summary report with regard to the HUD environmental review process for Radon as described in the HUD Notice CPD-23-103, KCE Matrix does not consider Radon as a significant environmental concern at this time. In accordance with the referenced HUD Notice, the evaluation of this matter has been completed and no further consideration of Radon and no further action with respect to Radon is needed for environmental review.

SIGNATURE

KCE Matrix appreciates the opportunity to have provided services for this project. Should you have any questions or concerns regarding this summary report, please do not hesitate to contact our office at 818-559-5500.

Sincerely,

KCE Matrix, Inc.

Aram B. Kaloustian, P.E.
Project Manager

Attachments: Appendix A - EDR Geocheck Physical Source Map Findings, Radon
Appendix B - CDC Environmental Health Tracking Network, Radon Testing Information

APPENDIX A

ENVIRONMENTAL DATA RESOURCES, INC. (EDR)

GEOCHECK – PHYSICAL SOURCE MAP FINDINGS
RADON

Vacant Land
APN 111-290-015-000
Farmersville, CA 93292

Inquiry Number: 8187223.2s
December 01, 2025

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93292	73	22

Federal EPA Radon Zone for TULARE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for TULARE COUNTY, CA

Number of sites tested: 59

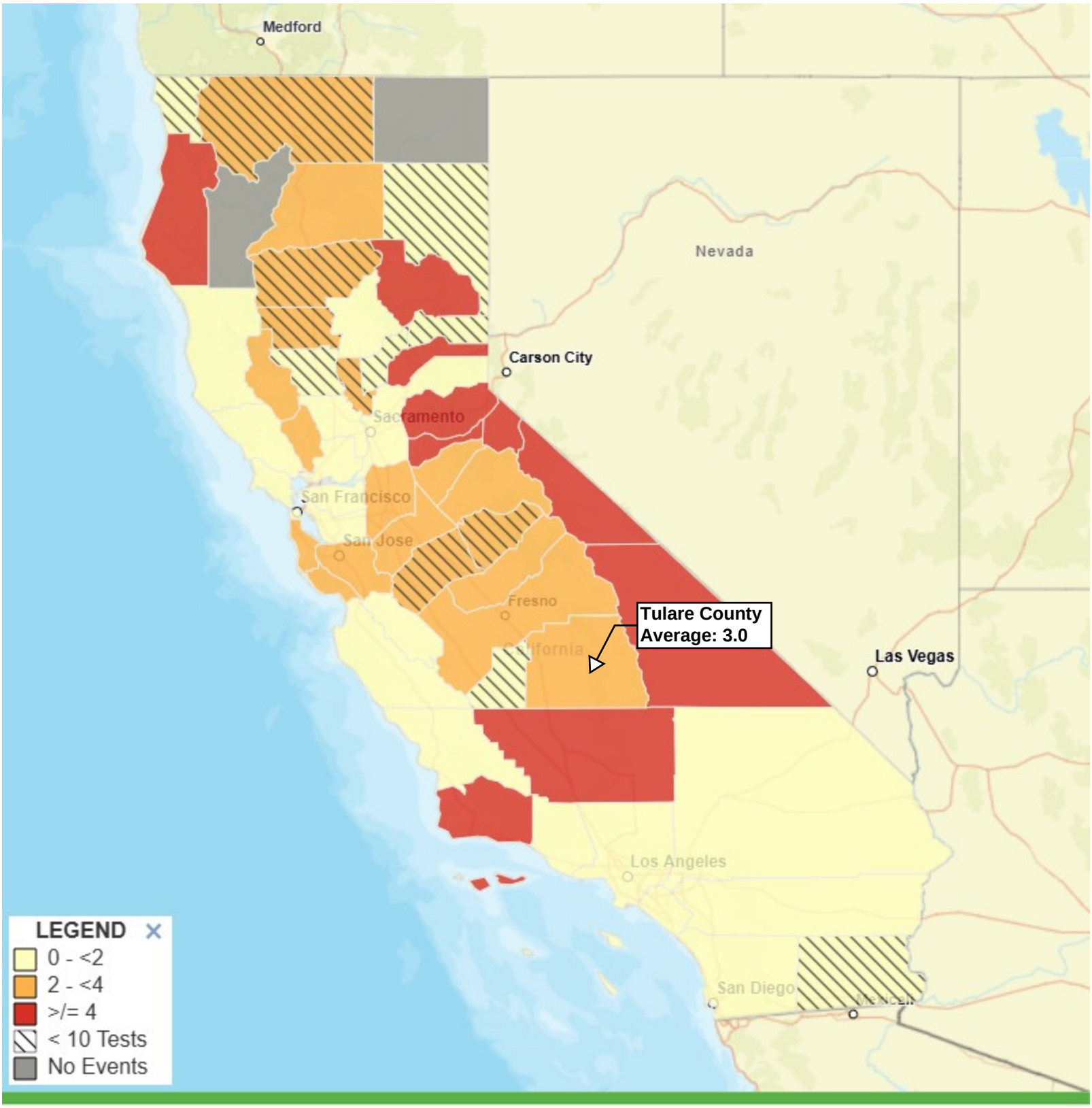
Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.846 pCi/L	97%	3%	0%
Living Area - 2nd Floor	0.600 pCi/L	100%	0%	0%
Basement	3.100 pCi/L	50%	50%	0%

APPENDIX B

CENTER FOR DISEASE CONTROL (CDC)
ENVIRONMENTAL HEALTH TRACKING NETWORK

RADON TESTING INFORMATION

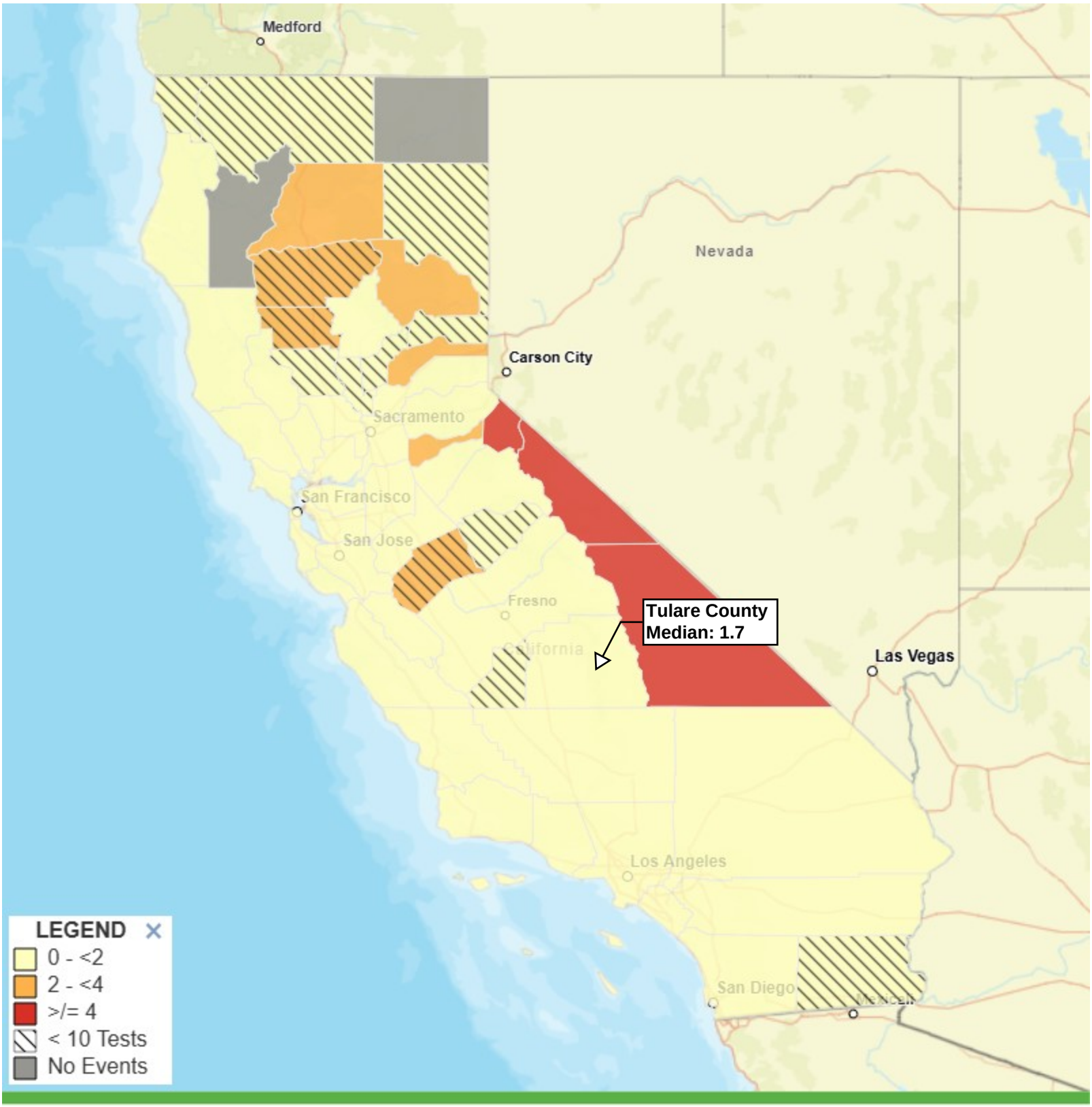
MEAN PRE-MITIGATION RADON LEVEL IN TESTED BUILDINGS OVER A 10-YEAR PERIOD



RADON | RADON TESTS FROM LABS | MEAN PRE-MITIGATION RADON LEVEL IN TESTED BUILDINGS OVER A 10-YEAR PERIOD | CALIFORNIA | **2008-2017**

Explore more data at ephtracking.cdc.gov/DataExplorer

MEDIAN PRE-MITIGATION RADON LEVEL IN TESTED BUILDINGS OVER A 10-YEAR PERIOD



RADON | RADON TESTS FROM LABS | MEDIAN PRE-MITIGATION RADON LEVEL IN TESTED BUILDINGS OVER A 10-YEAR PERIOD | CALIFORNIA | **2008-2017**

Explore more data at ephtracking.cdc.gov/DataExplorer

APPENDIX E

SUBSURFACE ENVIRONMENTAL SITE ASSESSMENT

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL, CIVIL & ENVIRONMENTAL

SUBSURFACE ENVIRONMENTAL SITE ASSESSMENT REPORT

Vacant Land
(APN: 111-290-015-000)
Farmersville, California 93223

Prepared For:

Pacific West Communities, Inc.
430 East State Street, #100
Eagle, Idaho 83616

KCE-2022-454E-R2
February 9, 2023

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Attachments: Appendix A - Figures 1 and 2
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I. INTRODUCTION

This report presents the results of subsurface environmental site assessment work conducted by KCE Matrix, Inc. (KCE Matrix) for the subject property. The purpose of this investigation was to assess subsurface soil for potential contamination from former agricultural land use at the property; and to assess subsurface soil-gas along the northwestern and southwestern most perimeter of the property for potential vapor intrusion and/or encroachment. The scope of work performed by KCE Matrix consisted of the following:

- Geologic logging during drilling of 40 exploratory soil borings.
- Soil sampling during drilling of 40 exploratory soil borings.
- Drilling and installation of 10 single-stage subsurface vapor probes.
- Soil-gas sampling of the 10 single-stage subsurface vapor probes.
- Project coordination and management.
- Sample delivery to a state certified environmental testing laboratory with corresponding chain of custody documentation.
- Laboratory analysis.
- Data analysis, interpretation, and preparation of this report summarizing the subsurface environmental assessment work conducted.

II. SITE DESCRIPTION

The property is located in a commercial/retail and residential area on the eastern side of Farmersville Road and approximately 700 feet to the north of the intersection of Farmersville Road and East Walnut Street, in Farmersville, California. The property consists of one parcel of land with Assessor's Parcel Number (APN): 111-290-015-000; measures approximately 409,500 square feet (approximately 9.4 acres) of land area in a rectangular-shaped configuration, appears to be relatively flat and has an approximate elevation of 365 feet above mean sea level. The property consists of vacant unoccupied land with no structures and has a dirt surface. A private road runs through the central portion of the site and connects Farmersville Road along the western property line to the residential properties located adjacent to and east of the subject site. The property can be accessed through the entire western property line along Farmersville Road and through vacant land located along the southern property line. A Location Map is shown in Appendix A, Figure 1, and a site plan of the property is presented in Appendix A, as Figure 2.

III. BACKGROUND

From November through December of 2022, a Phase I Environmental Site Assessment (ESA) was performed by KCE Matrix for the subject property. The results of the Phase I ESA were summarized in a report designated as (KCE-2022-454E-R1) dated December 6, 2022. Based on the Phase I ESA work performed, the following Recognized Environmental Condition (REC) was identified by KCE Matrix:

- REC – Historic agricultural land use. The subject property appears to have been used as agricultural land from at least approximately 1952 through 1984.

In addition, based on the Vapor Encroachment Screen (VES) conducted during the Phase I investigation, a Vapor Encroachment Condition (VEC) originating from the subject property could not be ruled out. Furthermore, a VEC originating from other nearby sites in the vicinity for the subject property could not be ruled out.

Based on the Phase I ESA performed, KCE Matrix recommended that subsurface environmental assessment work be performed for the subject property to determine whether or not the property had been impacted by the potential usage of pesticides over an extended period of time, and to assess any potential impact from metals (such as Arsenic and Lead). KCE Matrix also recommended that the proposed subsurface assessment work be conducted in a manner so as to address potential vapor encroachment conditions.

IV. FIELD ACTIVITIES

A. Historic Agricultural Land Use

Between January 11 and January 13, 2023, forty (40) subsurface exploratory soil borings (designated as EB-1 through EB-40) were drilled and sampled at the subject property, using hand-auger field drilling and sampling equipment at the locations shown in Appendix A, Figure 2. All 40 exploratory borings were drilled and sampled to a total depth of four feet below the ground surface (bgs).

Groundwater was not encountered in the 40 exploratory borings during the drilling and sampling work performed. Subsurface drilling and soil sampling activities were conducted by or under the supervision of KCE Matrix's California State Certified Professional Civil Engineer or Certified Engineering Geologist. The subsurface materials penetrated are described in the attached Field Borehole Logs as presented in Appendix D of this report.

A total of 80 soil samples were collected from the 40 exploratory borings at depths of two feet and four feet bgs for lithologic logging purposes. In addition, forty (40) of the 80 soil samples were selected for laboratory analysis from the 40 exploratory borings as follows:

- For borings EB-1 through EB-40 – soil samples collected at a depth of two feet bgs (40 samples)

The undisturbed soil samples were collected using hand-auger field drilling/sampling equipment. The sample containers were sealed, labeled, and stored in a cooler, on ice, until delivery to a state certified laboratory. All soil samples were vapor tested using a Photo Ionization Detector (PID). The PID used during this investigation has serial number 592-906766 and was calibrated with Isobutylene (i-C_4H_8) at a concentration of 100 parts per million by Volume (ppmV). The PID results for the soil vapors are reported on the attached Field Borehole Logs, which are included in Appendix D of this report.

B. Vapor Encroachment Condition

On January 19, 2023, ten single-stage soil vapor probes (designated as VP-1 through VP-10) were drilled and installed at the on-site locations shown in Appendix A, Figure 2.

The 10 single-stage vapor probes (designated as VP-1 through VP-10) were installed to a total depth of five feet bgs as measured from the ground surface. Each single-stage soil vapor probe was constructed by inserting a 1/4-inch Nylaflow sampling tube (which includes a vapor probe implant at the bottom of the tube) into the borehole, sealing off the annular space with the installation of a one-foot sand pack, installation of a one-foot dry granular bentonite above the sand pack, and installation of hydrated bentonite above the dry granular bentonite to the ground surface. A plastic stopcock was attached to the top of the vapor sampling tube for subsequent monitoring and sampling. A typical single-stage soil vapor probe construction diagram of the vapor probes constructed during this investigation is presented in Appendix E, Diagram 1.

On January 20, 2023, KCE Matrix collected soil-gas samples from the 10 single-stage vapor probes (designated as VP-1 through VP-10). The soil-gas samples were collected as follows:

- Ten (10) soil-gas samples collected from the 10 single-stage vapor probes VP-1 through VP-10, at a depth of five feet bgs (samples designated as VP-1(5) through VP-10(5)); and one field duplicate soil-gas sample collected from vapor probe VP-4 (sample designated as VP-4 (5)DUP)

The soil-gas sampling techniques used were based on the "Advisory – Active Soil Gas Investigations" established jointly by the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) and California Regional Water Quality Control Board (RWQCB) – Los Angeles Region and San Francisco Bay Region dated July of 2015. Soil-gas sampling activities were conducted by and/or under the supervision of KCE Matrix's California State Certified Professional Civil Engineer or Certified Engineering Geologist.

The soil-gas samples were collected using SUMMA canisters from the 10 single-stage vapor probes (designated as VP-1 through VP-10). The sampling rate for each soil-gas sample collected was approximately 200 cubic centimeters per minute (cc/min) using a SUMMA canister. Prior to purging or sampling, a shut-in test was conducted to check for leaks in the above-ground sampling

system. In addition, prior to collecting the soil-gas samples, a default of three purge-volumes was used as recommended by the DTSC/RWQCB guideline dated July 2015. Also, in order to verify proper collection of the soil-gas sample from the intended depth, a leak-test was performed for each soil-gas sample collected by placing a tracer gas mixture (n-pentane/n-hexane/n-heptane) above the bentonite seal for the probe.

V. GEOLOGY AND SUBSURFACE CONDITIONS

Based on the subsurface logging conducted by KCE Matrix during drilling of the 40 exploratory borings (designated as EB-1 through EB-40) during this investigation, the subsurface of the subject property appears to be underlain by sand to the maximum depth explored, approximately four feet bgs. Groundwater was not encountered during drilling activities.

KCE Matrix conducted a search of groundwater monitoring data as maintained by the State Water Resources Control Board (SWRCB) – Geotracker database for hydrology information for the site and site vicinity. Based on monitoring data collected from wells located at a site that is approximately 0.78-mile north of the subject site, the depth to groundwater was reported to range between 32.52 feet and 34.44 feet below the surface as monitored in May of 2012. Based on information as reported in the "Site Closure Summary" report dated April 1, 2003, for a property located approximately 0.75-mile south of the subject site, the highest depth to groundwater was reported as 13 feet below the top of well casings, and the lowest depth to groundwater was reported as 32 feet below the top of well casings, and the groundwater flow direction was reported to be towards the west.

VI. ANALYTICAL RESULTS

The soil and soil-gas samples collected during this investigation were analyzed by Jones Environmental, Inc. (JEI) in Santa Fe Springs, California. The samples were accompanied by properly executed chain of custody documentation. JEI is an environmental testing laboratory certified by the California State Department of Health Services (ELAP Certificate Number 2882).

A. Historic Agricultural Land Use

The 40 selected soil samples collected at a depth of two feet bgs from the 40 exploratory borings (designated as samples EB-1(2) through EB-40(2)) were analyzed for Organochlorine Pesticides (OCPs) by EPA method 8081A and for Arsenic and Lead by EPA method 6010B.

The analytical laboratory results of the 40 selected soil samples collected between January 11 and January 13, 2023 are presented in Appendix B, Tables 1 through 3. Copies of the laboratory reports and corresponding chain of custody documentation are presented in Appendix C of this report.

B. Vapor Encroachment Condition

The 11 soil-gas samples (designated as samples VP-1(5) through VP-10(5) and VP-4(5)DUP) collected on January 20, 2023, were analyzed for Volatile Organic Compounds (VOCs) and Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO) by EPA method 8260B.

The analytical laboratory results of the 11 soil-gas samples collected on January 20, 2023 are presented in Appendix B, Table 4. Copies of the laboratory report and corresponding chain of custody documentation are presented in Appendix C of this report.

VII. SUMMARY AND SAMPLE RESULTS

The following summarizes the subsurface environmental site assessment work performed for the subject property during this investigation:

A. Historic Agricultural Land Use

- Between January 11 and January 13, 2023, forty (40) exploratory soil borings (designated as EB-1 through EB-40) were drilled and sampled on site to a depth of four feet bgs. Groundwater was not encountered in any of the 40 borings during drilling activities.
- Between January 11 and January 13, 2023, a total of 80 soil samples were collected from the 40 exploratory borings on site (designated as EB-1 through EB-40). Forty (40) of the 80 soil samples were collected at a depth of two feet bgs; and the 40 other soil samples were collected at a depth of four feet bgs.
- As presented in Section VI of this report, forty (40) of 80 soil samples collected at a depth of two feet bgs were selected and analyzed for OCPs by EPA method 8081A and for Arsenic and Lead by EPA method 6010B.

Organochlorine Pesticides (OCPs)

- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for OCPs (designated as samples EB-1(2) through EB-40(2)) indicated no detectable concentrations of 19 of the 21 OCP constituents (OCPs identified as Aldrin, α-BHC, β-BHC, γ-BHC (Lindane), δ-BHC, γ-Chlordane, α-Chlordane, 4,4'-DDD, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin aldehyde, Endrin ketone, Heptachlor, Heptachlor epoxide, Methoxychlor and Toxaphene)
- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for OCPs indicated concentrations of two of the 21 OCP constituents as follows:
    - 4,4'-DDE ranging from 1.1 micrograms per Kilogram (µg/Kg) to 17.4 µg/Kg in 12 of the 40 soil samples (designated as samples EB-1(2), EB-3(2), EB-4(2),

EB-13(2) through EB-15(2), EB-18(2), EB-22(2) EB-26(2), and EB-31(2) through EB-33(2)). 4,4'-DDE was not detected in the 28 other soil samples.

- 4,4'-DDT at 2.4 µg/Kg and 2.2 µg/Kg in two of the 40 soil samples (designated as samples EB-13(2) and EB-31(2), respectively). 4,4'-DDT was not detected in the 38 other soil samples.

- The analytical results of the soil samples collected and analyzed for OCPs from the 40 soil borings are presented in Appendix B, Table 1.

Arsenic

- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for Arsenic (designated as samples EB-1(2) through EB-40(2)) indicated concentrations of Arsenic at 5.2 milligrams per Kilogram (mg/Kg) and 5.3 mg/Kg in two of the 40 soil samples collected (designated as samples EB-3(2) and EB-24(2), respectively). Arsenic was not detected in the 38 other soil samples collected and analyzed.

- The analytical results of the soil samples collected and analyzed for Arsenic from the 40 soil borings are presented in Appendix B, Table 2.

Lead

- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for Lead (designated as samples EB-1(2) through EB-40(2)) indicated concentrations of Lead ranging from 2.6 mg/Kg to 5.6 mg/Kg.

- The analytical results of the selected soil samples collected and analyzed for Lead from the 40 soil borings are presented in Appendix B, Table 3.

B. Vapor Encroachment Condition

- On January 19, 2023, ten single-stage soil-vapor probes (designated as VP-1 through VP-10) were drilled and installed at the subject site. The 10 single-stage vapor probes (designated as VP-1 through VP-10) were installed at a depth of five feet bgs as measured from the ground surface.

- On January 20, 2023, ten soil-gas samples were collected from the 10 single-stage vapor probes (designated as VP-1 through VP-10); and one duplicate soil-gas sample was collected from vapor probe VP-4. The 11 soil-gas samples collected were analyzed for VOCs and TPH-GRO by EPA method 8260B.

TPH-GRO, BTEX and MTBE

- The analytical results of the 11 soil-gas samples collected from the 10 single-stage vapor probes (designated as VP-1 through VP-10) indicated concentrations of TPH-GRO, BTEX and MTBE as follows:

Sample ID	TPH-GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
VP-1(5)	ND	ND	12	ND	ND	ND
VP-2(5)	ND	ND	21	ND	ND	ND
VP-3(5)	ND	ND	40	14	28	ND
VP-4(5)	ND	ND	46	22	56	ND
VP-4(5)DUP	ND	ND	44	19	46	ND
VP-5(5)	ND	ND	25	ND	17	ND
VP-6(5)	ND	ND	39	8	38	ND
VP-7(5)	ND	ND	88	18	69	ND
VP-8(5)	ND	ND	62	14	56	ND
VP-9(5)	ND	ND	56	11	59	ND
VP-10(5)	ND	ND	74	17	72	ND

*Results are presented in micrograms per cubic meter ($\mu g/m^3$)

OTHER VOCs

- The analytical results of the 11 soil-gas samples collected from the 10 single-stage vapor probes (designated as VP-1 through VP-10) indicated no detectable concentrations of other VOCs except as follows:
    - Concentrations of 1,2,4-Trimethylbenzene ranging from 9 $\mu g/m^3$ to 18 $\mu g/m^3$ in eight of the 11 soil-gas samples (designated as VP-4(5), VP-4(5)DUP, VP-5(5) through VP-10(5)). Concentrations of 1,2,4-Trimethylbenzene were not detected in the three other soil-gas samples (designated as VP-1(5) through VP-3(5)).
    - A concentration of Chloroform at 21 $\mu g/m^3$ in one of the 11 soil-gas samples (designated as VP-4(5)). Concentrations of Chloroform were not detected in the ten other soil-gas samples (designated as VP-1(5) through VP-3(5), VP-4(5)DUP and VP-5(5) through VP-10(5)).

VIII. EVALUATION

The RWQCB – San Francisco Bay Region has developed a method of performing risk assessment for subsurface environmental investigations. The extensive work performed to create the methodology and a detailed description of this method are presented in the document entitled "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final – November 2007." Most recently, the derivation and application of ESLs is presented in a user's guide prepared by the RWQCB - San Francisco Bay Region (Interim Final January 2019 – Rev.2) and the ESLs are listed in the associated tables. This method establishes and presents Environmental Screening Levels (ESLs) for over 100 commonly released and detected contaminants that have been found in subsurface soil, groundwater, sub-slab/soil-gas and indoor air at sites where such releases of hazardous materials may have occurred.

The ESLs were developed to address environmental protection goals. For unauthorized releases into subsurface soil, use of the ESLs were intended to provide protection of human health to direct

exposure from the chemicals of concern, to protect against vapor intrusion into buildings, to protect against leaching of the chemicals of concern to groundwater, protection of terrestrial biota and protection against adverse nuisance conditions. The ESLs are considered conservative. Within certain limits, the risk to human health and the environment can be considered to be insignificant at sites where concentrations of the chemicals of concern do not exceed the established ESLs. Furthermore, the detection of the chemicals of concern at concentrations in excess of an established ESL does not necessarily mean that significant risk exists at the given site. However, such conditions do generally indicate that additional site-specific investigation and evaluation of potential risk and environmental concern is warranted. For the purposes of this investigation, the RWQCB ESLs for residential (Tier 1) and commercial (Tier 2) land use have been used to evaluate the data obtained during this assessment.

A. Historic Agricultural Land Use

Organochlorine Pesticides (OCPs)

When comparing the analytical results of the soil samples collected and analyzed for the 21 OCP constituents during this assessment to the RWQCB (Tier 1) and (Tier 2) ESLs, the results indicate the following:

- The analytical results of the 40 soil samples collected at a depth of two feet bgs and analyzed for OCPs (designated as samples EB-1(2) through EB-40(2)) indicate no detectable concentrations of 19 of the 21 OCP constituents (OCPs identified as Aldrin, α-BHC, β-BHC, γ-BHC (Lindane), δ-BHC, γ-Chlordane, α-Chlordane, 4,4'-DDD, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin aldehyde, Endrin ketone, Heptachlor, Heptachlor epoxide, Methoxychlor and Toxaphene).

    - With regard to 18 of these 19 OCP constituents, the laboratory reporting limits are less than the RWQCB Tier 1 ESLs; and as such, the analytical results of these 18 OCP constituents are all less than the RWQCB Tier 1 ESLs.

    - With regard to one of these 19 OCP constituents (Heptachlor epoxide), this OCP constituent has RWQCB Tier 1 ESL of 0.18 µg/Kg; a Tier 2 ESL of 6.0 µg/Kg; and a residential Direct Exposure Human Health (Cancer Risk) ESL of 62 µg/Kg. The analytical laboratory reporting limit of Heptachlor epoxide is 0.4 µg/Kg; which is greater than the Tier 1 ESL and significantly less than the Tier 2 ESL and the residential Direct Exposure Human Health ESL.

- With regard to two of the 21 OCP (4,4'-DDE and4,4'-DDT) detected in the 40 soil samples collected from a depth of two feet bgs, the results indicate the following:

    - 4,4'-DDE: twelve (12) of the 40 soil samples (designated as samples EB-1(2), EB-3(2), EB-4(2), EB-13(2) through EB-15(2), EB-18(2), EB-22(2) EB-26(2), and EB-31(2) through EB-33(2)) indicate concentrations of 4,4'-DDE ranging from 1.1 µg/Kg to 17.4 µg/Kg, which are less than the Tier 1 ESL of 330 µg/Kg

and the Tier 2 ESL of 650 µg/Kg. 4,4'-DDE was not detected in the 28 other soil samples.

- 4,4'-DDT: two (2) of the 40 soil samples (designated as samples EB-13(2) and EB-31(2)) indicate concentrations of 4,4'-DDT at 2.4 µg/Kg and 2.2 µg/Kg respectively, which are greater than the Tier 1 ESL of 1.1 µg/Kg but significantly less than the Tier 2 ESL of 5,600 µg/Kg. In addition, when comparing the concentrations of 4,4'-DDT detected in the soil samples to residential (cancer risk) Direct Exposure Human Health Risk ESL for 4,4'-DDT (1.9 mg/Kg or 1,900 µg/Kg), the concentrations of 4,4'-DDT detected in the soil samples are significantly less than this ESL. 4,4'-DDT was not detected in the 38 other soil samples.

Arsenic

Arsenic has RWQCB (Tier 1) and (Tier 2) ESLs (0.067 mg/Kg and 0.31 mg/Kg, respectively) that are less than the analytical laboratory reporting limit of 5.0 mg/Kg. Therefore, the analytical laboratory results of Arsenic cannot be compared to the RWQCB ESLs.

The California Department of Toxic Substances Control (DTSC) has published Human Health Risk Assessment (HHRA) Note 11 regarding ambient levels for Arsenic in soils in five Southern California counties: Los Angeles, Orange, Riverside, San Bernardino, and San Diego. Specifically, DTSC established a regional ambient screening level of 12 milligrams per kilogram (mg/kg) for Arsenic, which is approximately 100 times the risk-based screening level for residential soil of 0.11 mg/kg developed by DTSC. This regional ambient level was previously established by DTSC as the upper bound of Arsenic in soil from multiple Los Angeles Unified School District sites, and DTSC formally established this ambient level for Southern California with the publication of HHRA Note 11.

The analytical laboratory results of the soil samples collected during this investigation indicate the following:

- Two of the 40 soil samples collected at a depth of two feet bgs (designated as EB-3(2), and EB-24(2)) indicate concentrations of Arsenic at 5.1 mg/Kg and 5.3 mg/Kg, respectively. The 38 other samples collected at a depth of two feet bgs indicate no detectable concentrations of Arsenic (laboratory reporting limit of 5.0 mg/Kg). Therefore, the analytical results of all 40 soil samples collected and analyzed are less than the DTSC ambient screening level of 12 mg/Kg.

Lead

With regard to Lead, the RWQCB ESLs for soil are as follows:

- Lead – RWQCB ESL, Tier 1 (residential) – 32 mg/kg
- Lead – RWQCB ESL, Tier 2 (commercial) – 32 mg/kg

- Lead – RWQCB ESL, Direct Exposure Human Health Risk – 82 mg/Kg

As presented in this report, the analytical results of all 40 soil samples collected from exploratory borings EB-1 through EB-40 at a depth of two feet bgs, indicate concentrations of Lead ranging from 2.6 mg/Kg to 5.6 mg/Kg and are therefore less than the RWQCB Tier 1 and Tier 2 ESLs for residential and commercial land use.

B. Vapor Encroachment Condition

For the purposes of this investigation, the RWQCB ESLs for both residential (Tier 1) and commercial (Tier 2) land use have been used to evaluate the soil-gas data obtained during this assessment.

As presented in this report, 10 soil-gas samples were collected from the 10 single-stage vapor probes (designated as VP-1 through VP-10) and one duplicate soil-gas sample was collected from vapor probe VP-4 in January of 2023 by KCE Matrix. The concentrations of the contaminants of concern detected in the soil-gas samples collected in January of 2023 are summarized in the table below:

Sample ID	TPH-GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
VP-1(5)	ND	ND	12	ND	ND	ND
VP-2(5)	ND	ND	21	ND	ND	ND
VP-3(5)	ND	ND	40	14	28	ND
VP-4(5)	ND	ND	46	22	56	ND
VP-4(5)DUP	ND	ND	44	19	46	ND
VP-5(5)	ND	ND	25	ND	17	ND
VP-6(5)	ND	ND	39	8	38	ND
VP-7(5)	ND	ND	88	18	69	ND
VP-8(5)	ND	ND	62	14	56	ND
VP-9(5)	ND	ND	56	11	59	ND
VP-10(5)	ND	ND	74	17	72	ND
Tier 1 ESLs (Residential)	3,300	3.2	10,000	37	3,500	360
Tier 2 ESLs (Commercial/Industrial)	3,300	14	44,000	160	15,000	1,600

*Results are presented in micrograms per cubic meter ($\mu g/m^3$)

When comparing the analytical results of the subsurface soil-gas samples collected and analyzed during this assessment to the RWQCB ESLs as listed above, the results indicate the following:

- For TPH-GRO, Benzene and MTBE – All 11 soil-gas samples (designated as VP-1(5) through VP-10(5) and VP-4(5)DUP) collected and analyzed at a depth of five feet bgs

indicate no detectable concentrations of these contaminants of concern; and are therefore all less than the RWQCB Tier 1 ESL.

- For Toluene, Ethylbenzene and Total Xylenes – The 11 soil-gas samples (designated as VP-1(5) through VP-10(5) and VP-4(5)DUP) collected and analyzed at a depth of five feet bgs indicate various concentrations of these contaminants of concern; and the concentrations detected are all less than the RWQCB Tier 1 ESLs.

- For VOCs (other than BTEX and MTBE) – The 11 soil-gas samples collected from the 10 single-stage vapor probes indicate no detectable concentrations of VOCs for a majority of the samples and constituents analyzed. Of the few concentrations of these other VOCs that were detected, none were greater than the Tier 1 ESLs, except for Chloroform which was detected in only one of the 11 soil-gas samples collected (sample designated as VP-4(5) at a concentration of 21 µg/m^3. This concentration of Chloroform detected is similar to and only slightly greater than the Tier 1 and Tier 2 ESLs of 18 µg/m^3 for Chloroform. In addition, the duplicate sample collected from this same vapor probe (sample designated as VP-4(5)DUP) indicates no detectable concentration of Chloroform.

IX. CONCLUSIONS

A. Historic Agricultural Land Use

Organochlorine Pesticides (OCPs)

With regard to OCPs: Based on the subsurface environmental site assessment work performed and the evaluation of the data as presented in this report, two of the 21 OCP constituents were detected at various concentrations in subsurface soil at depths of two feet bgs. The concentrations of one of these two OCP constituents (4,4'-DDE) were below the RWQCB Tier 1 and Tier 2 ESLs. The concentrations of the one other OCP constituent (4,4'-DDE) were greater than the RWQCB Tier 1 ESL, but less than the Tier 2 and the RWQCB Direct Exposure Human Health Risk ESLs. Based on these results, KCE Matrix recommends no further subsurface soil assessment and/or remediation work in relation to OCPs for the subject site.

Arsenic

With regard to Arsenic: Based on the subsurface environmental site assessment work performed and the evaluation of the data as presented in this report, Arsenic was detected in only two of the 40 soil samples collected and analyzed. The concentrations of Arsenic detected are below the DTSC ambient screening level of 12 mg/Kg. Based on these results, KCE Matrix recommends no further subsurface soil assessment and/or remediation work in relation to Arsenic for the subject site.

Lead

With regard to Lead: Based on the subsurface environmental site assessment work performed and the evaluation of the data as presented in this report, Lead was detected at various concentrations in the 40 soil samples collected and analyzed. The concentrations of Lead in all 40 soil samples are less than the RWQCB Tier 1 and Tier 2 ESLs. Based on these results, KCE Matrix recommends no further subsurface soil assessment and/or remediation work in relation to Lead for the subject site.

B. Vapor Encroachment Condition

Based on the subsurface environmental site assessment work performed and the evaluation of the data as presented in this report, the results of soil-gas samples collected and analyzed indicate concentrations of the contaminants of concern that are less than the RWQCB Tier 1 and Tier 2 ESLs. In addition, the analytical results of the soil samples collected during this investigation indicate concentrations that are less than the RWQCB Tier 1 and Tier 2 ESLs. Based on these results, the Vapor Encroachment Conditions for the subject property has been adequately assessed and KCE Matrix recommends no further subsurface soil and/or soil-gas assessment and/or remediation for the subject site.

C. Conclusions

Based on the results of the subsurface ESA performed as presented in this report with regard to pesticides, Arsenic and Lead; the REC identified in the Phase I ESA report designated as (KCE-2022-454E-R1) dated December 6, 2022 as prepared by KCE Matrix, has been adequately assessed and KCE Matrix no longer considers the historical agricultural land use at the subject property as a REC.

Based on the results of the subsurface ESA performed as presented in this report, the Vapor Encroachment Condition identified in the Phase I ESA report designated as (KCE-2022-454E-R1) dated December 6, 2022 as prepared by KCE Matrix, has been adequately assessed and KCE Matrix concludes that a Vapor Encroachment Condition does not exist at the subject property.

X. LIMITATIONS

Site-specific subsurface conditions such as soil deposits and rock formations may vary in thickness, lithology, saturation strength and other properties across any site beyond what available documentation indicates. Therefore, it is possible that undocumented or concealed improvements or alterations to the property could exist beyond the inquiry of the activities conducted during this site assessment and associated remedial activities. In addition, environmental changes, either naturally occurring or artificially induced, may cause changes or alterations (which can be significant) to the property as compared to the conditions found at the time that this assessment was conducted.

Based on the best available investigative technologies, no amount of assessment can guarantee that the subject property does not contain contaminants or hazardous substances. The activities conducted during this limited investigation cannot identify all potential concerns for the subject property, and do not eliminate the possibility that the subject property is completely free of environmental concerns.

KCE Matrix has analyzed and evaluated the information collected during this investigation and associated remedial action using what we believe to be the currently applicable engineering techniques and principles. KCE Matrix assumes no liability from other parties involved in losses sustained as a result of decisions made based on interpretations of this report. KCE Matrix makes no warranty, either expressed or implied, regarding the work conducted, except that our services were performed in accordance with the generally accepted professional principles and practices existing for such work.

This report and all information obtained during this site assessment and associated remedial activities are considered confidential and will not be released without written permission by the owner of the subject property, the owner authorized entity conducting this assessment, or as required by law. The owner of the subject property is typically responsible for mitigation of contamination, corrective or remedial action, and disclosure of any information obtained during this site assessment and associated remedial activities or information contained in this report.

XI. SIGNATURE AND CERTIFICATION

KCE Matrix appreciates the opportunity to have provided services for this project. Should you have any questions regarding this report and the work performed, please do not hesitate to contact our office at 818-559-5500.

Sincerely,

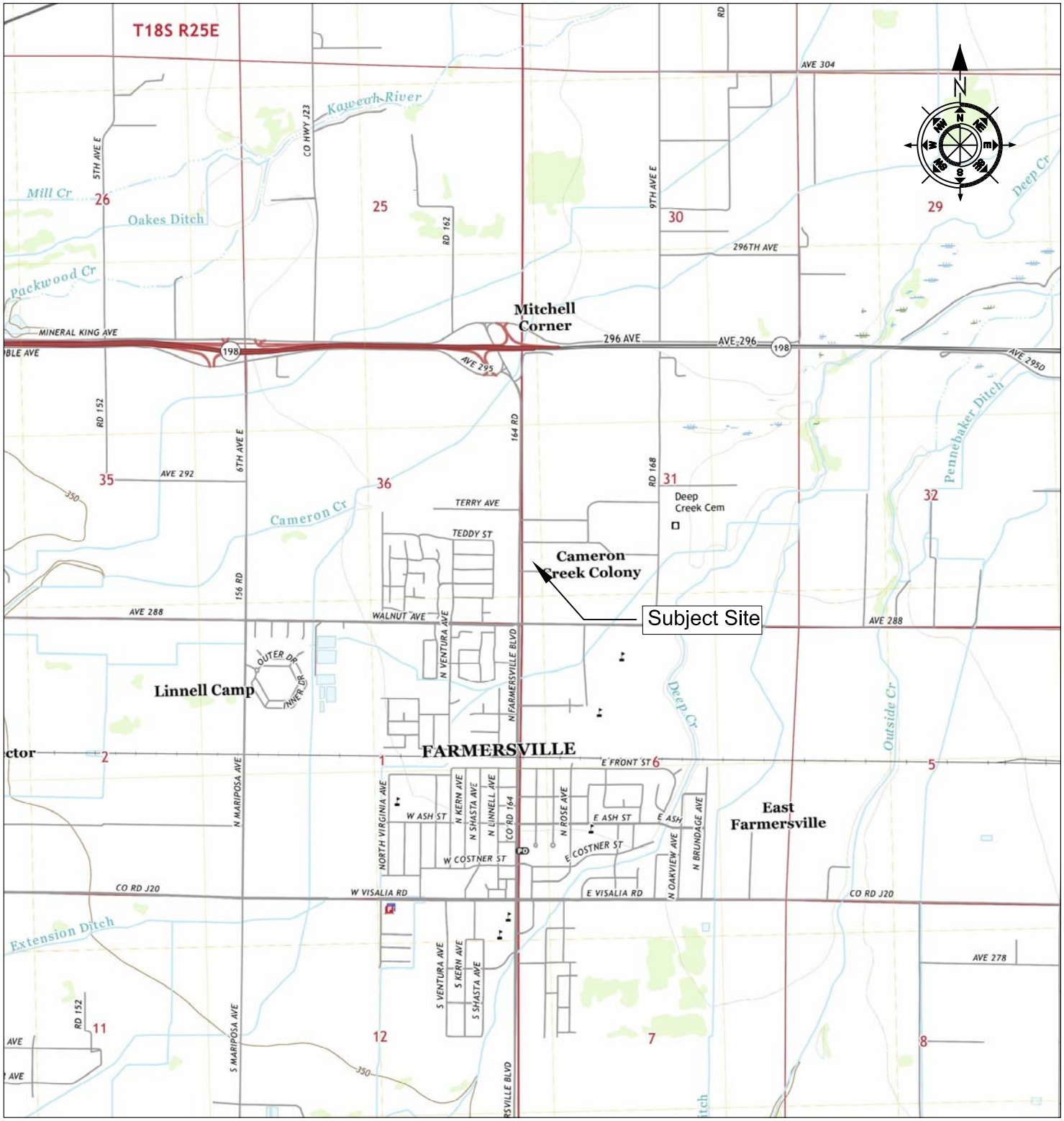
KCE Matrix, Inc.

Aram B. Kaloustian, P.E.
Project Manager

License No. C52428
Expiration Date: 12/31/24

APPENDIX A

(FIGURES 1 AND 2)



Map Center: Latitude 36.3153, Longitude -119.2059
Subject site is located on the Exeter quadrangle (Map Source Year: 2021)

0 0.5 1.0
Approx. scale Mile

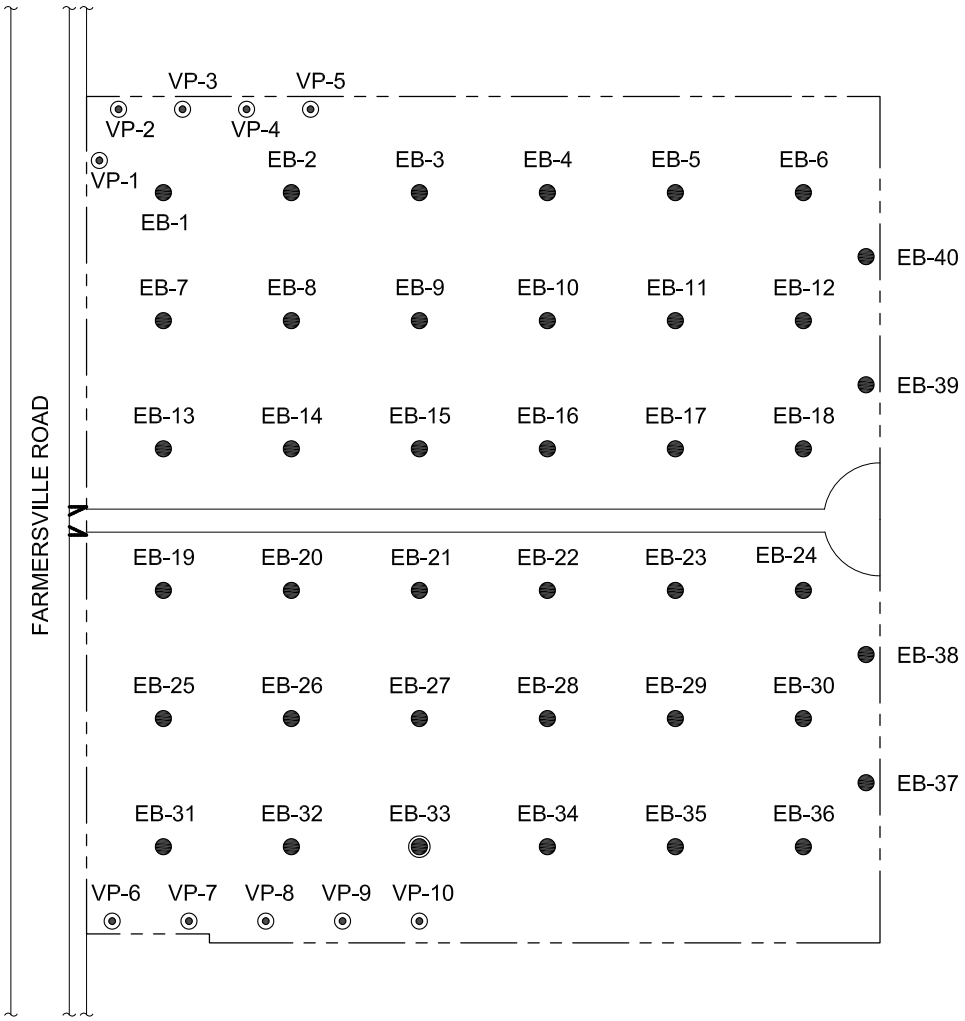
LOCATION MAP

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

FIGURE 1



LEGEND

- Subsurface Vapor Probe (On January 19 and 20, 2023)
- Soil Boring (Between January 11 and 13, 2023)

0 150 300

Approx. scale feet

SITE PLAN - EXPLORATORY SOIL BORING AND SUBSURFACE VAPOR PROBE LOCATIONS

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

FIGURE 2

APPENDIX B

(TABLES 1 THROUGH 4)

KCE-2022-454E-R2

TABLE 1

ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 11, 12 and 13, 2023 by KCE Matrix, Inc.)

Sample Identification	Depth	Organochlorine Pesticides (EPA 8081A)																				
		Aldrin	α-BHC	β-BHC	γ-BHC (Lindane)	δ-BHC	γ-Chlordane	α-Chlordane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
	(Feet)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)
EB-1(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-2(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-3(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-4(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-5(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-6(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-7(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-8(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-9(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-10(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-11(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-12(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-13(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	17.4	**2.4**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-14(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-15(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-16(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-17(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-18(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-19(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-20(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-21(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-22(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-23(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-24(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-25(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-26(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-27(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-28(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-29(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-30(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-31(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	8.5	**2.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-32(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-33(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-34(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-35(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-36(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-37(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-38(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-39(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-40(2)	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RWQCB Tier 1 ESL's (µg/Kg)		2.4	-	-	7.4	-	8.5	8.5	2700	330	1.1	0.46	9.8	9.8	9.8	1.1	1.1	1.1	120	0.18	13	510
RWQCB Tier 2 ESL's (µg/Kg)		100	-	-	7.4	-	8.5	8.5	12,000	650	5,600	6.3	9.8	9.8	9.8	1.1	1.1	1.1	500	6.0	13	2,200

Bold result indicates concentration in excess of RWQCB Tier 1 ESL

ND = Not Detected at or above Reporting Limit

µg/Kg = micrograms per Kilogram

TABLE 2

ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES

Vacant Land
APN: 111-290-015-000, Farmersville, California 93223
(Soil samples collected on January 11, 12 and 13, 2023 by KCE Matrix, Inc.)

Sample Identification	Depth (Feet)	EPA 6010B by 3050B Arsenic (mg/kg)
EB-1(2)	2	ND
EB-2(2)	2	ND
EB-3(2)	2	**5.1**
EB-4(2)	2	ND
EB-5(2)	2	ND
EB-6(2)	2	ND
EB-7(2)	2	ND
EB-8(2)	2	ND
EB-9(2)	2	ND
EB-10(2)	2	ND
EB-11(2)	2	ND
EB-12(2)	2	ND
EB-13(2)	2	ND
EB-14(2)	2	ND
EB-15(2)	2	ND
EB-16(2)	2	ND
EB-17(2)	2	ND
EB-18(2)	2	ND
EB-19(2)	2	ND
EB-20(2)	2	ND
EB-21(2)	2	ND
EB-22(2)	2	ND
EB-23(2)	2	ND
EB-24(2)	2	**5.3**
EB-25(2)	2	ND
EB-26(2)	2	ND
EB-27(2)	2	ND
EB-28(2)	2	ND
EB-29(2)	2	ND
EB-30(2)	2	ND
EB-31(2)	2	ND
EB-32(2)	2	ND
EB-33(2)	2	ND
EB-34(2)	2	ND
EB-35(2)	2	ND
EB-36(2)	2	ND
EB-37(2)	2	ND
EB-38(2)	2	ND
EB-39(2)	2	ND
EB-40(2)	2	ND

RWQCB Tier 1 ESLs (mg/Kg)	0.067
RWQCB Tier 2 ESLs (mg/Kg)	0.31

Bold result indicates concentration in excess of RWQCB Tier 1 ESL

ND = Not Detected
mg/kg = milligrams per Kilogram

TABLE 3

ANALYTICAL LABORATORY RESULTS FOR SOIL SAMPLES

Vacant Land
APN: 111-290-015-000, Farmersville, California 93223
(Soil samples collected on January 11, 12 and 13, 2023 by KCE Matrix, Inc.)

Sample Identification	Depth (Feet)	EPA 6010B by 3050B Lead (mg/kg)
EB-1 (2)	2	3.4
EB-2 (2)	2	2.6
EB-3 (2)	2	4.3
EB-4 (2)	2	2.9
EB-5 (2)	2	3.5
EB-6 (2)	2	3.1
EB-7 (2)	2	3.1
EB-8 (2)	2	2.8
EB-9 (2)	2	3.9
EB-10 (2)	2	3.6
EB-11 (2)	2	2.9
EB-12 (2)	2	2.7
EB-13 (2)	2	5.6
EB-14 (2)	2	2.6
EB-15 (2)	2	2.9
EB-16 (2)	2	3.9
EB-17 (2)	2	3.1
EB-18 (2)	2	4.3
EB-19 (2)	2	3.0
EB-20 (2)	2	3.2
EB-21 (2)	2	3.2
EB-22 (2)	2	2.9
EB-23 (2)	2	3.5
EB-24 (2)	2	3.5
EB-25 (2)	2	3.3
EB-26 (2)	2	3.5
EB-27 (2)	2	2.8
EB-28 (2)	2	3.1
EB-29 (2)	2	3.4
EB-30 (2)	2	3.3
EB-31 (2)	2	4.7
EB-32 (2)	2	3.8
EB-33 (2)	2	3.4
EB-34 (2)	2	3.2
EB-35 (2)	2	3.1
EB-36 (2)	2	3.1
EB-37 (2)	2	3.4
EB-38 (2)	2	3.5
EB-39 (2)	2	3.2
EB-40 (2)	2	3.0

RWQCB Tier 1 ESLs (mg/Kg)	32
RWQCB Tier 2 ESLs (mg/Kg)	32

Bold result indicates concentration in excess of RWQCB Tier 1 ESL

ND = Not Detected
mg/kg = milligrams per kilogram

TABLE 4

ANALYTICAL LABORATORY RESULTS FOR SUBSURFACE SOIL VAPOR SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 20, 2023 by KCE Matrix, Inc.)

Sample ID / Depth (ft) / Organics	VP-1(5)	VP-2(5)	VP-3(5)	VP-4(5)	VP-4(5)DUP	VP-5(5)
	5	5	5	5	5	5
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
Benzene	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	21	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
Freon 12	ND	ND	ND	ND	ND	ND
Freon 11	ND	ND	ND	ND	ND	ND
Freon 113	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	14	22	19	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Toluene	12	21	40	46	44	25
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	18	14	10
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND
m,p-Xylene	ND	ND	28	44	36	17

TPH = Total Petroleum Hydrocarbons

ND = Not Detected at or above Reporting Limit

mg/Kg = milligrams per Kilogram

TABLE 4

ANALYTICAL LABORATORY RESULTS FOR SUBSURFACE SOIL VAPOR SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 20, 2023 by KCE Matrix, Inc.)

Sample ID / Depth (ft) / Organics	VP-1(5)	VP-2(5)	VP-3(5)	VP-4(5)	VP-4(5)DUP	VP-5(5)
	5	5	5	5	5	5
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
o-Xylene	ND	ND	ND	12	10	ND
Methyl-tert-butylether	ND	ND	ND	ND	ND	ND
Ethyl-tert-butylether	ND	ND	ND	ND	ND	ND
Di-isopropylether	ND	ND	ND	ND	ND	ND
tert-amylmethylether	ND	ND	ND	ND	ND	ND
tert-Butylalcohol	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (C4-C12)	ND	ND	ND	ND	ND	ND
n-Hexane (LCC)	ND	ND	ND	ND	ND	ND
n-Pentane (LCC)	ND	ND	ND	ND	ND	ND
Isopropanol (LCC)	ND	ND	ND	ND	ND	ND
n-Propanol (LCC)	ND	ND	ND	ND	ND	ND

TPH = Total Petroleum Hydrocarbons
ND = Not Detected at or above Reporting Limit
mg/Kg = milligrams per Kilogram

TABLE 4

ANALYTICAL LABORATORY RESULTS FOR SUBSURFACE SOIL VAPOR SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 20, 2023 by KCE Matrix, Inc.)

Sample ID / Depth (ft) / Organics	VP-6(5)	VP-7(5)	VP-8(5)	VP-9(5)	VP-10(5)
	5	5	5	5	5
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
Freon 12	ND	ND	ND	ND	ND
Freon 11	ND	ND	ND	ND	ND
Freon 113	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
Ethylbenzene	8	18	14	11	17
Isopropylbenzene	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND
Toluene	39	88	62	56	74
1,1,1-Trichloroethane	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	10	13	9	11	13
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND
m,p-Xylene	29	52	42	47	56

TPH = Total Petroleum Hydrocarbons

ND = Not Detected at or above Reporting Limit

mg/Kg = milligrams per Kilogram

TABLE 4

ANALYTICAL LABORATORY RESULTS FOR SUBSURFACE SOIL VAPOR SAMPLES

Vacant Land

APN: 111-290-015-000, Farmersville, California 93223

(Soil samples collected on January 20, 2023 by KCE Matrix, Inc.)

Sample ID / Depth (ft) / Organics	VP-6(5)	VP-7(5)	VP-8(5)	VP-9(5)	VP-10(5)
	5	5	5	5	5
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
o-Xylene	9	17	14	12	16
Methyl-tert-butylether	ND	ND	ND	ND	ND
Ethyl-tert-butylether	ND	ND	ND	ND	ND
Di-isopropylether	ND	ND	ND	ND	ND
tert-amylmethylether	ND	ND	ND	ND	ND
tert-Butylalcohol	ND	ND	ND	ND	ND
Gasoline Range Organics (C4-C12)	ND	ND	ND	ND	ND
n-Hexane (LCC)	ND	ND	ND	ND	ND
n-Pentane (LCC)	ND	ND	ND	ND	ND
Isopropanol (LCC)	ND	ND	ND	ND	ND
n-Propanol (LCC)	ND	ND	ND	ND	ND

TPH = Total Petroleum Hydrocarbons
ND = Not Detected at or above Reporting Limit
mg/Kg = milligrams per Kilogram

APPENDIX C

(LABORATORY REPORTS
AND CHAIN OF CUSTODY DOCUMENTATION)

JONES ENVIRONMENTAL, INC.

714-449-9937
562-646-1611

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

30 January 2023

Viken Melkonian
KCE Matrix
1648 West Glenoaks Blvd., Ste. 102
Glendale, CA 91201

Re: KCE-2022-454E

Enclosed are the results of analyses for samples received by the laboratory on 01/23/23. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Colby Wakeman
Lab Director

JONES ENVIRONMENTAL, INC.

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VP-1(5)	JEI230058-01	Soil Gas	01/20/2023 08:38	01/23/2023 13:21
VP-2(5)	JEI230058-02	Soil Gas	01/20/2023 08:54	01/23/2023 13:21
VP-3(5)	JEI230058-03	Soil Gas	01/20/2023 09:11	01/23/2023 13:21
VP-4(5)	JEI230058-04	Soil Gas	01/20/2023 09:28	01/23/2023 13:21
VP-4(5) DUP	JEI230058-05	Soil Gas	01/20/2023 09:44	01/23/2023 13:21
VP-5(5)	JEI230058-06	Soil Gas	01/20/2023 09:45	01/23/2023 13:21
VP-6(5)	JEI230058-07	Soil Gas	01/20/2023 10:19	01/23/2023 13:21
VP-7(5)	JEI230058-08	Soil Gas	01/20/2023 10:36	01/23/2023 13:21
VP-8(5)	JEI230058-09	Soil Gas	01/20/2023 10:53	01/23/2023 13:21
VP-9(5)	JEI230058-10	Soil Gas	01/20/2023 11:10	01/23/2023 13:21
VP-10(5)	JEI230058-11	Soil Gas	01/20/2023 11:26	01/23/2023 13:21

Jones Environmental, Inc.

Colby Wakeman
Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

DETECTIONS SUMMARY

Sample ID: VP-1(5) **Laboratory ID:** JEI230058-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	12	8	µg/m3	EPA 8260	

Sample ID: VP-2(5) **Laboratory ID:** JEI230058-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	21	8	µg/m3	EPA 8260	

Sample ID: VP-3(5) **Laboratory ID:** JEI230058-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	14	8	µg/m3	EPA 8260	
Toluene	40	8	µg/m3	EPA 8260	
m,p-Xylene	28	16	µg/m3	EPA 8260	

Sample ID: VP-4(5) **Laboratory ID:** JEI230058-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloroform	21	8	µg/m3	EPA 8260	
Ethylbenzene	22	8	µg/m3	EPA 8260	
Toluene	46	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	18	8	µg/m3	EPA 8260	
m,p-Xylene	44	16	µg/m3	EPA 8260	
o-Xylene	12	8	µg/m3	EPA 8260	

Sample ID: VP-4(5) DUP **Laboratory ID:** JEI230058-05

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	19	8	µg/m3	EPA 8260	
Toluene	44	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	14	8	µg/m3	EPA 8260	
m,p-Xylene	36	16	µg/m3	EPA 8260	

Jones Environmental, Inc.

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Colby Wakeman
Lab Director

JONES ENVIRONMENTAL, INC.

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

DETECTIONS SUMMARY

Sample ID: VP-4(5) DUP **Laboratory ID:** JEI230058-05

Analyte	Result	Reporting Limit	Units	Method	Notes
o-Xylene	10	8	µg/m3	EPA 8260	

Sample ID: VP-5(5) **Laboratory ID:** JEI230058-06

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	25	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	10	8	µg/m3	EPA 8260	
m,p-Xylene	17	16	µg/m3	EPA 8260	

Sample ID: VP-6(5) **Laboratory ID:** JEI230058-07

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	8	8	µg/m3	EPA 8260	
Toluene	39	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	10	8	µg/m3	EPA 8260	
m,p-Xylene	29	16	µg/m3	EPA 8260	
o-Xylene	9	8	µg/m3	EPA 8260	

Sample ID: VP-7(5) **Laboratory ID:** JEI230058-08

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	18	8	µg/m3	EPA 8260	
Toluene	88	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	13	8	µg/m3	EPA 8260	
m,p-Xylene	52	16	µg/m3	EPA 8260	
o-Xylene	17	8	µg/m3	EPA 8260	

Sample ID: VP-8(5) **Laboratory ID:** JEI230058-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	14	8	µg/m3	EPA 8260	

Jones Environmental, Inc.

Colby Wakeman
Lab Director

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11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

DETECTIONS SUMMARY

Sample ID: VP-8(5) **Laboratory ID:** JEI230058-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	62	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	9	8	µg/m3	EPA 8260	
m,p-Xylene	42	16	µg/m3	EPA 8260	
o-Xylene	14	8	µg/m3	EPA 8260	

Sample ID: VP-9(5) **Laboratory ID:** JEI230058-10

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	11	8	µg/m3	EPA 8260	
Toluene	56	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	11	8	µg/m3	EPA 8260	
m,p-Xylene	47	16	µg/m3	EPA 8260	
o-Xylene	12	8	µg/m3	EPA 8260	

Sample ID: VP-10(5) **Laboratory ID:** JEI230058-11

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	17	8	µg/m3	EPA 8260	
Toluene	74	8	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	13	8	µg/m3	EPA 8260	
m,p-Xylene	56	16	µg/m3	EPA 8260	
o-Xylene	16	8	µg/m3	EPA 8260	

Jones Environmental, Inc.

Colby Wakeman
Lab Director

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JONES ENVIRONMENTAL, INC.

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714-449-9937 PHONE
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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-1(5)
JEI230058-01(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	12	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-1(5)
JEI230058-01(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	ND	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	

Surrogate: Toluene-d8	*101.38%*	*60 - 140*
Surrogate: Dibromofluoromethane	*85.10%*	*60 - 140*
Surrogate: 4-Bromofluorobenzene	*97.37 %*	*60 - 140*

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-2(5)

JEI230058-02(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	21	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-2(5)
JEI230058-02(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	ND	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*101.75 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*86.29 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*98.57 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-3(5)
JEI230058-03(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	14	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	40	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-3(5)
JEI230058-03(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	28	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*100.27 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*88.12 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*96.37 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-4(5)

JEI230058-04(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	21	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	22	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	46	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	18	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-4(5)
JEI230058-04(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	44	16	µg/m3	"	"		"	"	
o-Xylene	12	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.46 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*90.26 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*99.45 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-4(5) DUP

JEI230058-05(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	19	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	44	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	14	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-4(5) DUP

JEI230058-05(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301075		01/23/23	EPA 8260	
m,p-Xylene	36	16	µg/m3	"	"		"	"	
o-Xylene	10	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*99.91 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*84.44 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*94.66 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-5(5)
JEI230058-06(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	ND	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	25	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	10	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-5(5)
JEI230058-06(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	17	16	µg/m3	"	"		"	"	
o-Xylene	ND	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.79 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*93.61 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*101.68 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-6(5)

JEI230058-07(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	8	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	39	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	10	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-6(5)
JEI230058-07(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	29	16	µg/m3	"	"		"	"	
o-Xylene	9	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.28 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*97.07 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*102.11 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-7(5)

JEI230058-08(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	18	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	88	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	13	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-7(5)

JEI230058-08(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	52	16	µg/m3	"	"		"	"	
o-Xylene	17	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*97.50 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*96.49 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*101.48 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-8(5)

JEI230058-09(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	14	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	62	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	9	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-8(5)
JEI230058-09(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	42	16	µg/m3	"	"		"	"	
o-Xylene	14	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.97 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*94.40 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*102.87 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-9(5)
JEI230058-10(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	11	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	56	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	11	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-9(5)
JEI230058-10(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	47	16	µg/m3	"	"		"	"	
o-Xylene	12	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*99.48 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*91.66 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*102.37 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-10(5)
JEI230058-11(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Benzene	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
Bromodichloromethane	ND	8	µg/m3	"	"		"	"	
Bromoform	ND	8	µg/m3	"	"		"	"	
n-Butylbenzene	ND	12	µg/m3	"	"		"	"	
sec-Butylbenzene	ND	12	µg/m3	"	"		"	"	
tert-Butylbenzene	ND	12	µg/m3	"	"		"	"	
Carbon tetrachloride	ND	8	µg/m3	"	"		"	"	
Chlorobenzene	ND	8	µg/m3	"	"		"	"	
Chloroform	ND	8	µg/m3	"	"		"	"	
Dibromochloromethane	ND	8	µg/m3	"	"		"	"	
1,2-Dibromoethane (EDB)	ND	8	µg/m3	"	"		"	"	
1,2-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,3-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
1,4-Dichlorobenzene	ND	16	µg/m3	"	"		"	"	
Freon 12	ND	16	µg/m3	"	"		"	"	
Freon 11	ND	16	µg/m3	"	"		"	"	
Freon 113	ND	16	µg/m3	"	"		"	"	
1,1-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,2-Dichloroethane	ND	8	µg/m3	"	"		"	"	
1,1-Dichloroethene	ND	8	µg/m3	"	"		"	"	
cis-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
trans-1,2-Dichloroethene	ND	8	µg/m3	"	"		"	"	
Ethylbenzene	17	8	µg/m3	"	"		"	"	
Isopropylbenzene	ND	8	µg/m3	"	"		"	"	
4-Isopropyltoluene	ND	8	µg/m3	"	"		"	"	
Methylene chloride	ND	8	µg/m3	"	"		"	"	
Naphthalene	ND	40	µg/m3	"	"		"	"	
n-Propylbenzene	ND	8	µg/m3	"	"		"	"	
Styrene	ND	8	µg/m3	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	16	µg/m3	"	"		"	"	
Tetrachloroethene	ND	8	µg/m3	"	"		"	"	
Toluene	74	8	µg/m3	"	"		"	"	
1,1,1-Trichloroethane	ND	8	µg/m3	"	"		"	"	
1,1,2-Trichloroethane	ND	8	µg/m3	"	"		"	"	
Trichloroethene	ND	8	µg/m3	"	"		"	"	
1,2,4-Trimethylbenzene	13	8	µg/m3	"	"		"	"	
1,3,5-Trimethylbenzene	ND	8	µg/m3	"	"		"	"	

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

VP-10(5)
JEI230058-11(Soil Gas)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by EPA 8260									
Vinyl chloride	ND	8	µg/m3	1	QC2301076		01/23/23	EPA 8260	
m,p-Xylene	56	16	µg/m3	"	"		"	"	
o-Xylene	16	8	µg/m3	"	"		"	"	
Methyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Ethyl-tert-butylether	ND	40	µg/m3	"	"		"	"	
Di-isopropylether	ND	40	µg/m3	"	"		"	"	
tert-amylmethylether	ND	40	µg/m3	"	"		"	"	
tert-Butylalcohol	ND	400	µg/m3	"	"		"	"	
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3	"	"		"	"	
n-Hexane (LCC)	ND	80	µg/m3	"	"		"	"	
n-Pentane (LCC)	ND	80	µg/m3	"	"		"	"	
Isopropanol (LCC)	ND	80	µg/m3	"	"		"	"	
n-Propanol (LCC)	ND	80	µg/m3	"	"		"	"	
Surrogate: Toluene-d8	*98.19 %*	*60 - 140*							
Surrogate: Dibromofluoromethane	*98.29 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene	*102.79 %*	*60 - 140*							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
CCV 1										
Benzene	10	8	%	10		104	80 - 120		120	
Chlorobenzene	10	8	%	10		99	80 - 120		120	
1,1-Dichloroethene	8	8	%	10		81	80 - 120		120	
cis-1,2-Dichloroethene	10	8	%	10		96	80 - 120		120	
Ethylbenzene	10	8	%	10		97	80 - 120		120	
Tetrachloroethene	10	8	%	10		97	80 - 120		120	
Toluene	10	8	%	10		103	80 - 120		120	
1,1,1-Trichloroethane	9	8	%	10		87	80 - 120		120	
Trichloroethene	9	8	%	10		91	80 - 120		120	
Vinyl chloride	9	8	%	10		93	80 - 120		120	
LCS 1										
Benzene	2.89	8	%	2.5		116	70 - 130			
Chlorobenzene	2.89	8	%	2.5		116	70 - 130			
1,1-Dichloroethene	2.10	8	%	2.5		84	60 - 140			
cis-1,2-Dichloroethene	2.49	8	%	2.5		100	70 - 130			
Ethylbenzene	2.78	8	%	2.5		111	70 - 130			
Tetrachloroethene	2.86	8	%	2.5		114	70 - 130			
Toluene	3.04	8	%	2.5		122	70 - 130			
1,1,1-Trichloroethane	2.18	8	%	2.5		87	70 - 130			
Trichloroethene	2.43	8	%	2.5		97	70 - 130			
Vinyl chloride	1.52	8	%	2.5		61	60 - 140			
Surrogate: Toluene-d8		*103.94 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*88.11 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*96.36 %*	*60 - 140*							
LCSD 1										
Benzene	2.83	8	%	2.5		113		2.00		
Chlorobenzene	2.77	8	%	2.5		111		4.10		
1,1-Dichloroethene	2.30	8	%	2.5		92		9.07		
cis-1,2-Dichloroethene	2.38	8	%	2.5		95		4.67		

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
LCSD 1										
Ethylbenzene	2.85	8	%	2.5		114		2.40		
Tetrachloroethene	2.73	8	%	2.5		109		4.52		
Toluene	2.92	8	%	2.5		117		3.95		
1,1,1-Trichloroethane	2.13	8	%	2.5		85		2.20		
Trichloroethene	2.37	8	%	2.5		95		2.46		
Vinyl chloride	1.56	8	%	2.5		63		2.82		
Surrogate: Toluene-d8		*104.81 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*85.90 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*99.48 %*	*60 - 140*							
Method Blank 1										
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							
tert-Butylbenzene	ND	12	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
1,2-Dichlorobenzene	ND	16	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Methylene chloride	ND	8	µg/m3							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
Method Blank 1										
Naphthalene	ND	40	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Styrene	ND	8	µg/m3							
1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
Dibromomethane	ND	8	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
Isopropanol (LCC)	ND	80	µg/m3							
n-Propanol (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		*104.34 %*		*60 - 140*						
Surrogate: Dibromofluoromethane		*90.89 %*		*60 - 140*						
Surrogate: 4-Bromofluorobenzene		*95.64 %*		*60 - 140*						
Sample Blank 1										
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
Sample Blank 1										
tert-Butylbenzene	ND	12	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
1,2-Dichlorobenzene	ND	16	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Methylene chloride	ND	8	µg/m3							
Naphthalene	ND	40	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Styrene	ND	8	µg/m3							
1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							

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Colby Wakeman
Lab Director

JONES ENVIRONMENTAL, INC.

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301075 - EPA 8260										
Sample Blank 1										
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
Dibromomethane	ND	8	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
Isopropanol (LCC)	ND	80	µg/m3							
n-Propanol (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		*102.92 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*88.33 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*96.19 %*	*60 - 140*							

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Lab Director

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SANTA FE SPRINGS, CA 90670
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562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
CCV 1										
Benzene	10	8	%	10		104	80 - 120		120	
Chlorobenzene	10	8	%	10		100	80 - 120		120	
1,1-Dichloroethene	9	8	%	10		91	80 - 120		120	
cis-1,2-Dichloroethene	10	8	%	10		97	80 - 120		120	
Ethylbenzene	10	8	%	10		99	80 - 120		120	
Tetrachloroethene	9	8	%	10		92	80 - 120		120	
Toluene	10	8	%	10		101	80 - 120		120	
1,1,1-Trichloroethane	10	8	%	10		99	80 - 120		120	
Trichloroethene	9	8	%	10		93	80 - 120		120	
Vinyl chloride	9	8	%	10		88	80 - 120		120	
LCS 1										
Benzene	2.69	8	%	2.5		107	70 - 130			
Chlorobenzene	2.84	8	%	2.5		114	70 - 130			
1,1-Dichloroethene	2.76	8	%	2.5		111	60 - 140			
cis-1,2-Dichloroethene	2.71	8	%	2.5		108	70 - 130			
Ethylbenzene	2.47	8	%	2.5		99	70 - 130			
Tetrachloroethene	2.44	8	%	2.5		98	70 - 130			
Toluene	2.71	8	%	2.5		108	70 - 130			
1,1,1-Trichloroethane	2.51	8	%	2.5		101	70 - 130			
Trichloroethene	2.56	8	%	2.5		102	70 - 130			
Vinyl chloride	2.45	8	%	2.5		98	60 - 140			
Surrogate: Toluene-d8		*99.24 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*97.85 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*105.19 %*	*60 - 140*							
LCSD 1										
Benzene	2.93	8	%	2.5		117		8.66		
Chlorobenzene	2.83	8	%	2.5		113		0.29		
1,1-Dichloroethene	2.80	8	%	2.5		112		1.18		
cis-1,2-Dichloroethene	2.83	8	%	2.5		113		4.27		

Jones Environmental, Inc.

Colby Wakeman
Lab Director

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JONES ENVIRONMENTAL, INC.

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SANTA FE SPRINGS, CA 90670
714-449-9937 PHONE
562-646-1611 FAX

KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
LCSD 1										
Ethylbenzene	2.69	8	%	2.5		108		8.43		
Tetrachloroethene	2.60	8	%	2.5		104		6.12		
Toluene	2.79	8	%	2.5		112		2.91		
1,1,1-Trichloroethane	2.59	8	%	2.5		104		2.92		
Trichloroethene	2.58	8	%	2.5		103		0.55		
Vinyl chloride	2.61	8	%	2.5		104		6.35		
Surrogate: Toluene-d8		*98.30 %*	*60 - 140*							
Surrogate: Dibromofluoromethane		*96.10 %*	*60 - 140*							
Surrogate: 4-Bromofluorobenzene		*104.54 %*	*60 - 140*							
Method Blank 1										
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							
tert-Butylbenzene	ND	12	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
1,2-Dichlorobenzene	ND	16	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Methylene chloride	ND	8	µg/m3							

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Colby Wakeman
Lab Director

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SANTA FE SPRINGS, CA 90670
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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
Method Blank 1										
Naphthalene	ND	40	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Styrene	ND	8	µg/m3							
1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
Dibromomethane	ND	8	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
Isopropanol (LCC)	ND	80	µg/m3							
n-Propanol (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		*100.10 %*		*60 - 140*						
Surrogate: Dibromofluoromethane		*97.95 %*		*60 - 140*						
Surrogate: 4-Bromofluorobenzene		*101.04 %*		*60 - 140*						
Sample Blank 1										
Benzene	ND	8	µg/m3							
Bromodichloromethane	ND	8	µg/m3							
Bromoform	ND	8	µg/m3							
n-Butylbenzene	ND	12	µg/m3							
sec-Butylbenzene	ND	12	µg/m3							

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Colby Wakeman
Lab Director

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
Sample Blank 1										
tert-Butylbenzene	ND	12	µg/m3							
Carbon tetrachloride	ND	8	µg/m3							
Chlorobenzene	ND	8	µg/m3							
Chloroform	ND	8	µg/m3							
Dibromochloromethane	ND	8	µg/m3							
1,2-Dichlorobenzene	ND	16	µg/m3							
1,3-Dichlorobenzene	ND	16	µg/m3							
1,4-Dichlorobenzene	ND	16	µg/m3							
Freon 12	ND	16	µg/m3							
Freon 11	ND	16	µg/m3							
Freon 113	ND	16	µg/m3							
1,1-Dichloroethane	ND	8	µg/m3							
1,2-Dichloroethane	ND	8	µg/m3							
1,1-Dichloroethene	ND	8	µg/m3							
cis-1,2-Dichloroethene	ND	8	µg/m3							
trans-1,2-Dichloroethene	ND	8	µg/m3							
Ethylbenzene	ND	8	µg/m3							
Isopropylbenzene	ND	8	µg/m3							
4-Isopropyltoluene	ND	8	µg/m3							
Methylene chloride	ND	8	µg/m3							
Naphthalene	ND	40	µg/m3							
n-Propylbenzene	ND	8	µg/m3							
Styrene	ND	8	µg/m3							
1,1,1,2-Tetrachloroethane	ND	8	µg/m3							
1,1,2,2-Tetrachloroethane	ND	16	µg/m3							
Tetrachloroethene	ND	8	µg/m3							
Toluene	ND	8	µg/m3							
1,1,1-Trichloroethane	ND	8	µg/m3							
1,1,2-Trichloroethane	ND	8	µg/m3							
Trichloroethene	ND	8	µg/m3							
1,2,4-Trimethylbenzene	ND	8	µg/m3							
1,3,5-Trimethylbenzene	ND	8	µg/m3							
Vinyl chloride	ND	8	µg/m3							
m,p-Xylene	ND	16	µg/m3							
o-Xylene	ND	8	µg/m3							
Methyl-tert-butylether	ND	40	µg/m3							
Ethyl-tert-butylether	ND	40	µg/m3							

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Lab Director

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2301076 - EPA 8260										
Sample Blank 1										
Di-isopropylether	ND	40	µg/m3							
tert-amylmethylether	ND	40	µg/m3							
tert-Butylalcohol	ND	400	µg/m3							
Dibromomethane	ND	8	µg/m3							
Gasoline Range Organics (C4-C12)	ND	2000	µg/m3							
n-Hexane (LCC)	ND	80	µg/m3							
n-Pentane (LCC)	ND	80	µg/m3							
Isopropanol (LCC)	ND	80	µg/m3							
n-Propanol (LCC)	ND	80	µg/m3							
Surrogate: Toluene-d8		*97.78 %*		*60 - 140*						
Surrogate: Dibromofluoromethane		*96.62 %*		*60 - 140*						
Surrogate: 4-Bromofluorobenzene		*102.70 %*		*60 - 140*						

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Lab Director

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KCE Matrix	Project: KCE-2022-454E	
1648 West Glenoaks Blvd., Ste. 102	Project Number: KCE-2022-454E	Reported
Glendale, CA 91201	Project Manager: Viken Melkonian	01/30/23 11:50

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry
RPD	Relative Percent Difference
E	Estimated Concentration; concentration exceeds calibration range.
LCC	Leak Check Compound
MDL	Compound Reported to Method Detection Limit

Jones Environmental, Inc.

Colby Wakeman
Lab Director

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Santa Fe Springs, CA 90670
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Fax (714) 449-9685
www.jonesenv.com

Soil-Gas Chain of Custody Record

Client: KCE Matrix, Inc.
Project Name: Vacant Land
Project Address: APN: 111-290-015-000
Farmersville, California
Email: viken@kcematrixinc.com
Phone: (818) 559 5500
Report To: KCE Matrix, Inc.
Sampler: Viken Melkonian

Date: 1/23/2023
Client Project #: KCE-2022-454E

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: Y / N
Flow Rate: 200 cc/min
If different than above, see Notes.

Report Options: EDD ____ EDF* - 10% Surcharge____ *Global ID ____

LAB USE ONLY
Jones Project # JEI230058
Page 1 of 1 2
Sample Condition as Recieved: Sealed □ yes □ no
Sample Container: Summa
If different than above, see Notes.

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- ☒ Normal
- □ Mobile Lab

Tracer:
- ☒ n-pentane
- ☒ n-hexane
- ☒ ~~n-heptane~~
- □ Helium
- □ 1,1-DFA
- ☒ IPA
- x n-propanol

Reporting Limits Requested: □ Commercial ☒ Residential
Units: µg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Pump Used	Magnehelic	Laboratory Sample ID	Canister ID	Canister Start Pressure	Canister End Pressure	Sampling Start Time	Sampling End Time	Sample Matrix: Soil Gas (SG), Air (A)	EPA 8260B (VOC's + TPH-GRO)	Oxygen by ASTM D1946	Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
VP-1(5)	3	3,280	1/20/23			JEI230058-01	01799	-30	0	8:32	8:38	SG	X			1	
VP-2(5)	3	3,280	1/20/23			JEI230058-02	01826	-30	0	8:48	8:54	SG	X			1	
VP-3(5)	3	3,280	1/20/23			JEI230058-03	01220	-30	0	9:05	9:11	SG	X			1	
VP-4(5)	3	3,280	1/20/23			JEI230058-04	01784	-30	0	9:22	9:28	SG	X			1	
VP-4(5)DUP	3	3,280	1/20/23			JEI230058-05	01506	-30	0	9:38	9:44	SG	X			1	
VP-5(5)	3	3,280	1/20/23			JEI230058-06	01754	-30	0	9:39	9:45	SG	X			1	
VP-6(5)	3	3,280	1/20/23			JEI230058-07	01176	-30	-3	10:13	10:19	SG	X			1	
VP-7(5)	3	3,280	1/20/23			JEI230058-08	01780	-30	0	10:30	10:36	SG	X			1	
VP-8(5)	3	3,280	1/20/23			JEI230058-09	01800	-30	0	10:47	10:53	SG	X			1	
VP-9(5)	3	3,280	1/20/23			JEI230058-10	01772	-30	0	11:04	11:10	SG	X			1	

Total Number of Containers

Relinquished By (Signature)	Printed Name	Company	Date	Time
	Viken Melkonian	KCE Matrix, Inc.	1/23/23	1125
	MARTIN YOUNG	JEL	1/23/23	1310

Received By (Signature)	Printed Name	Company	Date	Time
	MARTIN YOUNG	JEL	1/23/23	1125
	K. Horchler	Jones Env.	1/23/23	1321

Received By Laboratory (Signature)

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

JONES ENVIRONMENTAL, INC.
11007 Forest Pl.
Santa Fe Springs, CA 90670
(714) 449-9937
Fax (714) 449-9685
www.jonesenv.com

Soil-Gas Chain of Custody Record

Client: KCE Matrix, Inc.
Project Name: Vacant Land
Project Address: APN: 111-290-015-000
Farmersville, California
Email: viken@kcematrixinc.com
Phone: (818) 559 5500
Report To: KCE Matrix, Inc.
Sampler: Viken Melkonian

Date: 1/23/2023
Client Project #: KCE-2022-454E

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: Y / N
Flow Rate: 200 cc/min
If different than above, see Notes.

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

Turn Around Requested:
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- ☒ Normal
- □ Mobile Lab

Tracer:
- ☒ n-pentane
- ☒ n-hexane
- ~~☒ n-heptane~~
- □ Helium
- □ 1,1-DFA
- ☒ IPA
- x n-propanol

Reporting Limits Requested: □ Commercial ☒ Residential
Units: µg/m³

LAB USE ONLY
Jones Project # JEI230058
Page 24 of 42
Sample Condition as Recieved: Sealed □ yes □ no
Sample Container: Summa
If different than above, see Notes.

Sample ID	Purge Number	Purge Volume (mL)	Date	Pump Used	Magnehelic	Laboratory Sample ID	Canister ID	Canister Start Pressure	Canister End Pressure	Sampling Start Time	Sampling End Time	Sample Matrix: Soil Gas (SG), Air (A)	EPA 8260B (VOC's + TPH-GRO)	Oxygen by ASTM D1946	Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
VP-10(5)	3	3,280	1/20/23			JEI230058-11	01759	-30	0	11:21	11:26	SG	X			1	

Relinquished By (Signature): Viken Melkonian
Printed Name: Viken Melkonian
Company: KCE Matrix, Inc.
Date: 01/23/23 Time: 1126

Relinquished By (Signature): MARTIN YOUNG
Printed Name: MARTIN YOUNG
Company: JEL
Date: 1/23/23 Time: 1310

Received By (Signature): MARTIN YOUNG
Printed Name: MARTIN YOUNG
Company: JEL
Date: 01/23/23 Time: 1126

Received By Laboratory (Signature)
Printed Name
Company
Date: Time:

11 Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	01/23/23
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	01/11-13/23
		Date Received:	01/13/23
Project:	Vacant Land	**Date Analyzed:**	01/17&18/23
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

ANALYSES REQUESTED

Soil:

1. EPA 6010B – Lead (Pb), Arsenic (As)
2. EPA 8081A by 3546 – Chlorinated Pesticides by GC/ECD

Approval:

Douglas A. Fowler, M.S.
Senior Chemist

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-1(2)**	**EB-2(2)**	**EB-3(2)**	**EB-4(2)**	**EB-5(2)**		
Jones ID:	**ST-21515-01**	**ST-21515-02**	**ST-21515-03**	**ST-21515-04**	**ST-21515-05**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	**5.1**	ND	ND	5.0	mg/kg
Lead, Pb	**3.4**	**2.6**	**4.3**	**2.9**	**3.5**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011701	I23011701	I23011701	I23011701	I23011701		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-6(2)**	**EB-7(2)**	**EB-8(2)**	**EB-9(2)**	**EB-10(2)**		
Jones ID:	**ST-21515-06**	**ST-21515-07**	**ST-21515-08**	**ST-21515-09**	**ST-21515-10**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**3.1**	**3.1**	**2.8**	**3.9**	**3.6**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011701	I23011701	I23011701	I23011701	I23011701		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-11(2)**	**EB-12(2)**	**EB-13(2)**	**EB-14(2)**	**EB-15(2)**		
Jones ID:	**ST-21515-11**	**ST-21515-12**	**ST-21515-13**	**ST-21515-14**	**ST-21515-15**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**2.9**	**2.7**	**5.6**	**2.6**	**2.9**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011701	I23011701	I23011701	I23011701	I23011701		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-16(2)**	**EB-17(2)**	**EB-18(2)**	**EB-19(2)**	**EB-20(2)**		
Jones ID:	**ST-21515-16**	**ST-21515-17**	**ST-21515-18**	**ST-21515-19**	**ST-21515-20**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**3.9**	**3.1**	**4.3**	**3.0**	**3.2**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011701	I23011701	I23011701	I23011701	I23011701		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-21(2)**	**EB-22(2)**	**EB-23(2)**	**EB-24(2)**	**EB-25(2)**		
Jones ID:	**ST-21515-21**	**ST-21515-22**	**ST-21515-23**	**ST-21515-24**	**ST-21515-25**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	**5.3**	ND	5.0	mg/kg
Lead, Pb	**3.2**	**2.9**	**3.5**	**3.5**	**3.3**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011702	I23011702	I23011702	I23011702	I23011702		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-26(2)**	**EB-27(2)**	**EB-28(2)**	**EB-29(2)**	**EB-30(2)**		
Jones ID:	**ST-21515-26**	**ST-21515-27**	**ST-21515-28**	**ST-21515-29**	**ST-21515-30**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**3.5**	**2.8**	**3.1**	**3.4**	**3.3**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011702	I23011702	I23011702	I23011702	I23011702		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-31(2)**	**EB-32(2)**	**EB-33(2)**	**EB-34(2)**	**EB-35(2)**		
Jones ID:	**ST-21515-31**	**ST-21515-32**	**ST-21515-33**	**ST-21515-34**	**ST-21515-35**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**4.7**	**3.8**	**3.4**	**3.2**	**3.1**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011702	I23011702	I23011702	I23011702	I23011702		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Sample ID:	**EB-36(2)**	**EB-37(2)**	**EB-38(2)**	**EB-39(2)**	**EB-40(2)**		
Jones ID:	**ST-21515-36**	**ST-21515-37**	**ST-21515-38**	**ST-21515-39**	**ST-21515-40**	**Reporting Limit**	**Units**
Analytes:							
Arsenic, As	ND	ND	ND	ND	ND	5.0	mg/kg
Lead, Pb	**3.1**	**3.4**	**3.5**	**3.2**	**3.0**	0.5	mg/kg
Dilution Factor	1	1	1	1	1		
Batch ID:	I23011702	I23011702	I23011702	I23011702	I23011702		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Batch ID: **I23011701** **Prepared:** 1/17/2023 **Analyzed:** 1/17/2023

Analytes:	Result	Spike Level	% REC	% RPD	% REC Limits	Reporting Limit	Units
METHOD BLANK:	**I230117-MB1**						
Arsenic, As	ND					5.0	mg/kg
Lead, Pb	ND					0.5	mg/kg
LCS:	**I230117-LCS1**						
Arsenic, As	**181**	200	91%		80 - 120		mg/kg
Lead, Pb	**48.4**	50.0	97%		80 - 120		mg/kg
LCSD:	**I230117-LCSD1**						
Arsenic, As	**184**	200	**92%**	1.6%	80 - 120		mg/kg
Lead, Pb	**48.7**	50.0	**97%**	0.6%	80 - 120		mg/kg
CCV:	**I230117-CCV1**						
Arsenic, As	**1.03**	1.00	**103%**		90-110		mg/L
Lead, Pb	**1.04**	1.00	**104%**		90-110		mg/L

CCV = Continuing Calibration Verification
LCS = Laboratory Control Sample
LCSD= Laboratory Control Sample Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:** **Date Received:**	1/11-13/2023 1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 6010B - Arsenic & Lead by ICP-OES

Batch ID: **I23011702** **Prepared:** 1/17/2023 **Analyzed:** 1/17/2023

Analytes:	Result	Spike Level	% REC	% RPD	% REC Limits	Reporting Limit	Units
METHOD BLANK:	**I230117-MB2**						
Arsenic, As	ND					5.0	mg/kg
Lead, Pb	ND					0.5	mg/kg
LCS:	**I230117-LCS2**						
Arsenic, As	**188**	200	94%		80 - 120		mg/kg
Lead, Pb	**50.3**	50.0	101%		80 - 120		mg/kg
LCSD:	**I230117-LCSD2**						
Arsenic, As	**177**	200	**89%**	6.0%	80 - 120		mg/kg
Lead, Pb	**47.5**	50.0	**95%**	5.7%	80 - 120		mg/kg
CCV:	**I230117-CCV2**						
Arsenic, As	**1.07**	1.00	**107%**		90-110		mg/L
Lead, Pb	**1.09**	1.00	**109%**		90-110		mg/L

CCV = Continuing Calibration Verification
LCS = Laboratory Control Sample
LCSD= Laboratory Control Sample Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-1(2)**	**EB-2(2)**	**EB-3(2)**	**EB-4(2)**	**EB-5(2)**		
Jones ID:	**ST-21515-01**	**ST-21515-02**	**ST-21515-03**	**ST-21515-04**	**ST-21515-05**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	**2.1**	ND	**1.8**	**1.1**	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	104%	119%	102%	115%	99%	30 - 120	
Decachlorobiphenyl	118%	115%	120%	115%	116%	30 - 120	
Batch:	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-6(2)**	**EB-7(2)**	**EB-8(2)**	**EB-9(2)**	**EB-10(2)**		
Jones ID:	**ST-21515-06**	**ST-21515-07**	**ST-21515-08**	**ST-21515-09**	**ST-21515-10**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	ND	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	115%	107%	86%	106%	105%	30 - 120	
Decachlorobiphenyl	109%	119%	118%	115%	119%	30 - 120	
Batch:	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-11(2)**	**EB-12(2)**	**EB-13(2)**	**EB-14(2)**	**EB-15(2)**		
Jones ID:	**ST-21515-11**	**ST-21515-12**	**ST-21515-13**	**ST-21515-14**	**ST-21515-15**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	**17.4**	**1.3**	**1.4**	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	**2.4**	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	112%	113%	95%	97%	94%	30 - 120	
Decachlorobiphenyl	116%	119%	113%	105%	114%	30 - 120	
Batch:	ECD4_ 011723_02	ECD4_ 011723_02	ECD4_ 011723_02	ECD4_ 011723_02	ECD4_ 011723_02		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-16(2)**	**EB-17(2)**	**EB-18(2)**	**EB-19(2)**	**EB-20(2)**		
Jones ID:	**ST-21515-16**	**ST-21515-17**	**ST-21515-18**	**ST-21515-19**	**ST-21515-20**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	**1.2**	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	95%	104%	103%	111%	112%	30 - 120	
Decachlorobiphenyl	116%	119%	116%	119%	116%	30 - 120	
Batch:	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02	ECD4_011723_02		

ND = Value less than reporting limit

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Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-21(2)**	**EB-22(2)**	**EB-23(2)**	**EB-24(2)**	**EB-25(2)**		
Jones ID:	**ST-21515-21**	**ST-21515-22**	**ST-21515-23**	**ST-21515-24**	**ST-21515-25**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	**1.1**	ND	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	109%	96%	100%	115%	93%	30 - 120	
Decachlorobiphenyl	117%	119%	119%	116%	119%	30 - 120	
Batch:	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01		

ND = Value less than reporting limit

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Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-26(2)**	**EB-27(2)**	**EB-28(2)**	**EB-29(2)**	**EB-30(2)**		
Jones ID:	**ST-21515-26**	**ST-21515-27**	**ST-21515-28**	**ST-21515-29**	**ST-21515-30**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	**1.6**	ND	ND	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	105%	104%	101%	117%	81%	30 - 120	
Decachlorobiphenyl	119%	120%	118%	119%	104%	30 - 120	
Batch:	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-31(2)**	**EB-32(2)**	**EB-33(2)**	**EB-34(2)**	**EB-35(2)**		
Jones ID:	**ST-21515-31**	**ST-21515-32**	**ST-21515-33**	**ST-21515-34**	**ST-21515-35**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	**8.5**	**3.1**	**1.7**	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	**2.2**	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	93%	106%	107%	69%	91%	30 - 120	
Decachlorobiphenyl	117%	120%	120%	81%	120%	30 - 120	
Batch:	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**EB-36(2)**	**EB-37(2)**	**EB-38(2)**	**EB-39(2)**	**EB-40(2)**		
Jones ID:	**ST-21515-36**	**ST-21515-37**	**ST-21515-38**	**ST-21515-39**	**ST-21515-40**	**Reporting Limit**	**Units**
Analytes:							
α-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	ND	ND	ND	0.4	ug/kg
β-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	ND	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	ND	ND	ND	0.4	ug/kg
Aldrin	ND	ND	ND	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	ND	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	ND	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	ND	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	ND	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	ND	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	ND	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	ND	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	ND	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	ND	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	ND	ND	ND	20	ug/kg
Dilution Factor	1	1	1	1	1		
Surrogate Recovery:						**QC Limits**	
TCMX	103%	70%	96%	105%	78%	30 - 120	
Decachlorobiphenyl	120%	86%	120%	114%	112%	30 - 120	
Batch:	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01	ECD4_011823_01		

ND = Value less than reporting limit

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LABORATORY RESULTS

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

EPA 8081A – Chlorinated Pesticides by GC/ECD

Sample ID:	**METHOD BLANK #1**	**METHOD BLANK #2**		
Jones ID:	**MB2-011723ECD4**	**MB2-011723ECD4**	**Reporting Limit**	**Units**
Analytes:				
α-BHC	ND	ND	0.4	ug/kg
γ-BHC (Lindane)	ND	ND	0.4	ug/kg
β-BHC	ND	ND	0.4	ug/kg
Heptachlor	ND	ND	0.4	ug/kg
δ-BHC	ND	ND	0.4	ug/kg
Aldrin	ND	ND	0.4	ug/kg
Heptachlor Epoxide	ND	ND	0.4	ug/kg
γ-Chlordane	ND	ND	0.4	ug/kg
α-Chlordane	ND	ND	0.4	ug/kg
Endosulfan I	ND	ND	0.4	ug/kg
4,4'-DDE	ND	ND	0.8	ug/kg
Dieldrin	ND	ND	0.8	ug/kg
Endrin	ND	ND	0.8	ug/kg
4,4'-DDD	ND	ND	0.8	ug/kg
Endosulfan II	ND	ND	0.8	ug/kg
4,4'-DDT	ND	ND	0.8	ug/kg
Endrin Aldehyde	ND	ND	0.8	ug/kg
Endosulfan Sulfate	ND	ND	0.8	ug/kg
Methoxychlor	ND	ND	4.0	ug/kg
Endrin Ketone	ND	ND	0.8	ug/kg
Toxaphene	ND	ND	20	ug/kg
Dilution Factor	1	1		
Surrogate Recovery:			**QC Limits**	
TCMX	114%	112%	30 - 120	
Decachlorobiphenyl	113%	116%	30 - 120	
Batch:	ECD4_011723_02	ECD4_011823_01		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

BATCH: **ECD4_ 011723_02** **Prepared:** 1/17/2023 **Analyzed:** 1/17/2023

EPA 8081A – Chlorinated Pesticides by GC/ECD

	LCS	LCSD	% RPD	Spike Level	% Recovery Limits	Units
	LCS2-011723ECD4	LCSD2-011723ECD4				
Analytes:						
α-BHC	111	120	8%	100	60 - 140	ppb
Heptachlor	110	119	8%	100	60 - 140	ppb
Aldrin	113	122	8%	100	60 - 140	ppb
Heptachlor Epoxide	113	123	8%	100	60 - 140	ppb
γ-Chlordane	113	124	9%	100	60 - 140	ppb
Endosulfan I	112	122	9%	100	60 - 140	ppb
4,4'-DDE	116	127	9%	100	60 - 140	ppb
Dieldrin	125	136	8%	100	60 - 140	ppb
Endrin	119	129	8%	100	60 - 140	ppb
4,4'-DDD	117	129	10%	100	60 - 140	ppb
Endosulfan II	129	135	5%	100	60 - 140	ppb
4,4'-DDT	116	129	11%	100	60 - 140	ppb
Endrin Ketone	131	133	2%	100	60 - 140	ppb
Surrogate Recoveries:						
TCMX	117%	118%			30 - 120	
Decachlorobiphenyl	116%	118%			30 - 120	

LCS= Laboratory Control Sample
LCSD= Laboratory Control Sample Duplicate
RPD = Relative Percent Difference

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

BATCH: **ECD4_ 011723_02** **Prepared:** 1/17/2023 **Analyzed:** 1/17/2023

EPA 8081A – Chlorinated Pesticides by GC/ECD

	Result	Spike Level	% Recovery	% Recovery Limits	Units
CCV:	CCV2-011723ECD4				
Analytes:					
α-BHC	51.2	50	102%	80-120	ppb
Heptachlor	52.6	50	105%	80-120	ppb
Aldrin	52.6	50	105%	80-120	ppb
Heptachlor Epoxide	53.3	50	107%	80-120	ppb
γ-Chlordane	51.9	50	104%	80-120	ppb
Endosulfan I	55.4	50	111%	80-120	ppb
4,4'-DDE	105	100	105%	80-120	ppb
Dieldrin	107	100	107%	80-120	ppb
Endrin	108	100	108%	80-120	ppb
4,4'-DDD	98.7	100	99%	80-120	ppb
Endosulfan II	108	100	108%	80-120	ppb
4,4'-DDT	109	100	109%	80-120	ppb
Endrin Ketone	113	100	113%	80-120	ppb
Surrogate Recovery:					
TCMX	103%			80-120	
Decachlorobiphenyl	116%			80-120	

CCV= Continuing Calibration Verification

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714-449-9937
562-646-1611
11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

BATCH: **ECD4_ 011823_01** **Prepared:** 1/18/2023 **Analyzed:** 1/18/2023

EPA 8081A – Chlorinated Pesticides by GC/ECD

	LCS	LCSD	% RPD	Spike Level	% Recovery Limits	Units
	LCS1-011823ECD4	LCSD1-011823ECD4				
Analytes:						
α-BHC	121	114	6%	100	60 - 140	ppb
Heptachlor	118	111	6%	100	60 - 140	ppb
Aldrin	123	116	6%	100	60 - 140	ppb
Heptachlor Epoxide	124	117	6%	100	60 - 140	ppb
γ-Chlordane	123	116	6%	100	60 - 140	ppb
Endosulfan I	122	116	5%	100	60 - 140	ppb
4,4'-DDE	126	120	5%	100	60 - 140	ppb
Dieldrin	136	129	5%	100	60 - 140	ppb
Endrin	121	115	5%	100	60 - 140	ppb
4,4'-DDD	135	127	6%	100	60 - 140	ppb
Endosulfan II	140	132	6%	100	60 - 140	ppb
4,4'-DDT	119	112	6%	100	60 - 140	ppb
Endrin Ketone	136	137	1%	100	60 - 140	ppb
Surrogate Recoveries:						
TCMX	120%	115%			30 - 120	
Decachlorobiphenyl	118%	120%			30 - 120	

LCS= Laboratory Control Sample
LCSD= Laboratory Control Sample Duplicate
RPD = Relative Percent Difference

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	KCE Matrix, Inc.	**Report date:**	1/23/2023
Client Address:	1112 W. Burbank Blvd., Suite 301 Burbank, CA 91506	**Jones Ref. No.:** **Client Ref. No.:**	ST-21515 KCE-2022-454E
Attn:	Viken Melkonian	**Date Sampled:**	1/11-13/2023
		Date Received:	1/13/2023
Project:	Vacant Land	**Date Analyzed:**	1/17-18/2023
Project Address:	APN: 111-290-015-000 Farmersville, CA 93223	**Physical State:**	Soil

BATCH: **ECD4_ 011823_01** **Prepared:** 1/18/2023 **Analyzed:** 1/18/2023

EPA 8081A – Chlorinated Pesticides by GC/ECD

	Result	Spike Level	% Recovery	% Recovery Limits	Units
CCV:	CCV1-011823ECD4				
Analytes:					
α-BHC	47.6	50	95%	80-120	ppb
Heptachlor	47.6	50	95%	80-120	ppb
Aldrin	48.3	50	97%	80-120	ppb
Heptachlor Epoxide	48.1	50	96%	80-120	ppb
γ-Chlordane	47.2	50	94%	80-120	ppb
Endosulfan I	49.6	50	99%	80-120	ppb
4,4'-DDE	94.8	100	95%	80-120	ppb
Dieldrin	96.0	100	96%	80-120	ppb
Endrin	86.4	100	86%	80-120	ppb
4,4'-DDD	91.2	100	91%	80-120	ppb
Endosulfan II	98.6	100	99%	80-120	ppb
4,4'-DDT	89.7	100	90%	80-120	ppb
Endrin Ketone	101	100	101%	80-120	ppb
Surrogate Recovery:					
TCMX	98%			80-120	
Decachlorobiphenyl	110%			80-120	

CCV= Continuing Calibration Verification

ST-21515

CHAIN OF CUSTODY

KCE Matrix, Inc.

Sampled By:
Viken Melkonian
(Print Name) (Signature)

Vacant Land - (KCE-2022-454E)
Project Name/Location

APN: 111-290-015-000
Project Address

Farmersville, California 93223
City, State, Zip Code

Date	Time	Sample ID	Sample Description	Grab	Comp	# of Containers	Preserved? (Y/N)	Analyses Requested: Organo-Chloro Pesticides (EPA 608/8081A)	Aresnic (EPA 6010B)	Lead (EPA 6010B)								Comments and Remarks
1/11/23		EB-1(2)	Soil	X		1	N	X	X	X								ST-21515-01
1/11/23		EB-2(2)	Soil	X		1	N	X	X	X								ST-21515-02
1/11/23		EB-3(2)	Soil	X		1	N	X	X	X								ST-21515-03
1/11/23		EB-4(2)	Soil	X		1	N	X	X	X								ST-21515-04
1/11/23		EB-5(2)	Soil	X		1	N	X	X	X								ST-21515-05
1/11/23		EB-6(2)	Soil	X		1	N	X	X	X								ST-21515-06
1/11/23		EB-7(2)	Soil	X		1	N	X	X	X								ST-21515-07
1/11/23		EB-8(2)	Soil	X		1	N	X	X	X								ST-21515-08
1/11/23		EB-9(2)	Soil	X		1	N	X	X	X								ST-21515-09
1/11/23		EB-10(2)	Soil	X		1	N	X	X	X								ST-21515-10

Work Requested/Turnaround Time:

24 Hrs ☐ Normal ☒

48 Hrs ☐ 72 Hrs ☐

Other:

(Relinquished By)

(Date) (Time)

(Received By)

(Relinquished By)

1/13/23 1510
(Date) (Time)

(Received By)

(Relinquished By)

1/13/23 1704
(Date) (Time)

(Received By)

(Relinquished By)

(Date) (Time)

(Received By)

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ST-21515

CHAIN OF CUSTODY

KCE Matrix, Inc.

Sampled By:
Viken Melkonian
(Print Name) (Signature)

Vacant Land - (KCE-2022-454E)
Project Name/Location

APN: 111-290-015-000
Project Address

Farmersville, California 93223
City, State, Zip Code

Date	Time	Sample ID	Sample Description	Grab	Comp	# of Containers	Preserved? (Y/N)	Organo-Chloro Pesticides (EPA 608/8081A)	Aresnic (EPA 6010B)	Lead (EPA 6010B)								Comments and Remarks
								Analyses Requested										
1/11/23		EB-11(2)	Soil	X		1	N	X	X	X								ST-21515-11
1/11/23		EB-12(2)	Soil	X		1	N	X	X	X								ST-21515-12
1/12/23		EB-13(2)	Soil	X		1	N	X	X	X								ST-21515-13
1/12/23		EB-14(2)	Soil	X		1	N	X	X	X								ST-21515-14
1/12/23		EB-15(2)	Soil	X		1	N	X	X	X								ST-21515-15
1/12/23		EB-16(2)	Soil	X		1	N	X	X	X								ST-21515-16
1/12/23		EB-17(2)	Soil	X		1	N	X	X	X								ST-21515-17
1/12/23		EB-18(2)	Soil	X		1	N	X	X	X								ST-21515-18
1/12/23		EB-19(2)	Soil	X		1	N	X	X	X								ST-21515-19
1/12/23		EB-20(2)	Soil	X		1	N	X	X	X								ST-21515-20

Work Requested/Turnaround Time:

24 Hrs ☐ Normal ☒

48 Hrs ☐ 72 Hrs ☐

Other:

(Relinquished By)

(Date) (Time)

(Received By)

(Relinquished By)
1/13/23 1518
(Date) (Time)
(Received By)

(Relinquished By)
1/13/23 1704
(Date) (Time)
(Received By)

(Relinquished By)
(Date) (Time)
(Received By)

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ST-21515

CHAIN OF CUSTODY

KCE Matrix, Inc.

Sampled By:
Viken Melkonian
(Print Name)
(Signature)

Vacant Land - (KCE-2022-454E)
Project Name/Location

APN: 111-290-015-000
Project Address

Farmersville, California 93223
City, State, Zip Code

Date	Time	Sample ID	Sample Description	Grab	Comp	# of Containers	Preserved? (Y/N)	Organo-Chloro Pesticides (EPA 608/8081A)	Aresnic (EPA 6010B)	Lead (EPA 6010B)								Comments and Remarks
								Analyses Requested										
1/12/23		EB-21(2)	Soil	X		1	N	X	X	X								ST-21515-21
1/12/23		EB-22(2)	Soil	X		1	N	X	X	X								ST-21515-22
1/12/23		EB-23(2)	Soil	X		1	N	X	X	X								ST-21515-23
1/12/23		EB-24(2)	Soil	X		1	N	X	X	X								ST-21515-24
1/12/23		EB-25(2)	Soil	X		1	N	X	X	X								ST-21515-25
1/12/23		EB-26(2)	Soil	X		1	N	X	X	X								ST-21515-26
1/12/23		EB-27(2)	Soil	X		1	N	X	X	X								ST-21515-27
1/12/23		EB-28(2)	Soil	X		1	N	X	X	X								ST-21515-28
1/12/23		EB-29(2)	Soil	X		1	N	X	X	X								ST-21515-29
1/12/23		EB-30(2)	Soil	X		1	N	X	X	X								ST-21515-30

Work Requested/Turnaround Time:

24 Hrs ☐ Normal ☒

48 Hrs ☐ 72 Hrs ☐

Other:

(Relinquished By)
(Date)
(Time)
(Received By)

(Relinquished By)
1/13/23 1510
(Date) (Time)
(Received By)

(Relinquished By)
1/13/23 1704
(Date) (Time)
(Received By)

(Relinquished By)
(Date)
(Time)
(Received By)

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ST-21515

CHAIN OF CUSTODY

KCE Matrix, Inc.

Sampled By:
Viken Melkonian
(Print Name) (Signature)

Vacant Land - (KCE-2022-454E)
Project Name/Location

APN: 111-290-015-000
Project Address

Farmersville, California 93223
City, State, Zip Code

Date	Time	Sample ID	Sample Description	Grab	Comp	# of Containers	Preserved? (Y/N)	Analyses Requested: Organo-Chloro Pesticides (EPA 608/8081A)	Aresnic (EPA 6010B)	Lead (EPA 6010B)							Comments and Remarks
1/12/23		EB-31(2)	Soil	X		1	N	X	X	X							ST-21515-31
1/13/23		EB-32(2)	Soil	X		1	N	X	X	X							ST-21515-32
1/13/23		EB-33(2)	Soil	X		1	N	X	X	X							ST-21515-33
1/13/23		EB-34(2)	Soil	X		1	N	X	X	X							ST-21515-34
1/13/23		EB-35(2)	Soil	X		1	N	X	X	X							ST-21515-35
1/13/23		EB-36(2)	Soil	X		1	N	X	X	X							ST-21515-36
1/13/23		EB-37(2)	Soil	X		1	N	X	X	X							ST-21515-37
1/13/23		EB-38(2)	Soil	X		1	N	X	X	X							ST-21515-38
1/13/23		EB-39(2)	Soil	X		1	N	X	X	X							ST-21515-39
1/13/23		EB-40(2)	Soil	X		1	N	X	X	X							ST-21515-40

Work Requested/Turnaround Time:

24 Hrs ☐ Normal ☒

48 Hrs ☐ 72 Hrs ☐

Other:

(Relinquished By)

(Date) (Time)

(Received By)

(Relinquished By)
1/13/23 1510
(Date) (Time)
(Received By)

(Relinquished By)
1/13/23 1704
(Date) (Time)
(Received By)

(Relinquished By)
(Date) (Time)
(Received By)

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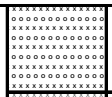
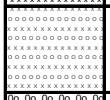
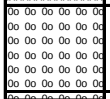
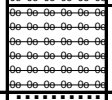
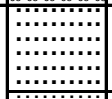
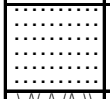
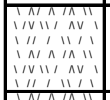
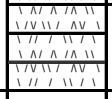
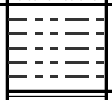
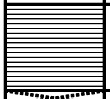
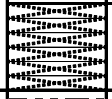
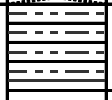
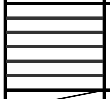
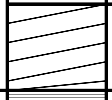
APPENDIX D

(BORING LOGS)

KCE MATRIX	SOIL CLASSIFICATION CHART		PROJECT ID: KCE-2022-454E
MAJOR DIVISION	GROUP SYMBOL		SOIL DESCRIPTION
GRAVELS (More than 1/2 of course fraction > No. 4 sieve size)		GW	Well-graded gravels, sandy gravels
		GP	Gap-graded or uniform gravels, sandy gravels
		GM	Silty gravels, silty sandy gravels
		GC	Clayey gravels, clayey sandy gravels
SANDS (More than 1/2 of course fraction < No. 4 sieve size)		SW	Well-graded, gravelly sands
		SP	Gap-graded or uniform sands, gravelly sands
		SM	Silty sands, silty gravelly sands
		SC	Clayey sands, clayey gravelly sands
SILTS & CLAYS Low Compressibility Liquid Limit < 50		ML	Silts, very fine sands, silty or clayey fine sands, micaceous silts
		CL	Low plasticity clays, sandy or silty clays
		OL	Organic silts and clays of low plasticity
SILTS & CLAYS High Compressibility Liquid Limit > 50		MH	Micaceous silts, diatomaceous silts, volcanic ash
		CH	Highly plastic clays and sandy clays
		OH	Organic silts and clays of high plasticity
HIGHLY ORGANIC SOILS		Pt	Peat, sandy peats, and clayey peat
DUAL (TRANSITION SOILS)	Soil characteristics are transitional between the soil classifications listed above		

CLASSIFICATION CHART (Unified Soil Classification System)

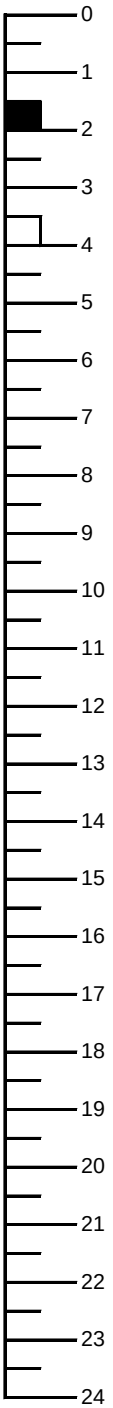
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-1

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-1 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-1 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

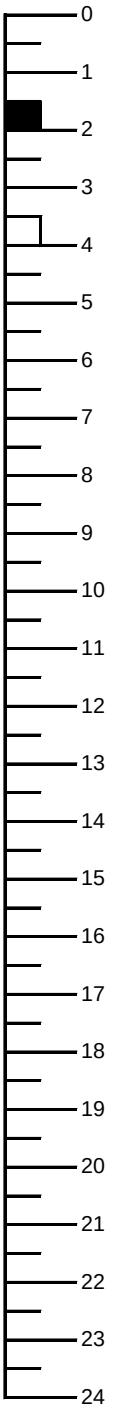


FIELD BOREHOLE LOG

Borehole Number: EB-2

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-2 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-2 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



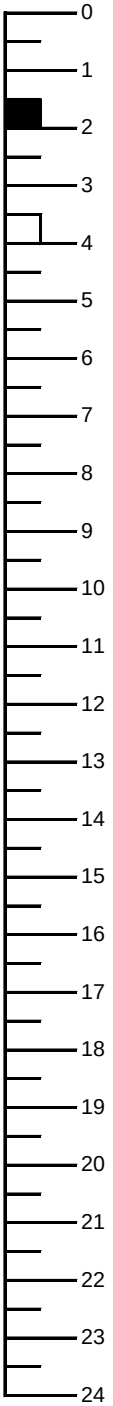
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-3

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-3 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-3 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



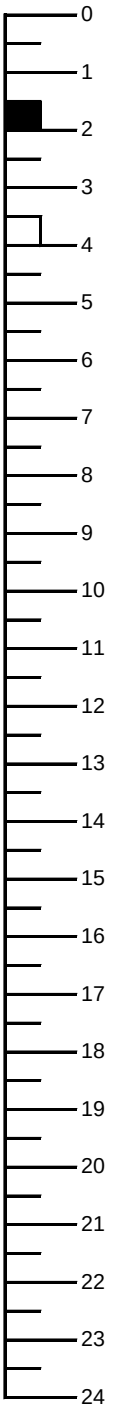
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-4

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-4 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-4 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



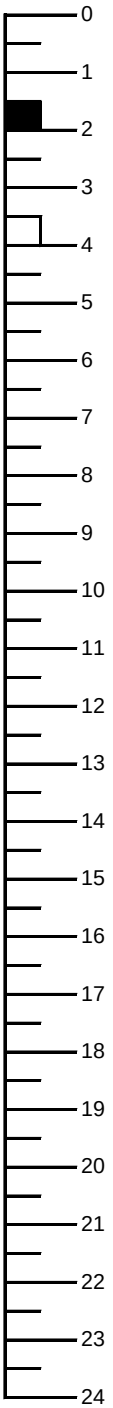
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-5

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-5 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-5 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

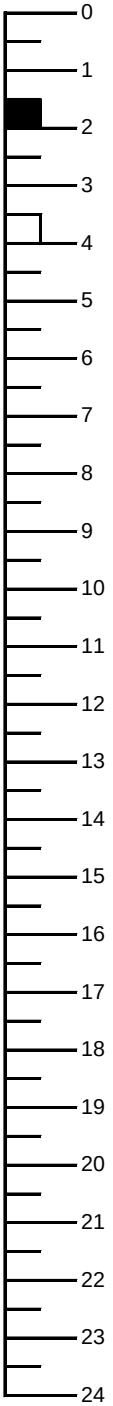


FIELD BOREHOLE LOG

Borehole Number: EB-6

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-6 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-6 (3.5-4.0)	0.1	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

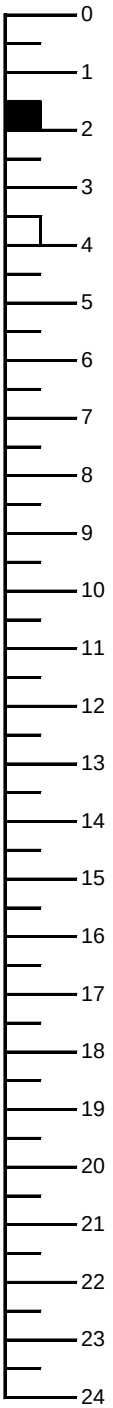


FIELD BOREHOLE LOG

Borehole Number: EB-7

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-7 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-7 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

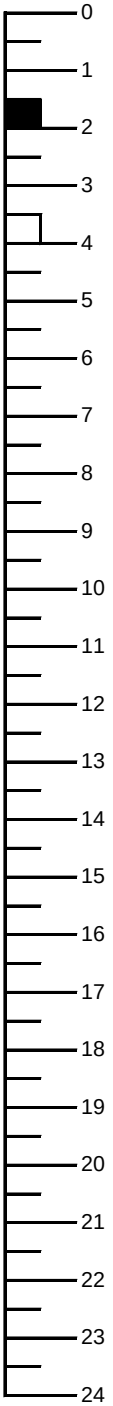


FIELD BOREHOLE LOG

Borehole Number: EB-8

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-8 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-8 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



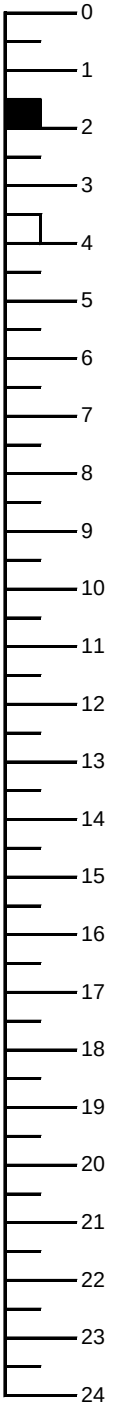
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-9

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-9 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-9 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

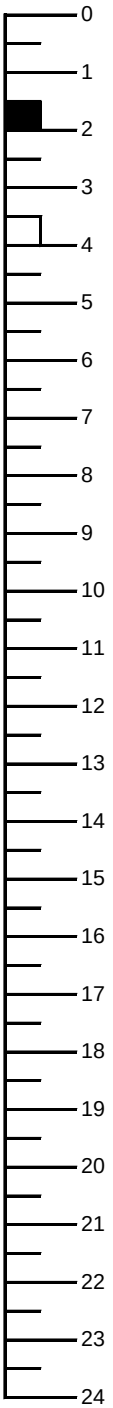


FIELD BOREHOLE LOG

Borehole Number: EB-10

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-10 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-10 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

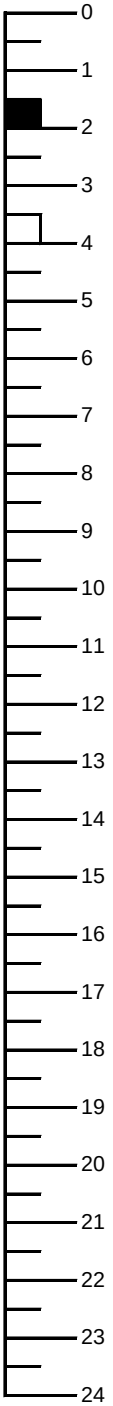


FIELD BOREHOLE LOG

Borehole Number: EB-11

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-11 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-11 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



FIELD BOREHOLE LOG

Borehole Number: EB-12

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/11/2023	Boring Diameter:	3.25"
Date Completed:	1/11/2023	Casing Diameter:	NA

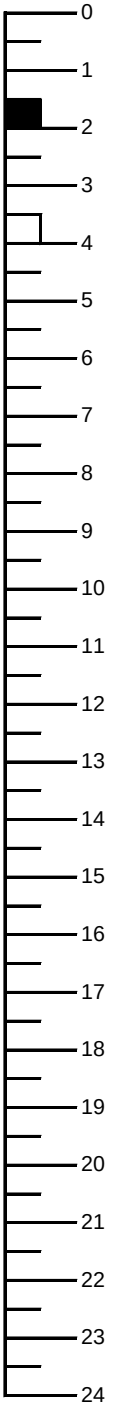
Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-12 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-12 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

FIELD BOREHOLE LOG

Borehole Number: EB-13

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-13 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-13 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

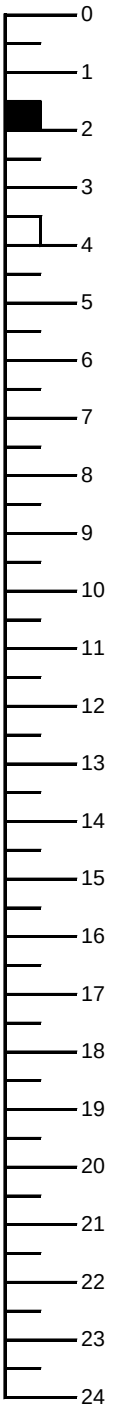


FIELD BOREHOLE LOG

Borehole Number: EB-14

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-14 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-14 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



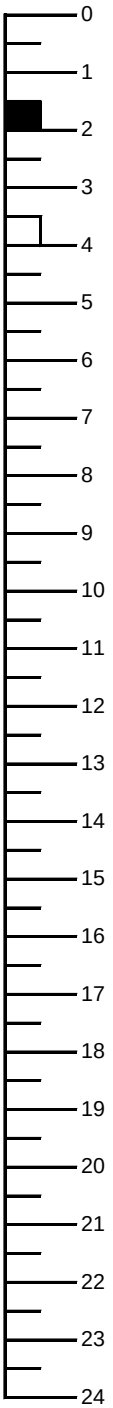
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-15

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-15 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-15 (3.5-4.0)	0.1	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



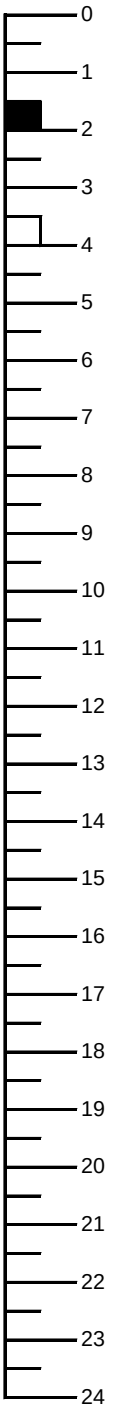
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-16

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-16 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-16 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

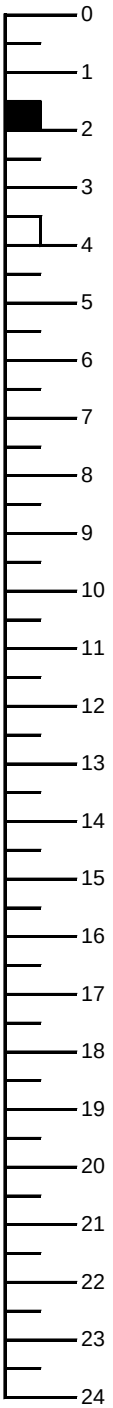


FIELD BOREHOLE LOG

Borehole Number: EB-17

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-17 (1.5-2.0)	0.1	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-17 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



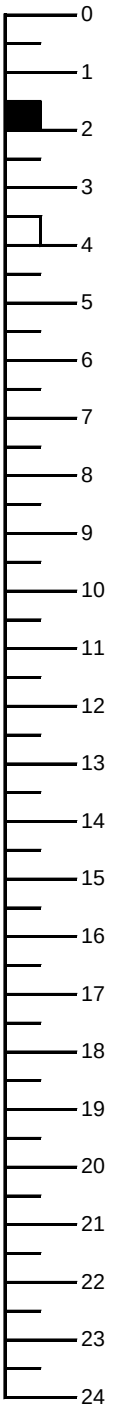
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-18

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-18 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-18 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

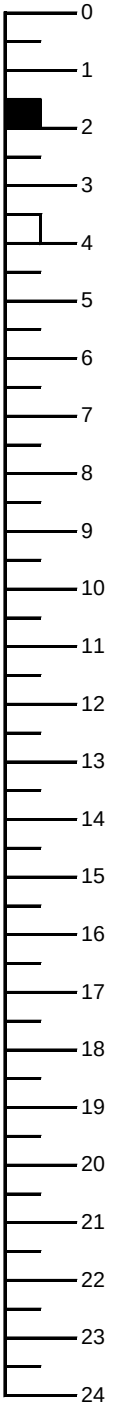


FIELD BOREHOLE LOG

Borehole Number: EB-19

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-19 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-19 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

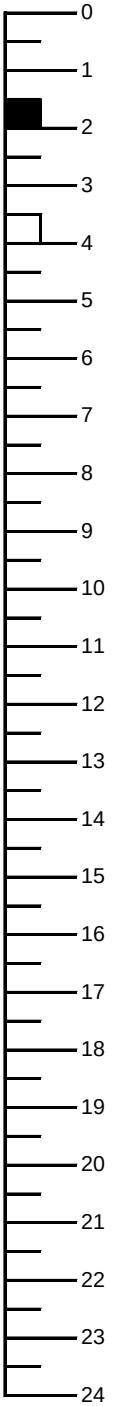


FIELD BOREHOLE LOG

Borehole Number: EB-20

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-20 (1.5-2.0)	0.1	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-20 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



FIELD BOREHOLE LOG

Borehole Number: EB-21

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-21 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-21 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

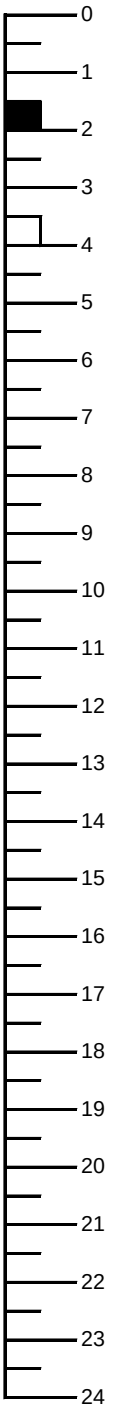
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-22

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-22 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-22 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

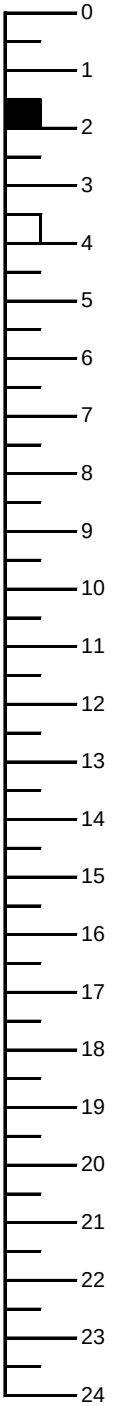


FIELD BOREHOLE LOG

Borehole Number: EB-23

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-23 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-23 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

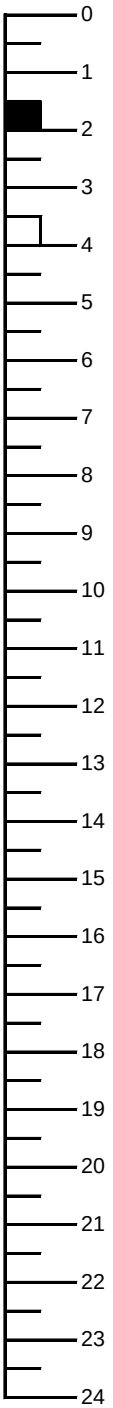


FIELD BOREHOLE LOG

Borehole Number: EB-24

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-24 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-24 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

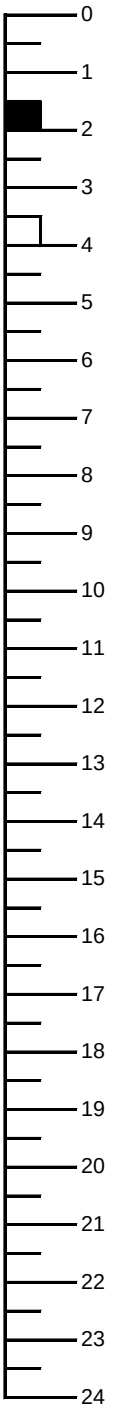


FIELD BOREHOLE LOG

Borehole Number: EB-25

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-25 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-25 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



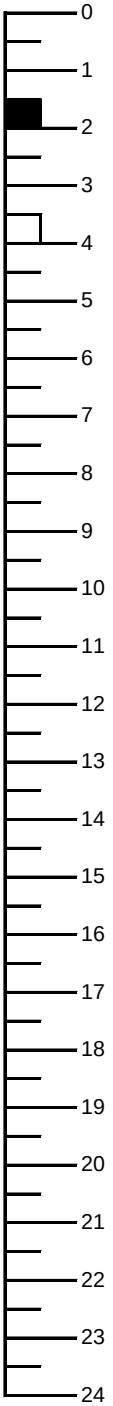
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-26

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-26 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-26 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



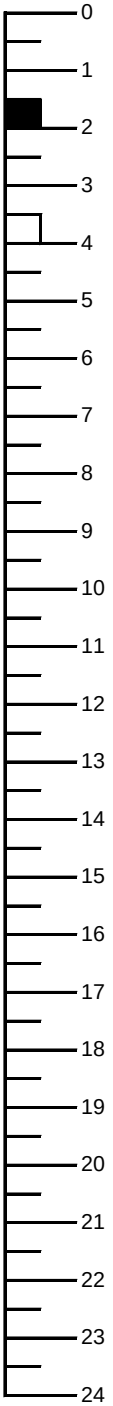
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-27

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-27 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-27 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

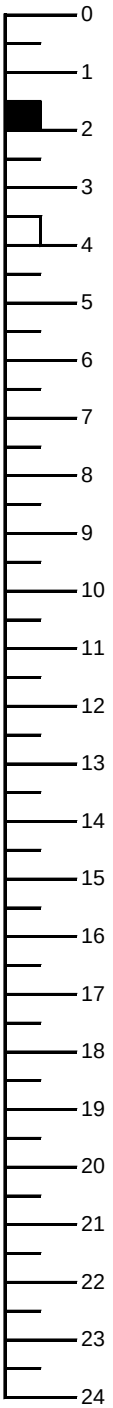


FIELD BOREHOLE LOG

Borehole Number: EB-28

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-28 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-28 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



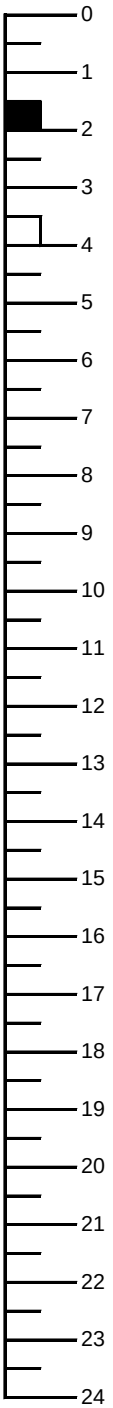
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-29

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-29 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-29 (3.5-4.0)	0.1	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

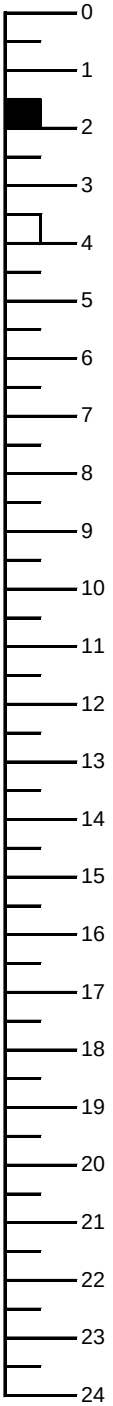


FIELD BOREHOLE LOG

Borehole Number: EB-30

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-30 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-30 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



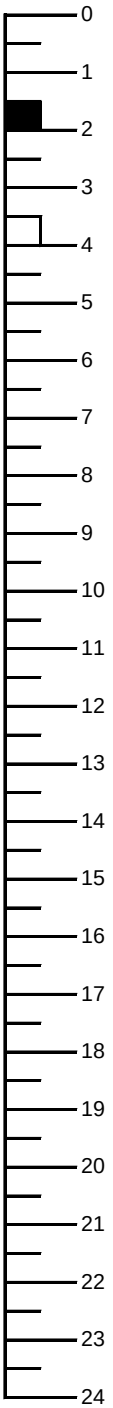
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-31

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/12/2023	Boring Diameter:	3.25"
Date Completed:	1/12/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-31 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-31 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

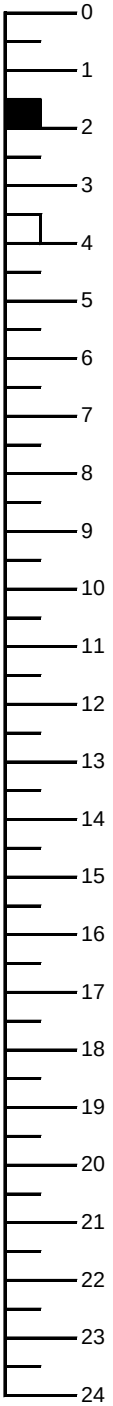


FIELD BOREHOLE LOG

Borehole Number: EB-32

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-32 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-32 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



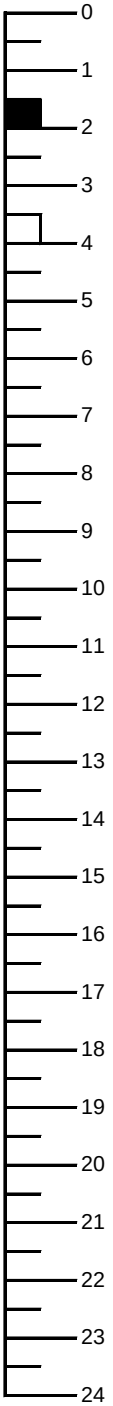
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-33

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-33 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-33 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

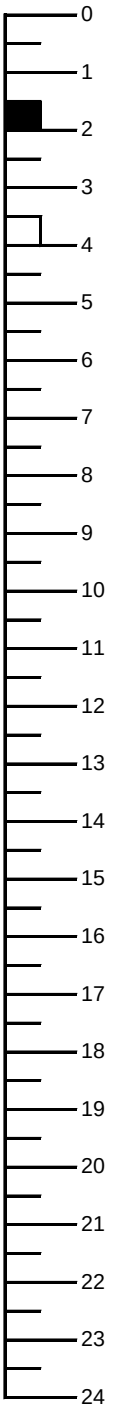


FIELD BOREHOLE LOG

Borehole Number: EB-34

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-34 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-34 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

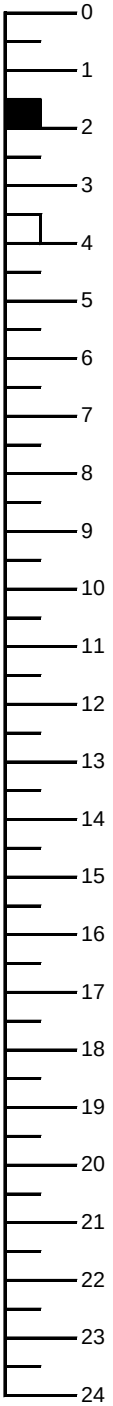


FIELD BOREHOLE LOG

Borehole Number: EB-35

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-35 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-35 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

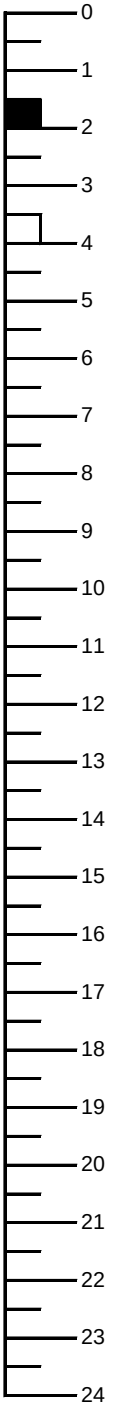


FIELD BOREHOLE LOG

Borehole Number: EB-36

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-36 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-36 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

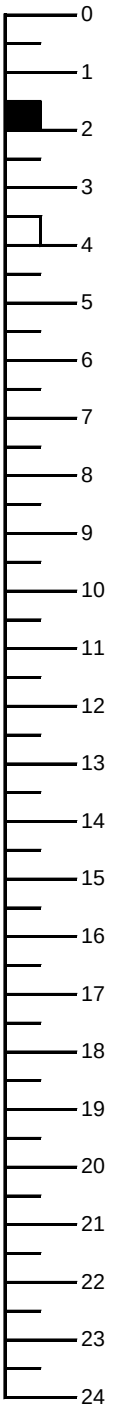


FIELD BOREHOLE LOG

Borehole Number: EB-37

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-37 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-37 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

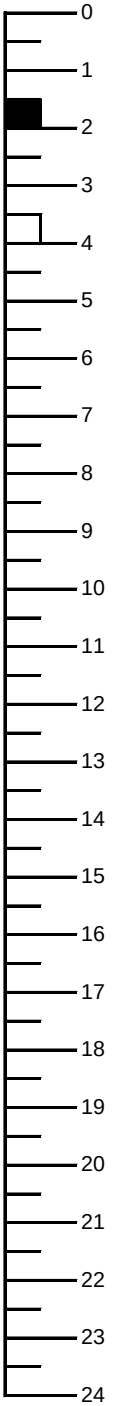


FIELD BOREHOLE LOG

Borehole Number: EB-38

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-38 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-38 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		

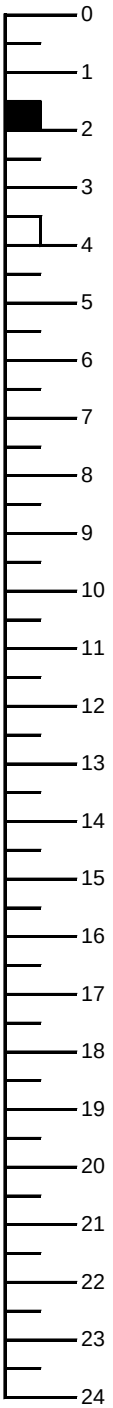


FIELD BOREHOLE LOG

Borehole Number: EB-39

Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-39 (1.5-2.0)	0.1	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-39 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



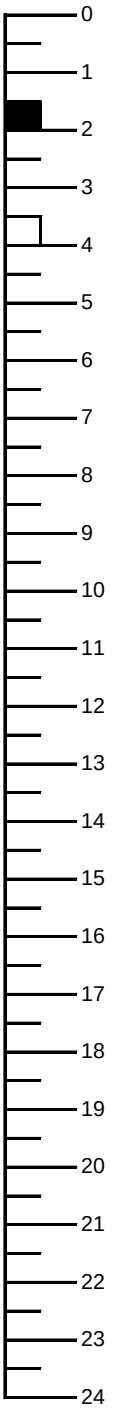
KCE MATRIX

FIELD BOREHOLE LOG

Borehole Number: EB-40

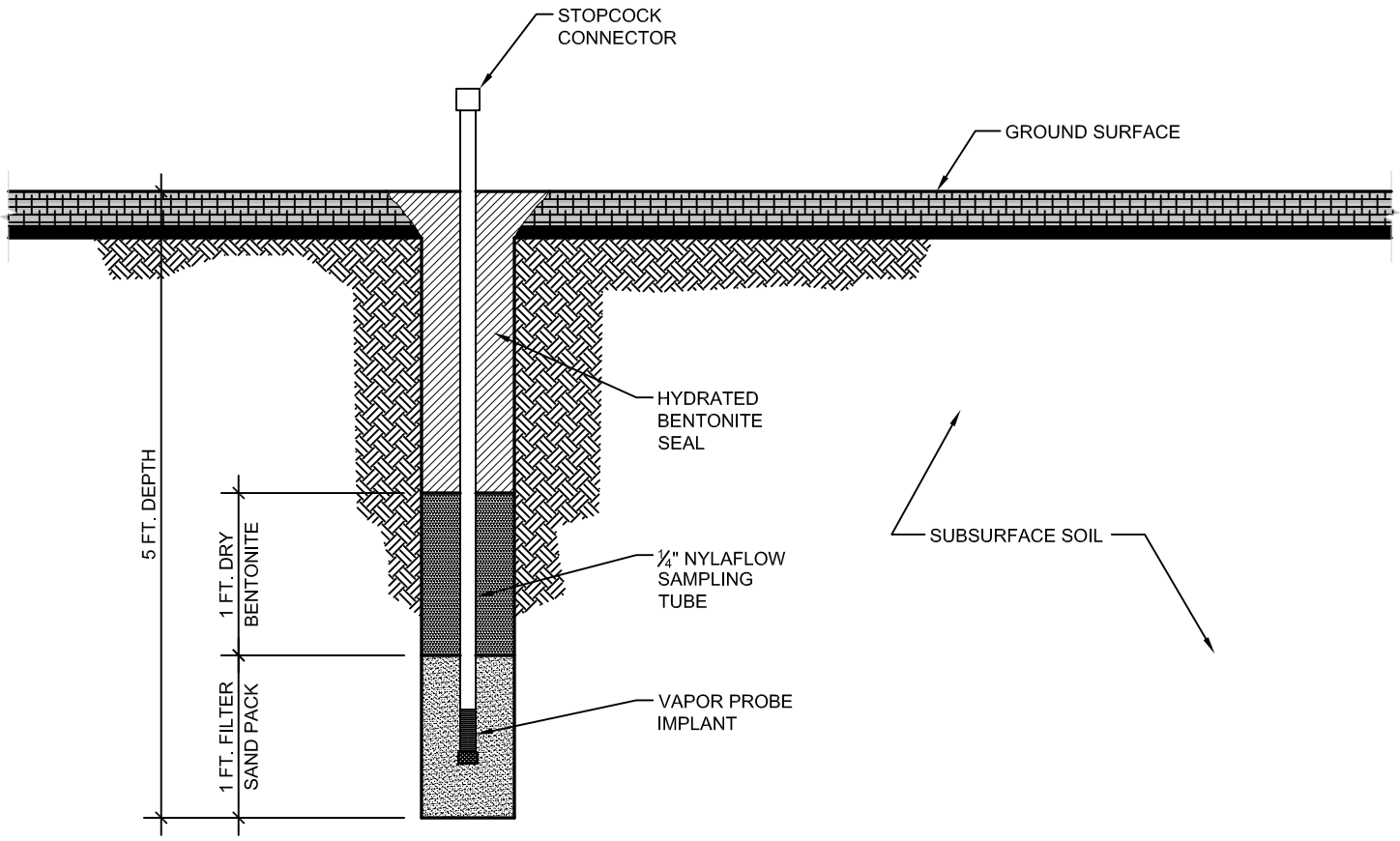
Project Number:	KCE-2022-454E	Drilling Co:	KCE Matrix, Inc.
Project Name:	Vacant Land	Drilling Method:	Hand Auger
Location:	(APN: 111-290-015-000), Farmersville, California	Field Geologist/Engineer:	Viken Melkonian
Start Date:	1/13/2023	Boring Diameter:	3.25"
Date Completed:	1/13/2023	Casing Diameter:	NA

Penetration Rate (# of Blows/6")	Sample interval	Sample PID Reading (in ppmV)	Lithology	Description	G.W. Level	Depth (ft)*
				~ Dirt Surface		
NA	EB-40 (1.5-2.0)	0.0	SP	Sand, Loose, Moist, Brown, No Odor		
NA	EB-40 (3.5-4.0)	0.0	SP	Sand, Firm, Dry, Brown, No odor		
				Total Depth = 4 ft		



APPENDIX E

(VAPOR PROBE CONSTRUCTION DIAGRAM 1)



SINGLE-STAGE SOIL-GAS SAMPLING PROBE CONSTRUCTION DIAGRAM

KCE MATRIX
CONSULTING ENGINEERS
STRUCTURAL,CIVIL & ENVIRONMENTAL

VACANT LAND
(APN: 111-290-015-000)
FARMERSVILLE, CALIFORNIA

PROJECT ID: KCE-2022-454E

DIAGRAM 1

APPENDIX F

FARMLAND CONVERSION IMPACT RATING AD-1006 FORM

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*		Date Of Land Evaluation Request 5/20/2025	
Name of Project Gardenia Courtyard Mixed-Use Project		Federal Agency Involved HCD	
Proposed Land Use Medium High Density Residential		County and State Tulare County, California	
PART II *(To be completed by NRCS)*		Date Request Received By NRCS 5/20/2025	Person Completing Form: Luis Alvarez
Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑ NO ☐	Acres Irrigated 568,184	Average Farm Size 299 ac.
Major Crop(s) Alfalfa-Hay, Cotton, Nuts	Farmable Land In Govt. Jurisdiction Acres: 851,52?% 27.4	Amount of Farmland As Defined in FPPA Acres: 971,7?% 31.3	
Name of Land Evaluation System Used CA Revised Storie Index	Name of State or Local Site Assessment System None	Date Land Evaluation Returned by NRCS 5/23/2025 LUIS ALVAREZ Digitally signed by LUIS ALVAREZ Date: 2025.12.15 10:44:43 -08'00'	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	9.4			
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	9.4			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	9.14			
B. Total Acres Statewide Important or Local Important Farmland	0.00			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.0009			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	21.11			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	86			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	86	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	86	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐

Reason For Selection:

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \text{ X } 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

APPENDIX G

PHASE I CULTURAL RESOURCE SURVEY FOR FARMERSVILLE GARDENIA COURTYARDS PROJECT, CITY OF FARMERSVILLE, CALIFORNIA

A
PHASE I CULTURAL RESOURCE SURVEY
FOR FARMERSVLLE GARDENIA COURTYARDS PROJECT,
CITY OF FARMERSVILLE, CALIFORNIA

Submitted to:

Crawford and Bowen Planning, Inc.
113 N. Church Street, Suite #302
Visalia, California 93291

Keywords:
Exeter 7.5' Quadrangle, City of Farmersville,
California Environmental Quality Act

Submitted by:
Hudlow Cultural Resource Associates
1405 Sutter Lane
Bakersfield, California 93309

Author:
Scott M. Hudlow

JULY 2023

Management Summary

At the request of Crawford and Bowen Planning, Inc., a Phase I Cultural Resource Survey was conducted on an approximate ten-acre parcel, located on the east side of Farmersville Road south of Dillon Avenue in the City of Farmersville, California. The Phase I Cultural Resource Survey consisted of an archaeological survey and a cultural resource record search.

No cultural resources were identified. No further work is required. If archaeological resources are encountered during the course of construction, a qualified archaeologist should be consulted for further evaluation.

If human remains or potential human remains are observed during construction, work in the vicinity of the remains will cease, and the remains will be treated in accordance with the provisions of State Health and Safety Code Section 7050.5. The protection of human remains follows California Public Resources Codes, Sections 5097.94, 5097.98, and 5097.99.

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1.0 Introduction

At the request of Crawford and Bowen Planning, *Hudlow Cultural Resource Associates* conducted a Phase I Cultural Resource Survey in accordance with the California Environmental Quality Act for a proposed multi-family residential development, Farmersville Gardenia Courtyards Project. The approximate ten-acre property lies on the east side of Farmersville Road, south of Dillon Avenue in the City of Farmersville, California. The Phase I Cultural Resource Survey consisted of a pedestrian survey and a cultural resource record search.

2.0 Project Location

The project area, is in the City of Farmersville, California. It is the NW ¼ of the SW ¼ of the SW ¼ of Section 31, T.18S., R.26E., Mount Diablo Baseline and Meridian, as displayed on the United States Geological Survey (USGS) Exeter 7.5-minute quadrangle map (Figure 1). The proposed multi-family residential development is located on the east side of Farmersville Road, south of Dillon Avenue in the City of Farmersville, California.

3.0 Record Search

A record search of the project area and the environs within one half-mile was conducted at the Southern San Joaquin Information Center. Information Center staff conducted the record search, RS# 23-182 on May 30, 2023. The record search revealed that ten cultural resource surveys have been conducted within one half-mile of the project area, however, no previous projects included the current project area. Three historic cultural resources, a historic canal, an industrial property and a historic house are located within one half-mile of the current project area. No cultural resources have been previously identified within the current project area (Appendix II).

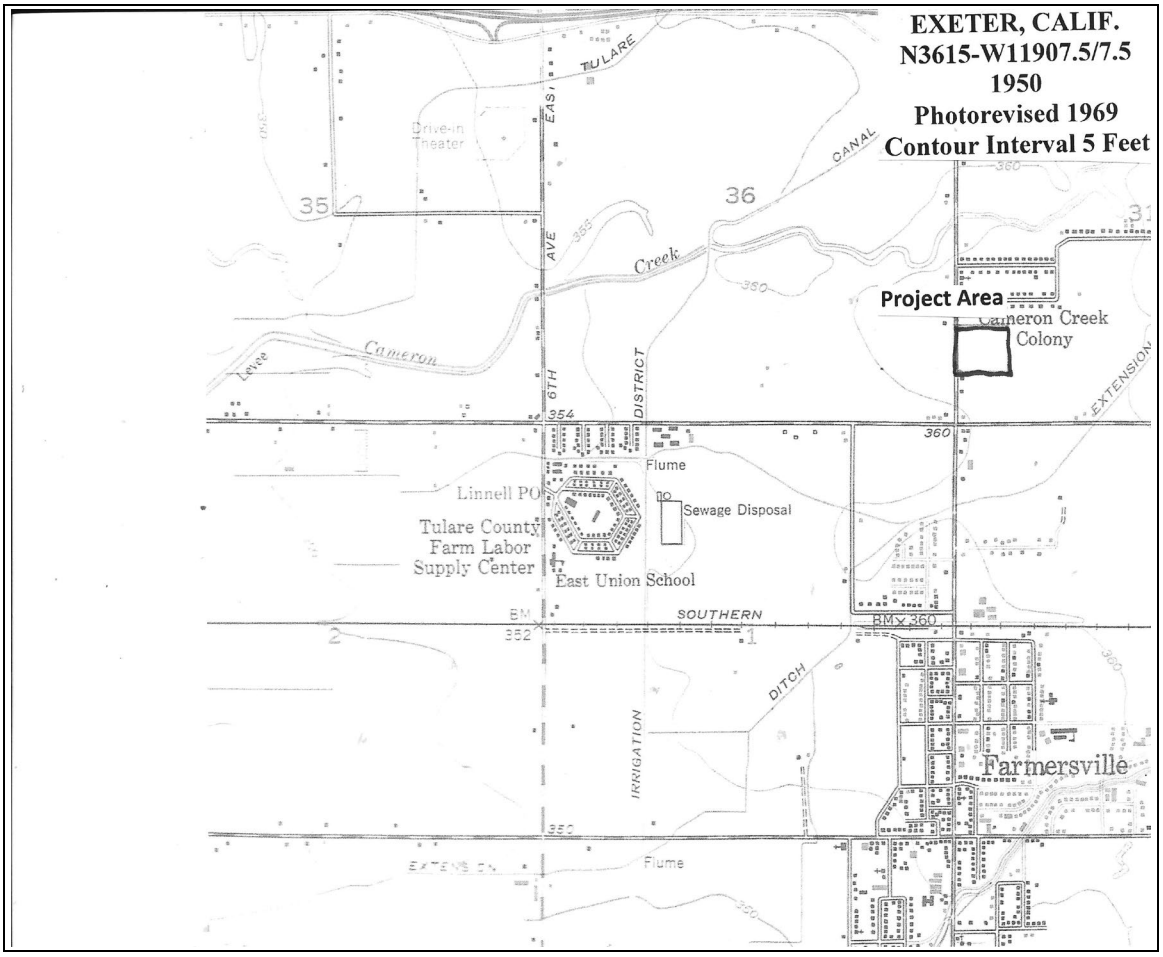
4.0 Environmental Background

The project area is located at elevation of 360 feet above mean sea level in the Great Central Valley, which is composed of two valleys-the Sacramento Valley and the San Joaquin Valley. The parcel is located within the Kaweah River delta between Cameron and Deep Creeks. The weedy lot is bisected by a gravel road and was a former farm field. No native vegetation survives; weeds and non-native grasses populate the project area, which is also covered with modern trash from the adjacent suburban neighborhood to the north and east (Figures 2 and 3).

5.0 Prehistoric Archaeological Context

A limited amount of archaeological research has been conducted in the southern San Joaquin Valley. Thus, consensus on a generally agreed upon

regional cultural chronology has yet to be developed. Most cultural sequences can be summarized into several distinct time periods: Early, Middle, and Late. Sequences differ in their inclusion of various "horizons," "technologies," or



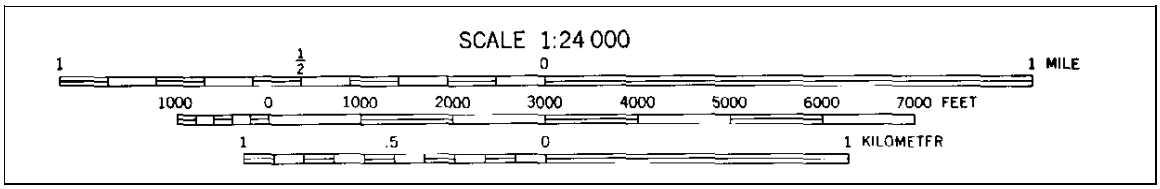


Figure 1
Project Area Location Map

"stages." A prehistoric archaeological summary of the southern San Joaquin Valley is available in Moratto (Moratto 1984).

Despite the preoccupation with chronological issues in most of the previous research, most suggested chronological sequences are borrowed from other regions with minor modifications based on sparse local data.

The following chronology is based on Parr and Osborne's Paleo-Indian, Proto-Archaic, Archaic, Post-Archaic periods (Parr and Osborne 1992:44-47). Most existing chronologies focus on stylistic changes of time-sensitive artifacts such as projectile points and beads rather than addressing the socioeconomic factors, which produced the myriad variations. In doing so, these attempts have encountered similar difficulties. These cultural changes are implied as environmentally determined, rather than economically driven.

Paleo-Indians, whom roamed the region approximately 12,000 years ago, were highly mobile individuals. Their subsistence is assumed to have been primarily big game, which was more plentiful 12,000 years ago than in the late twentieth century. However, in the Great Basin and California, Paleo people were also foragers who exploited a wide range of resources. Berries, seeds, and small game were also consumed. Their technology was portable, including manos (Parr and Osborne 1992:44). The paleo period is characterized by fluted Clovis and Folsom points, which have been identified throughout North America. The Tulare Lake region in Kings County has yielded several Paleo-Indian sites, which have included fluted points, scrapers, chipped crescents, and Lake Mojave-type points (Morratto 1984:81-2).

The Proto-Archaic period, which dates from approximately 11,000 to 8,000 years ago, was characterized by a reduction in mobility and conversely an increase in sedentism. This period is classified as the Western Pluvial Lake Tradition or the Proto-Archaic, of which the San Dieguito complex is a major aspect (Moratto 1984: 90-99; Warren 1967). An archaeological site along Buena Vista Lake in southwestern Kern County displays a similar assemblage to the San Dieguito type site. Claude Warren proposes that a majority of Proto-Archaic southern California could be culturally classified as the San Dieguito Complex (Warren 1967). The Buena Vista Lake site yielded manos, millingstones, large stemmed and foliate points, a mortar, and red ochre. During this period, subsistence patterns began to change. Hunting focused on smaller game and plant collecting became more integral. Large stemmed, lancelote (foliate) projectile points represents lithic technology. Millingstones become more prevalent. The increased sedentism possibly began to create regional stylistic and cultural differences not evident in the paleo period.

The Archaic period persisted in California for the next 4000 years. In 1959, Warren and McKusiak proposed a three-phase chronological sequence based on a small sample of burial data for the Archaic period (Moratto 1984:189; Parr and Osborne 1992:47). It is distinguished by increased sedentism and extensive seed and plant exploitation. Millingstones, shaped through use, were

Figure 2
Project Area, View to the Southeast

Figure 3
Project Area, View to the West Northwest

abundant. Bedrock manos and metates were the most prevalent types of millingstones (Parr and Osborne 1992:45). The central valley began to develop distinct cultural variations, which can be distinguished by different regions throughout the valley, including Tulare County.

In the Post-Archaic period enormous cultural variations began manifesting themselves throughout the entire San Joaquin Valley. This period extends into the contact period in the seventeenth, eighteenth and nineteenth centuries. Sedentary village life was emblematic of the Post-Archaic period, although hunting and gathering continued as the primary subsistence strategy. Agriculture was absent in California, partially due to the dense, predictable, and easily exploitable natural resources. The ancestral Yokuts have possibly been in the valley for the last three thousand years, and by the eighteenth century were the largest pre-contact population, approximately 40,000 individuals, in California (Moratto 1984).

6.0 Ethnographic Background

The Yokuts are a Penutian-speaking, non-political cultural group. Penutian speakers inhabit the San Joaquin Valley, the Bay Area, and the Central Sierra Nevada Mountains. The Yokuts are split into three major groups, the Northern Valley Yokuts, the Southern Valley Yokuts, and the Foothill Yokuts.

The southern San Joaquin Valley in the area northeast of Farmersville was home to the Yokuts tribelet, Wolase. The tribelet had approximately 550 people, had a special name for themselves, and spoke a unique dialect of the Yokuts language. Land was owned, collectively, and every group member enjoyed the right to utilize food resources. The Wolase occupied the area on the south side of the Kaweah River (Latta 1999).

The Southern Valley Yokuts had a mixed economy emphasizing fishing, hunting, fowling, and collecting shellfish, roots, and seeds. Fish were the most prevalent resource and was a productive activity throughout the entire year. Fish were caught in many different manners, including nets, conical basket traps, catching with bare hands, shooting with bows and arrows, and stunning fish with mild floral toxins. Geese, ducks, mud hens and other waterfowl were caught in snares, long-handled nets, stuffed decoys, and brushing brush to trick the birds to fly low into waiting hunters. Mussels were gathered and steamed on beds of tule. Turtles and dogs were consumed (Wallace 1978:449-450).

Wild seeds and roots provided a large portion of the Yokuts' diet. Tule seeds, grass seeds, fiddleneck, alfilaria were also consumed. Acorns, the staple crop for many California native cultures, were not common in the San Joaquin Valley. Acorns were traded into the area. Land mammals, such as rabbits, ground squirrels, antelope and tule elk, were not taken often (Wallace 1978:450).

The Yokuts occupied permanent structures in permanent villages for most of the year. During the late and early summer, families left for several months to gather seeds and plant foods, shifting camp locations when changing crops. Several different types of fiber-covered structures were common in Yokuts settlements. The largest was a communal tule mat-covered, wedge-shaped structure, which could house upward of ten individuals. These structures were established in a row, with the village chief's house in the middle and his messenger's houses were located at the ends of the house row. Dance houses and assembly buildings were located outside the village living area (Nabokov and Easton 1989:301).

The Yokuts also built smaller, oval, single-family tule dwellings. These houses were covered with tall mohya stalks or with sewn tule mats. Bent-pole ribs that met a ridgepole held by two crotched poles framed these small houses. The Yokuts also built a cone-shaped dwelling, which was framed with poles tied together with a hoop and then covered with tule or grass. These cone-shaped dwellings were large enough to contain multiple fireplaces (Nabokov and Easton 1989:301). Other structures included mat-covered granaries for storing food supplies, and a dirt-covered, communally owned sweathouse.

Clothing was minimal, men wore a breechclout or were naked. Women wore a narrow-fringed apron. Cold temperatures brought out rabbitskin or mud hen blankets. Moccasins were worn in certain places; however, most people went barefoot. Men wore no head coverings, but women wore basketry caps when they carried burden baskets on their heads. Hair was worn long. Women wore tattoos from the corners of the mouth to the chin; both men and women had ear and nose piercings. Bone, wood or shell ornaments were inserted (Wallace 1978:450-451).

Tule dominated the Yokut's material culture. It was used for many purposes, including sleeping mats, wall coverings, cradles, and basketry. Ceramics are uncommon to Yokuts culture as is true throughout most California native cultures. Basketry was common to Yokuts culture. Yokuts made cooking containers, conical burden baskets, flat winnowing trays, seed beaters, and necked water bottles. Yokuts also manufactured wooden digging sticks, fire drills, mush stirrers, and sinew-backed bows. Knives, projectile points, and scraping tools were chipped from imported lithic materials including obsidian, chert, and chalcedony. Stone mortars and pestles were secured in trade. Cordage was manufactured from milkweed fibers, animal skins were tanned, and awls were made from bone. Marine shells, particularly olivella shells, were used in the manufacture of money and articles of personal adornment. Shells were acquired from the Chumash along the coast (Wallace 1978:451-453).

The basic social and economic unit was the nuclear family. Lineages were organized along patrilineal lines. Yokuts fathers transmitted totems, particular to each paternal lineage, to each of his children. The totem was an animal or bird that no member would kill or eat and that was dreamed of and

prayed to. The mother's totem was not passed to her offspring; but was treated with respect. Families sharing the same totem formed an exogamous lineage. The lineage had no formal leader nor did it own land. The lineage was a mechanism for transmitting offices and performing ceremonial functions. The lineages formed two moieties, East and West, which consisted of several different lineages. Moieties were customarily exogamous. Children followed the paternal moiety. certain official positions within the villages were associated with certain totems. The most important was the Eagle lineage from which the village chief was appointed. A member of the Dove lineage acted as the chief's assistant. He supervised food distribution and gave commands during ceremonies. Another hereditary position was common to the Magpie lineage, was that of spokesman or crier.

7.0 Historical Overview

Tulare County was settled in the 1850s, soon after California joined the United States after the passage of the Compromise of 1850. The Compromise of 1850 allowed California to join the Union as a free state even though a major portion of the state lied beneath the Missouri Compromise line; and was potentially subject to southern settlement and slavery. Americans had long been visiting and working in California prior to the admission of California into the Union.

The Spanish moving north from Baja California into Alta California began European settlement of California 1n 1769. Father Junipero Serra, a Franciscan friar founded Mission San Diego de Alcala, beginning California active European settlement. However, Spanish mission efforts were focused on California's coastal regions. Spanish exploration of the San Joaquin Valley region begins in the 1770s. In 1772, Pedro Fages arrived in the San Joaquin Valley searching for army deserters. Father Francisco Garces, a Franciscan priest, soon visited the vicinity in 1776. The Spanish empire collapsed in 1820, all of Spain's former Central and South American colonies became independent nations. As a result, California became Mexican territory. California stayed in Mexican hands until the Mexican-American War. Mexican California remained a coastal society with little interest in settling in California's hot, dry interior valleys.

American exploration of the San Joaquin Valley begins in the 1820s with Jedediah Smith, Kit Carson, and Joseph Walker looking for commercial opportunities. The United States government began exploring California in the 1830s. Soon, the Americans will be searching for intercontinental railroad routes to link the eastern and western halves of the continent.

The defeat of the Mexicans during the Mexican-American War and the subsequent discovery of gold will drastically alter the complicated political realities of the west. The Mexican-American War was ostensible fought to settle a boundary dispute with the Mexicans over the western boundary of the newly-annexed state of Texas, which had fought a successful rebellion against the

Mexican Army in the mid 1830s. The Republic of Texas was an independent country for nine years until Texas was annexed by the United States in 1845. One major outcome of the Mexican-American War was that Mexico rescinded its claims to much of the American southwest. In 1848 these territories were folded into the United States, including California.

In January 1848, the discovery of gold in Coloma, California changed the settlement of California, forever. In the summer of 1848, when the gold strike was publicly announced, the overnight settlement of California began. The Mexican population of California was small and limited to the coasts and a few of southern California's interior valleys. A sizable native population settled the remainder of California; Tulare County was Yokuts territory. The Gold Rush tipped the balance of native communities throughout California, as many of California's natives were decimated.

In 1852, Tulare County was created from the southern half of Mariposa County. The first county seat was at Woodsville; however, Visalia was established that same year, and became the county seat in 1853. Visalia and Tulare County began to grow as the miners, who were attracted to the small gold rush in the Kern River Valley, returned to the San Joaquin valley and began farming after the gold at Keyesville was played out.

While farmers were settling the valley, cattle ranchers, timber mill operators, and resort operators settled the heavily timbered highlands of the southern Sierra Mountains. Road builders, such as John Jordan, opened the mountains, following native (Yokuts) trails into the mountains. By 1865, timber mills were found in the general vicinity, and were responsible for opening areas for settlement and for providing lumber to fuel the local economy. Cattle ranchers and shepherds grazed their animals throughout the region until 1903, when the laws changed.

As access to the San Joaquin Valley was secured via new and better roads, the mountains opened to permanent settlements. Small towns were established, such as Springville. Avon M. Coburn founded Springville in 1890. Coburn established a box factory and sawmill along the Tule River, near where Bear Creek empties into the middle fork of the Tule River. Springville flourished connecting the Tule River valley to the San Joaquin Valley via the wagon road to Porterville, which had been established in 1864.

As the areas to the west grew, the need for steady economical power arose. Albert Wishon, a local real estate agent, convinced the new (1895) San Joaquin Power Company, (later the San Joaquin Light and Power Company), which later merged with Pacific Gas and Electric Company in 1930, to build a hydroelectric dam on the Tule River in 1900. The pack road east of Springville was upgraded to a wagon road, and Camp Wishon was established as a construction camp, located below the Doyle Ranch. Construction on the power plant began in 1904. The power plant not only provided reliable power to the San Joaquin Valley to the west, but also opened areas to the east.

8.0 Field Procedures and Methods

On July 20, 2023, Scott M. Hudlow (for qualifications see Appendix I) conducted a pedestrian archaeological survey of the entire proposed project area. Hudlow surveyed in east/west transects across the entire lot in 15-meter (33 feet) intervals. All archaeological material more than fifty years of age or earlier encountered during the inventory would have been recorded. Site and isolate forms would be completed, artifacts and maps would be drawn.

9.0 Report of Archaeological Findings

No cultural resources were identified.

10.0 Management Recommendations

At the request of Crawford and Bowen Planning, Inc., a Phase I Cultural Resource Survey was conducted on an approximate ten-acre parcel, located on the east side of Farmersville Road south of Dillon Avenue in the City of Farmersville, California. The Phase I Cultural Resource Survey consisted of an archaeological survey and a cultural resource record search.

No cultural resources were identified. No further work is required. If archaeological resources are encountered during the course of construction, a qualified archaeologist should be consulted for further evaluation.

If human remains or potential human remains are observed during construction, work in the vicinity of the remains will cease, and the remains will be treated in accordance with the provisions of State Health and Safety Code Section 7050.5. The protection of human remains follows California Public Resources Codes, Sections 5097.94, 5097.98, and 5097.99.

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Warren, Claude N.
1967 "The San Dieguito Complex: A Review and Hypothesis" *American Antiquity* 32(2): 168-185.

Appendix I

Scott M. Hudlow
1405 Sutter Lane
Bakersfield, California 93309
(661) 834-9183

Education

The George Washington University
M.A. American Studies, 1993
Specialization in Historical Archaeology
and Architectural History

University of California, Berkeley
B.A. History, 1987
B.A. Anthropology, 1987
Specialization in Historical Archaeology
and Colonial History

Public Service

3/94-12/02 *Historic Preservation Commission.* City of Bakersfield, Bakersfield, California 93305.

7/97-12/01 *Newsletter Editor. California History Action,* newsletter for the California Council for the Promotion of History.

Relevant Work Experience

8/96- *Adjutant Faculty.* Bakersfield College, 1801 Panorama Drive, Bakersfield, California, 93305. Teach History 17A, Introduction to American History and Anthropology 5, Introduction to North American Indians.

Owner, Sole Proprietorship. Hudlow Cultural Resource Associates. 1405 Sutter Lane, Bakersfield California 93309. Operate small cultural resource management business. Manage contracts, respond to RFP's, bill clients, manage temporary employees. Conduct Phase I archaeological and architectural surveys for private and public clients; including the cultural resource survey, documentary photography, measured drawings, mapping of structures, filing of survey forms, historic research, assessing impact and writing reports. Evaluated archaeological and architectural sites and properties in lieu of their eligibility for the National Register of Historic Places in association with Section 106 and 110 requirements of the National Historic Preservation Act of 1966 and CEQA (California Environmental Quality Act).

Full resume available upon request.

Appendix II

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

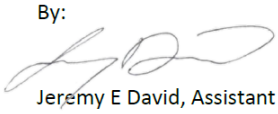
There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:



Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

APPENDIX H

SECTION 106 CONSULTATION MATERIALS

March 27, 2025

Chairperson Delia Dominguez
Kitanemuk & Yowlumne Tejon Indians
115 Radio Street
Bakersfield, CA, 93305

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Chairperson Dominguez,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

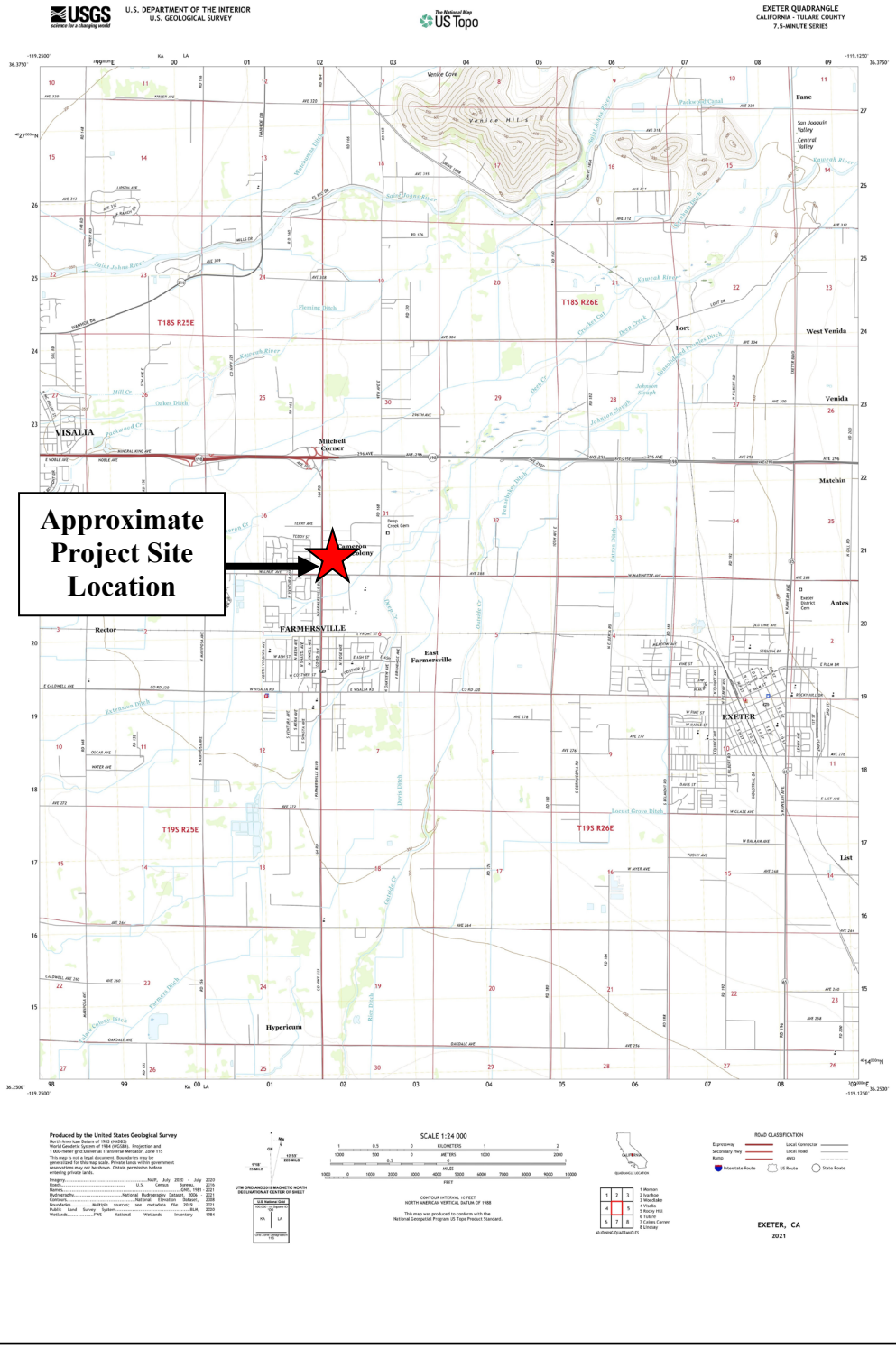
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Cultural Specialist Samantha McCarty
Santa Rosa Rancheria Tachi Yokut Tribe
P.O Box 8
Lemoore, CA, 93245

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Cultural Specialist McCarty,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

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Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

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1. Topographic Project Location Map
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4. NAHC Records Search

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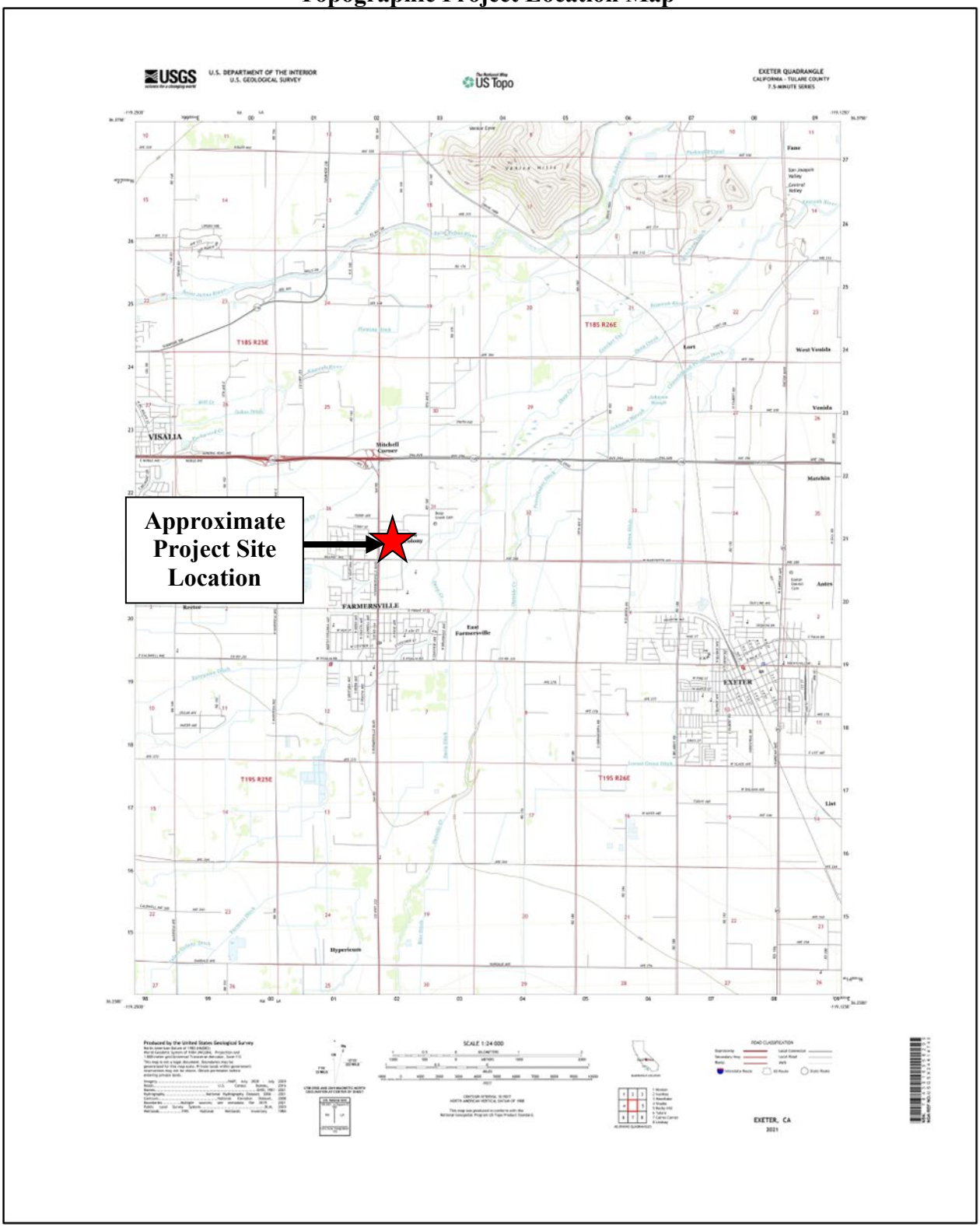

Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

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Record Search 23-182

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Cultural Specialist Nichole Escalon
Santa Rosa Rancheria Tachi Yokut Tribe
P.O Box 8
Lemoore, CA, 93245

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Cultural Specialist Escalon,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

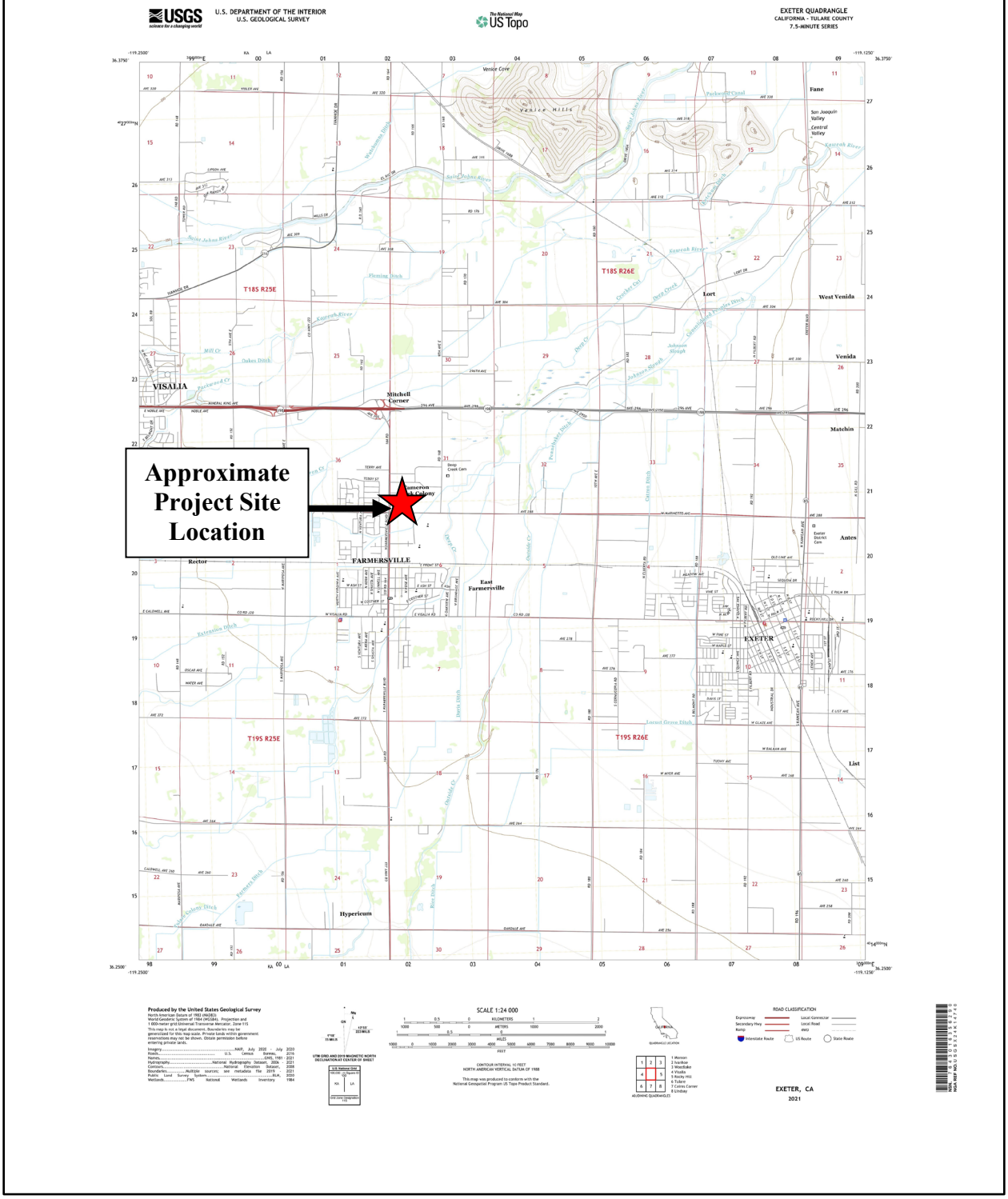
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Cultural Department Director Shana Powers
Santa Rosa Rancheria Tachi Yokut Tribe
P.O Box 8
Lemoore, CA93245

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Director Powers,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

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Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

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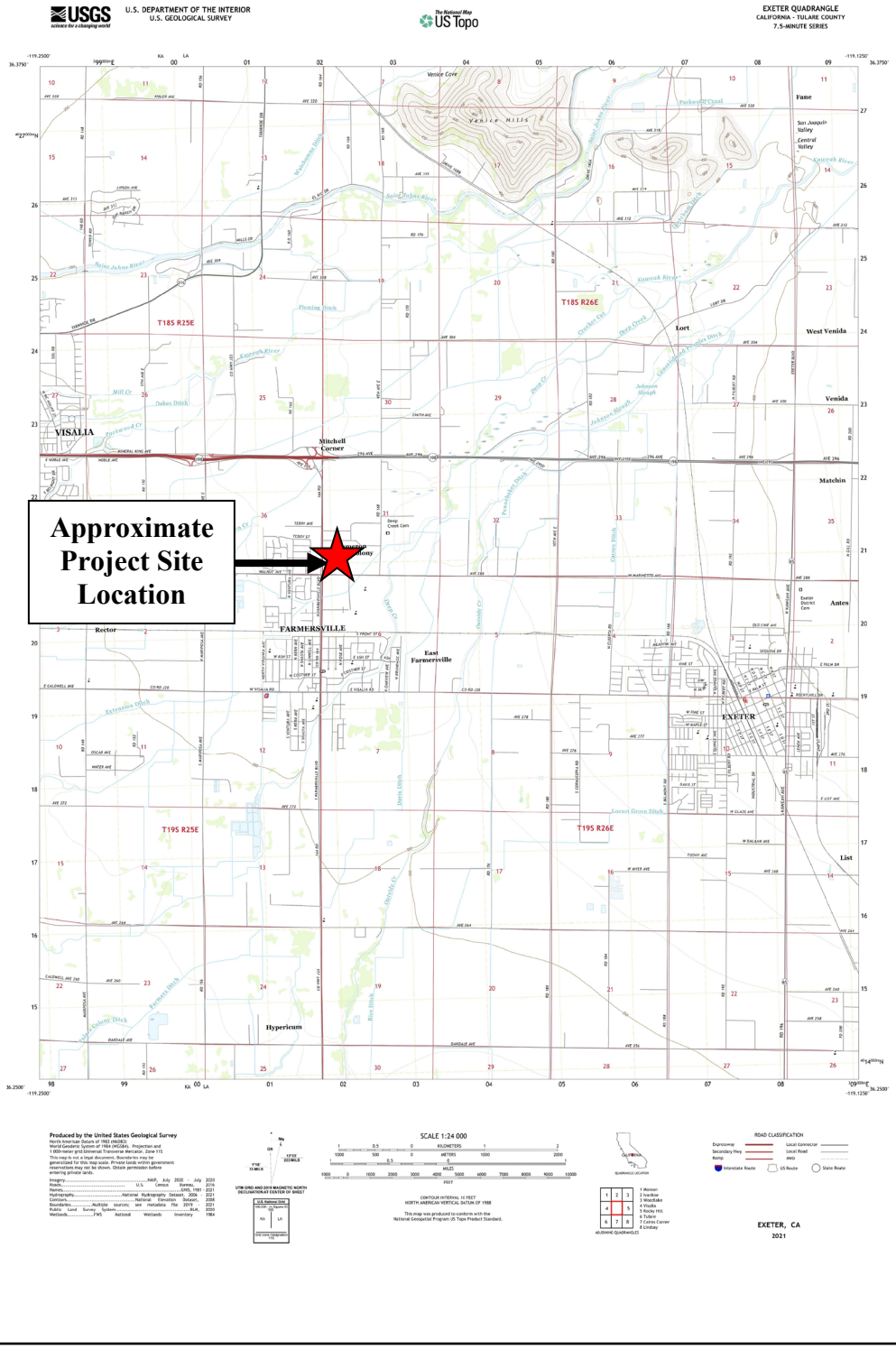
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

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Record Search 23-182

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COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

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If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Chairperson Michelle Heredia-Cordova
Table Mountain Rancheria
P.O Box 410
Friant, CA, 93626

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Chairperson Heredia-Cordova,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

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The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

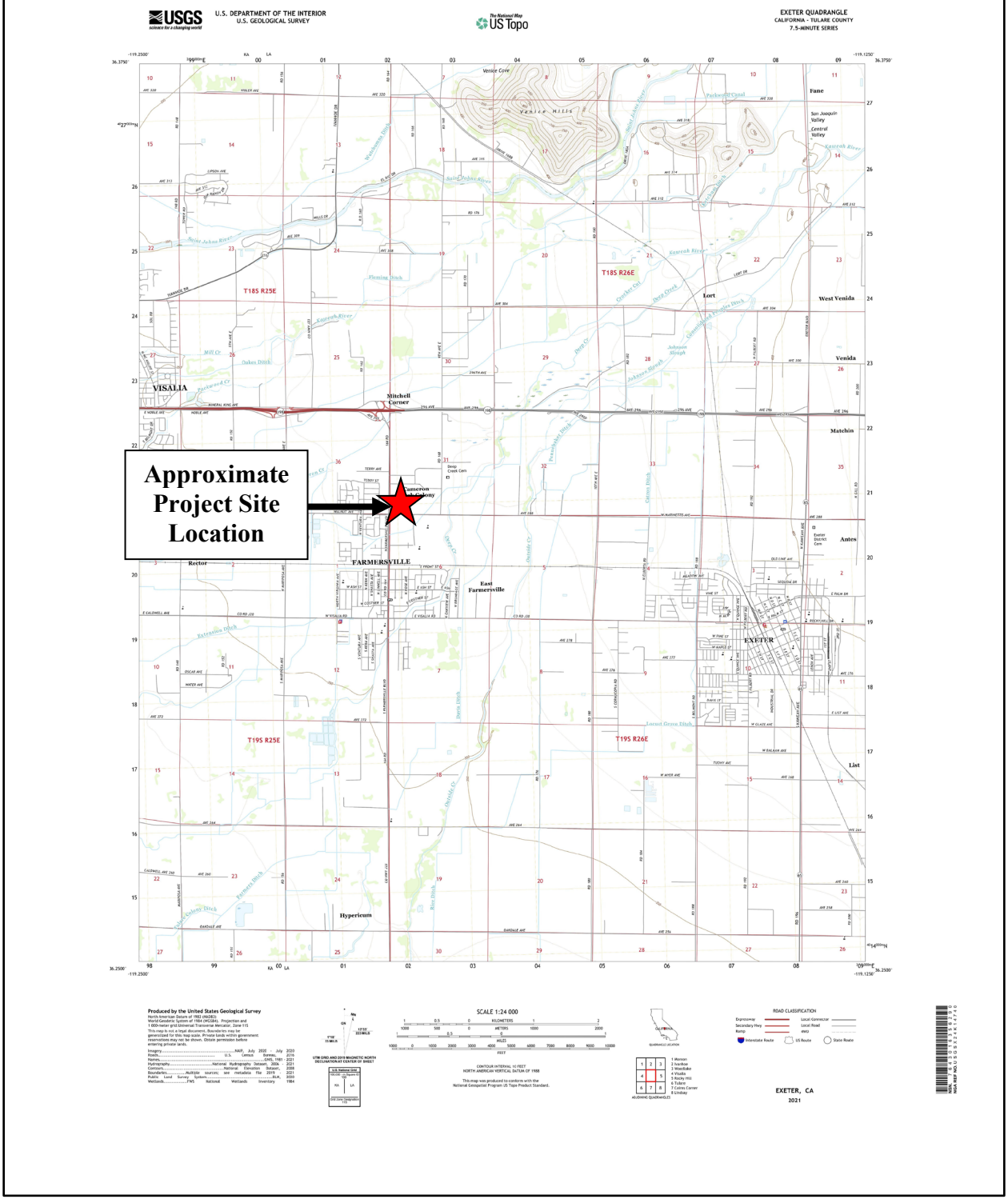
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Cultural Resource Director Bob Pennell
Table Mountain Rancheria
P.O Box 410
Friant, CA, 93626

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Director Pennell,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

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Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

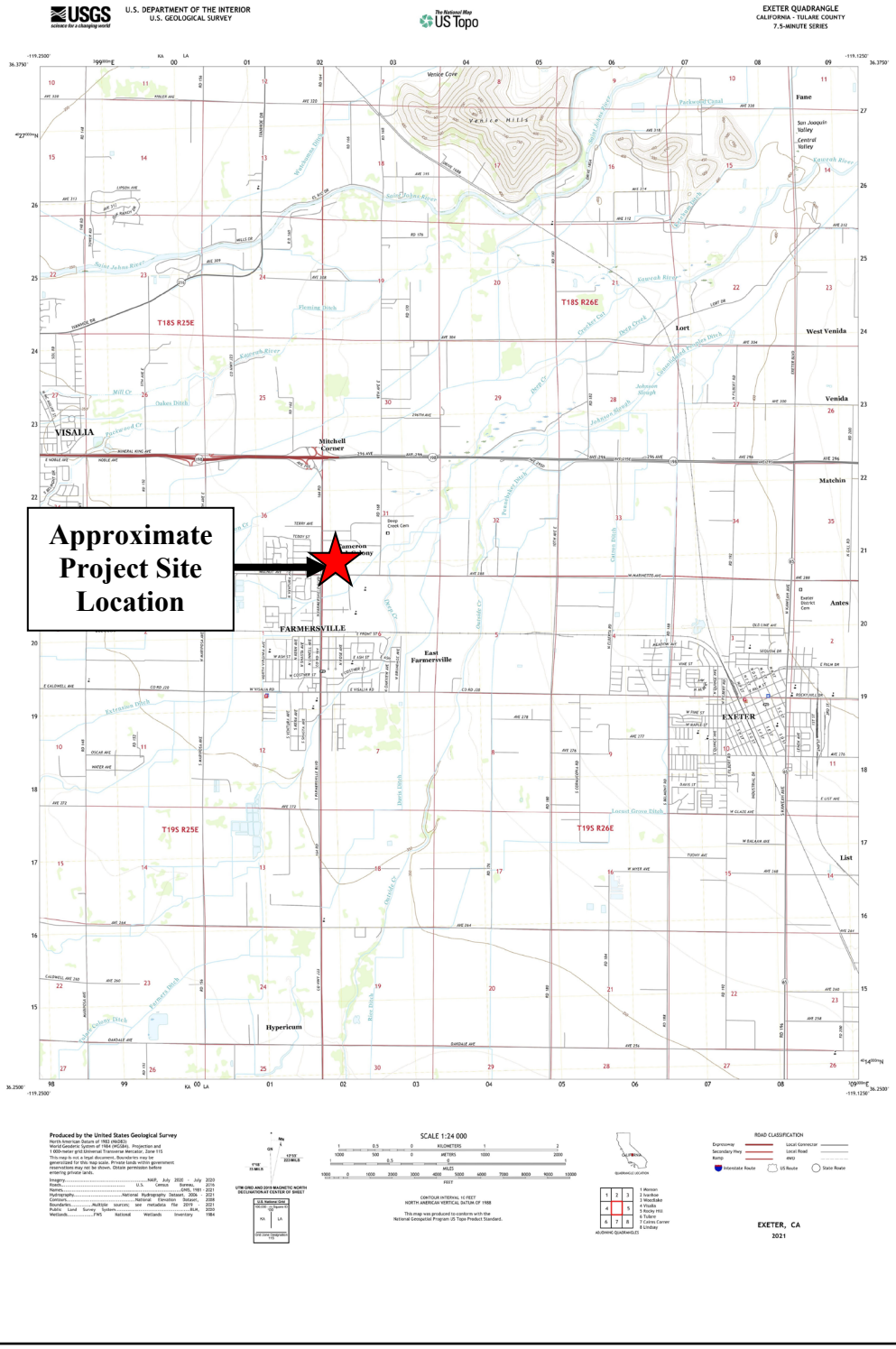
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

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Record Search 23-182

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COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

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If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Chairperson David Alvarez
Traditional Choinumni Tribe
2415 E. Houston Avenue
Fresno, CA, 93720

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Chairperson Alvarez,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

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Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

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Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

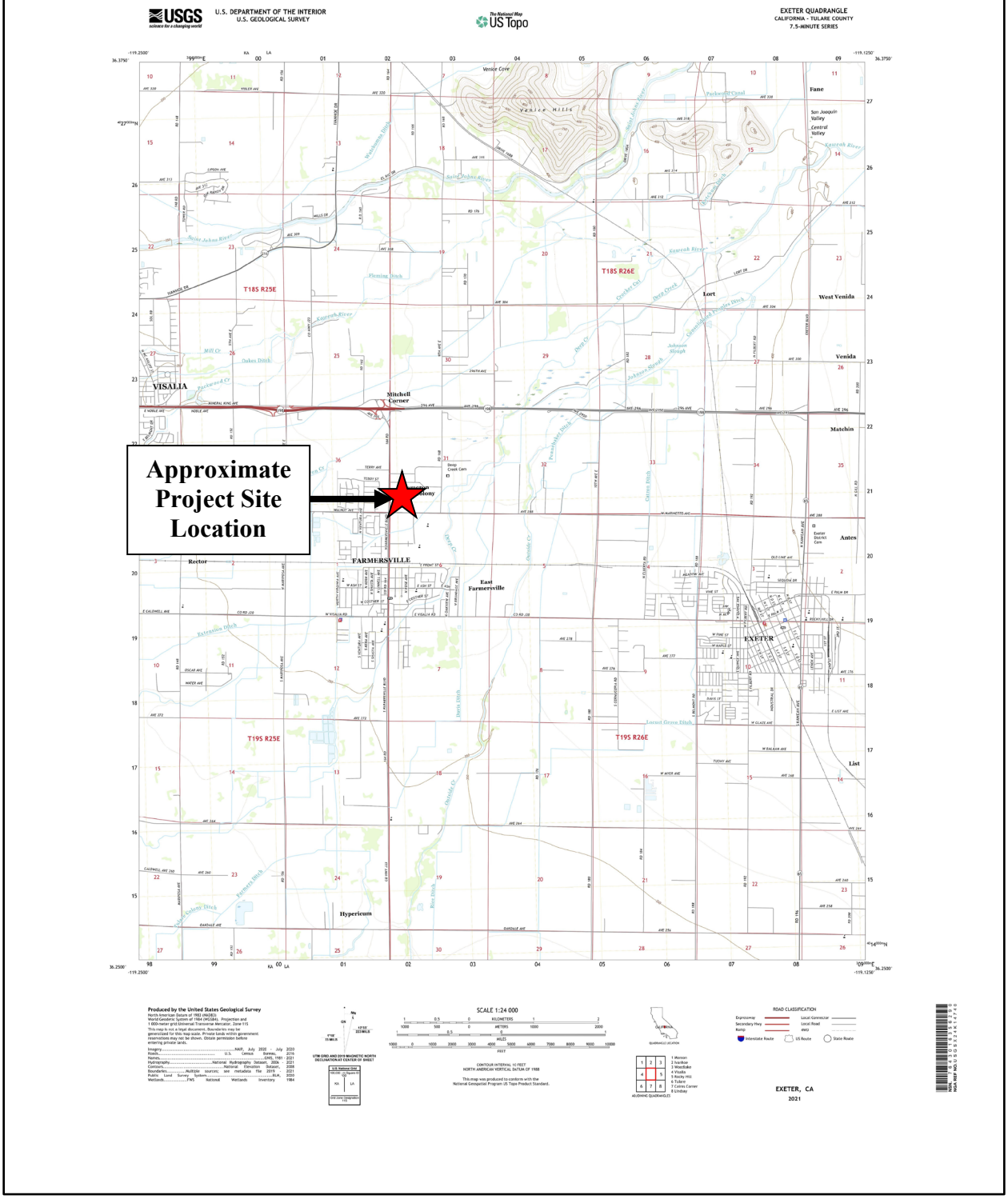
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Chairperson Neil Peyron
Tule River Indian Tribe
P.O Box 589
Porterville, CA, 93258

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Chairperson Peyron,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

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Sincerely,

Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

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4. NAHC Records Search

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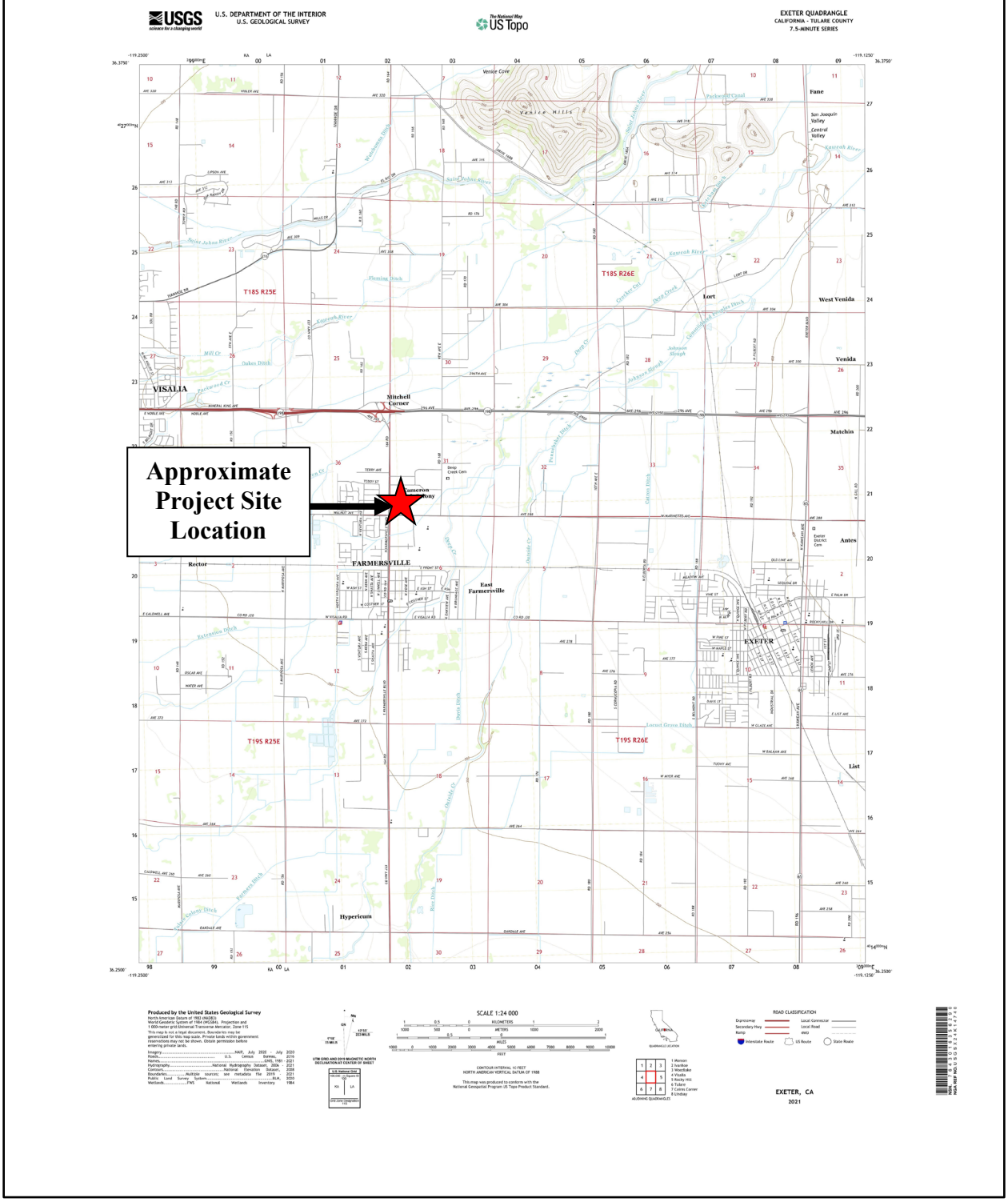

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California Historical Resources Information System

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Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

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Record Search 23-182

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Tribal Archeologist Joey Garfield
Tule River Indian Tribe
P.O Box 589
Porterville, CA, 93258

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Mr. Garfield,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

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Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

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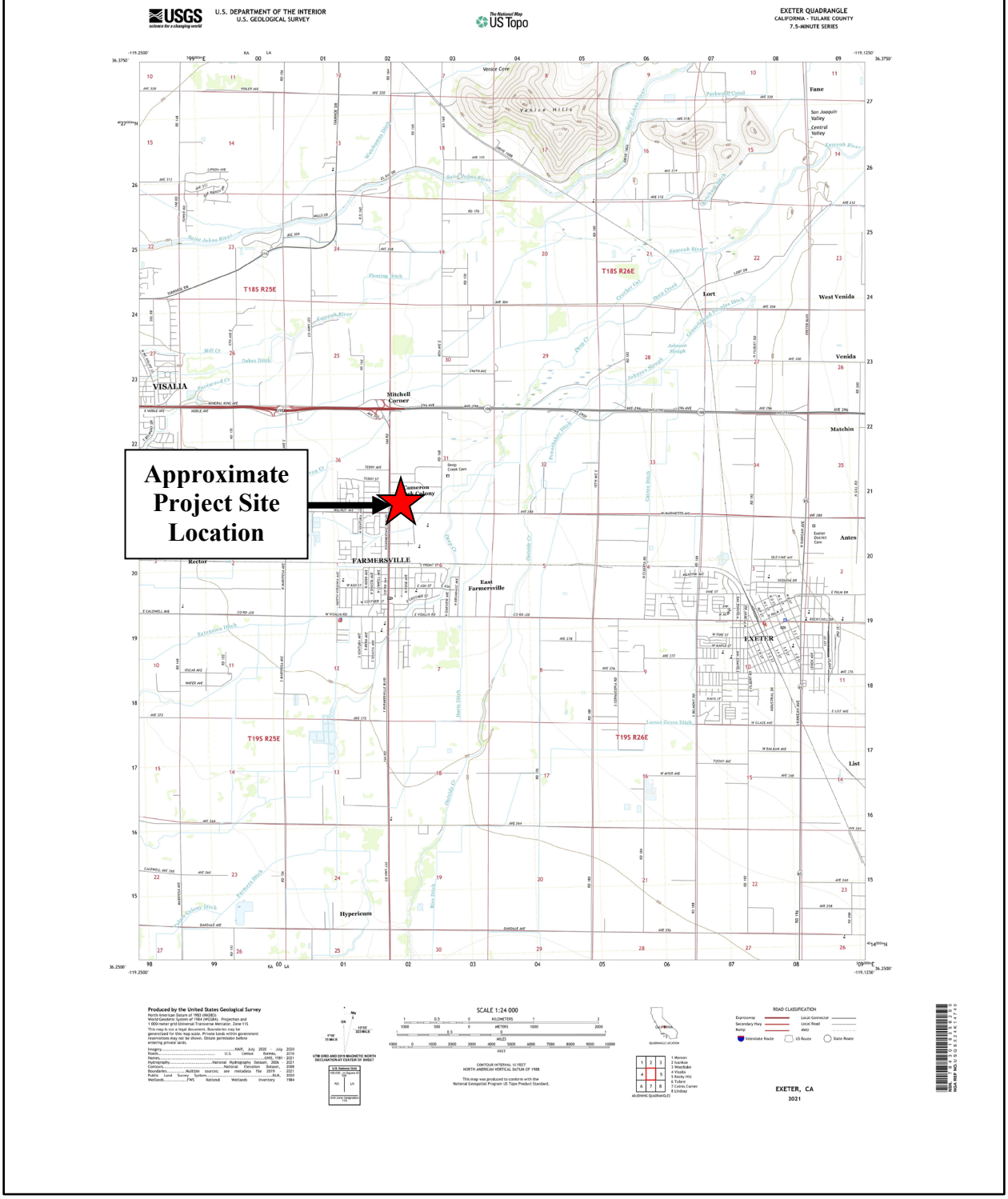

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Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Department of Environmental Protection Director Kerri Vera
Tule River Indian Tribe
P.O Box 589
Porterville, CA, 93258

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Director Vera,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

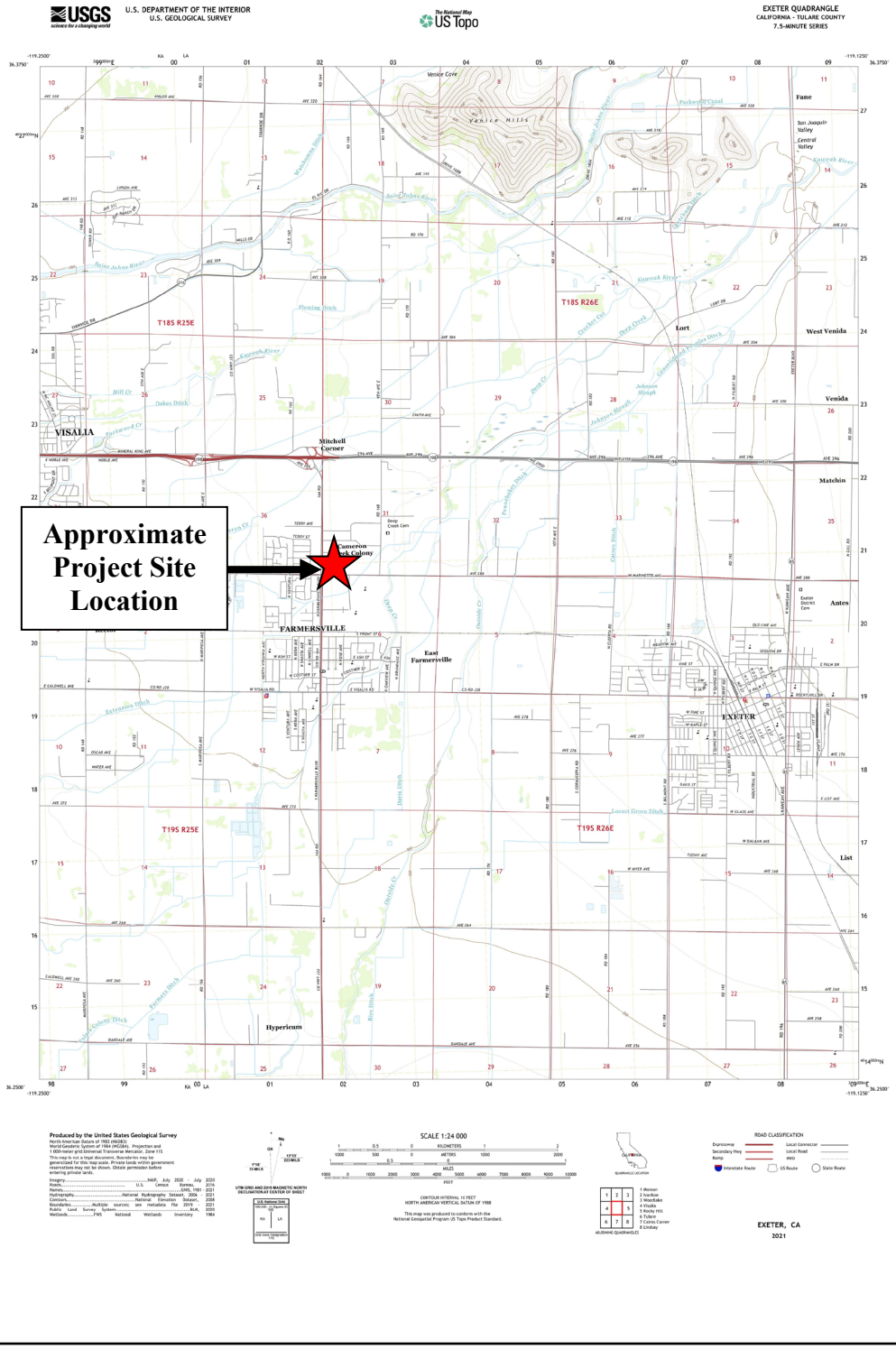
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
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Visalia, CA 93291

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Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

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NAHC Records Search

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Chumash

VICE-CHAIRPERSON
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Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

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If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Chairperson Kenneth Woodrow
Wuksachi Indian Tribe/Eshom Valley Band
1179 Rock Haven Ct.
Salinas, CA, 93906

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Chairperson Woodrow,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

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The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

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Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

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Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

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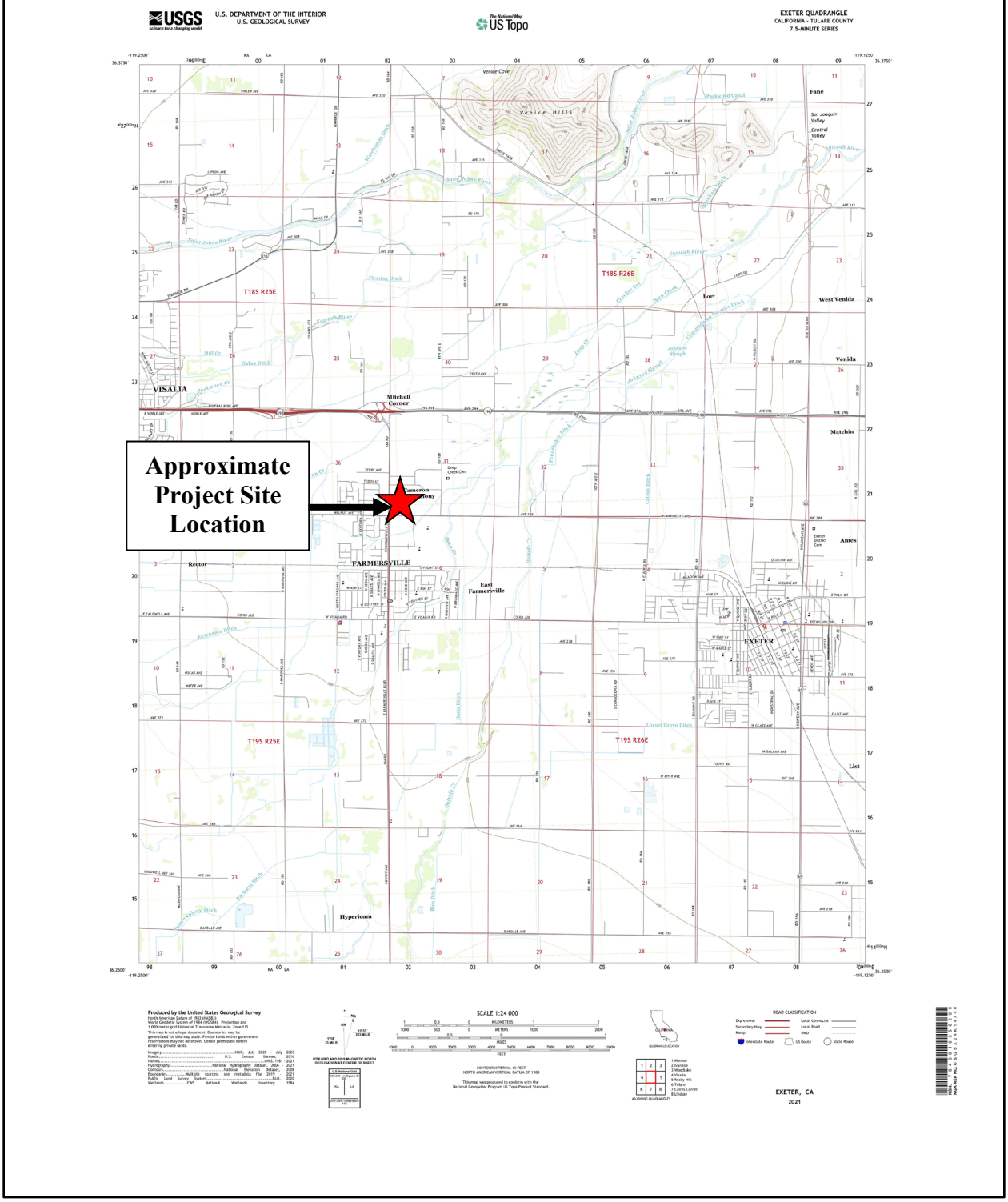

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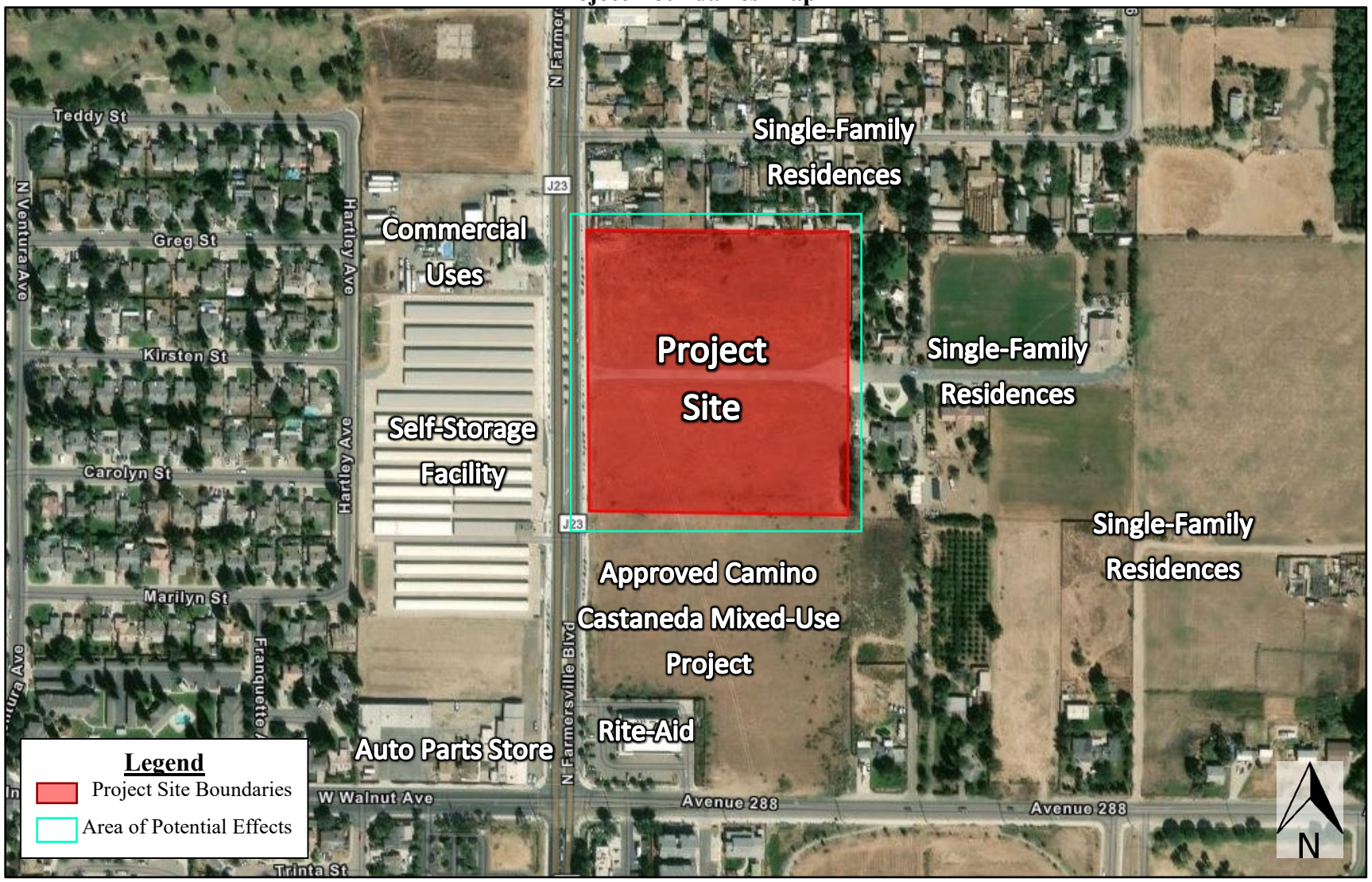

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California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
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Bakersfield, California 93311-1022
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KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

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There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

APPENDIX I

GARDENIA COURTYARD MIXED-USE PROJECT, FARMERSVILLE, CALIFORNIA 93223, STATE HISTORIC PRESERVATION OFFICER LETTER

May 9, 2025

Julianne Polanco
State Historic Preservation Officer
California Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100

Subject: Gardenia Courtyard Mixed-Use Project, Farmersville, California 93223

Dear Ms. Polanco,

The U.S. Department of Housing and Urban Development (HUD) is providing federal funding for the Gardenia Courtyard Mixed-Use Project (proposed project), located in the City of Farmersville, thereby making the project subject to environmental reviesw under the National Environmental Policy Act (NEPA). The City of Farmersville is the Responsible Entity and HUD is the NEPA Lead Agency for the proposed project. The City of Farmersville, as the Responsible Entity, is working with Raney Planning & Management, Inc. to prepare a NEPA Environmental Assessment for the proposed project.

The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The project site is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility, and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed

project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

In order to ascertain the potential of discovering cultural or historical resources on the property, the Southern San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield conducted a records search of the California Historical Resources Information System (CHRIS) for the project site and vicinity (see Attachment 3). The CHRIS records search included review of the cultural resource files at the SSJVIC, known and recorded cultural resources sites, inventory and excavation reports, the National Register of Historic Places, the Office of Historic Preservation (OHP) Built Environmental Resources Directory, California State Historical Landmarks, the California Register of Historical Resources, the California Inventory of Historic Resources, and California Points of Historical Interest. The records search concluded that the project site does not contain any recorded cultural or historical resources. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Pursuant to Section 106 of the National Historic Preservation Act, on March 27, 2025, the City distributed requests for consultation to the applicable Native American tribes identified by the NAHC (see Attachment 5 and Attachment 6). The tribes identified by the NAHC did not respond within the allotted review period.

Based on the findings described above, the discovery of historic cultural resources or tribal cultural resources is not anticipated to occur during implementation of the proposed project. The project would be subject to State requirements, pursuant to Health and Safety Code Section 7050.5(c) and Public Resources Code Section 5097.98, in the event that any cultural resources are encountered on-site.

Based on the results of the CHRIS and NAHC Sacred Lands File record searches, and because the project would be required to comply with State standards and the protective measures included in the Environmental Assessment, the City has determined that **historic properties or archaeological resources would not be affected** as a result of the proposed project.

If you have any questions regarding the project, please feel free to contact me by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. Thank you for your time and attention to this matter.

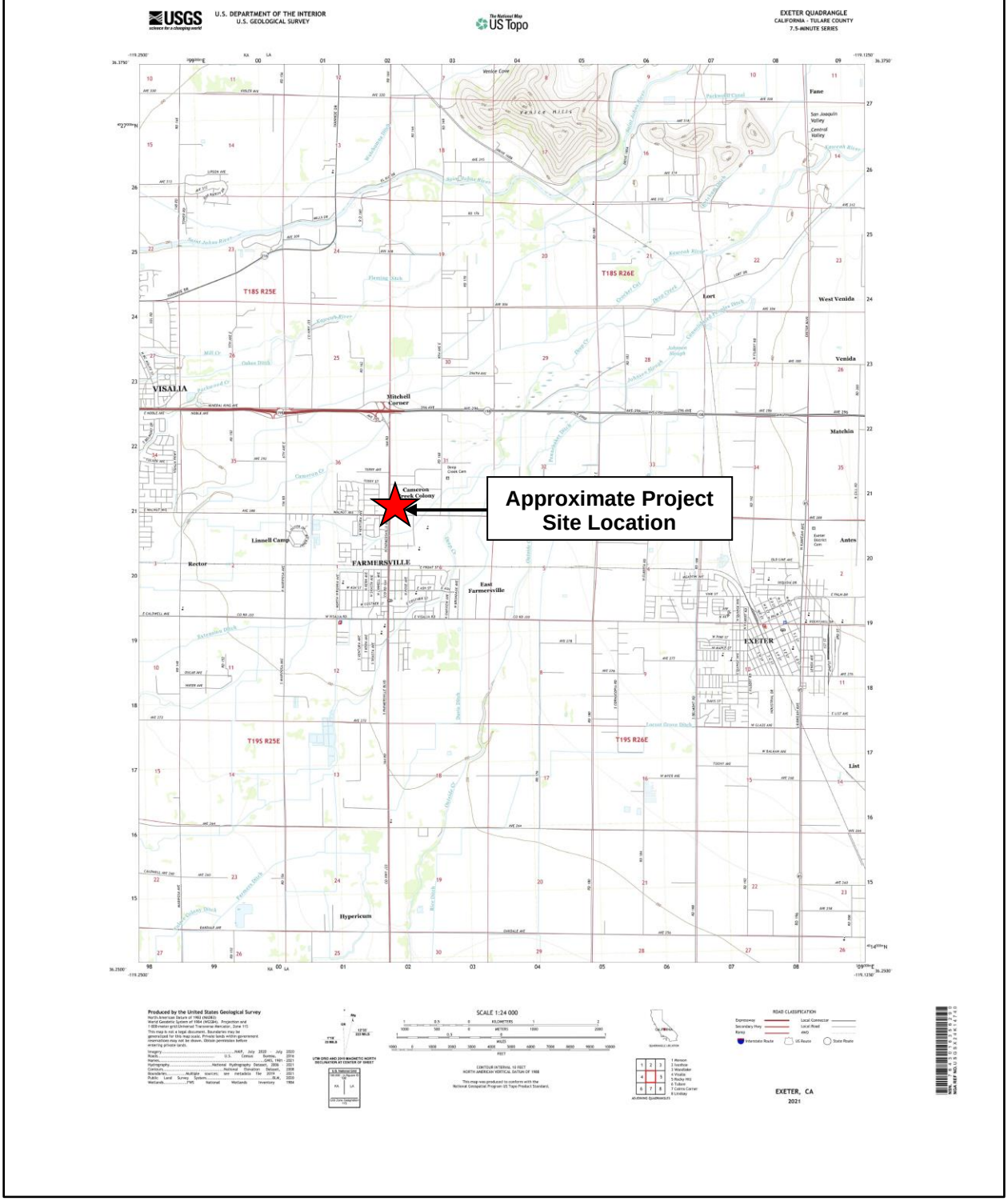
Sincerely,

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Vicinity Map
3. CHRIS Record Search Results
4. NAHC Sacred Lands File Search Results
5. NAHC Tribal Contact List
6. Tribal Consultation Letters

Attachment 1
Topographic Project Location Map



Attachment 2
Project Vicinity Map

Note: Project site boundaries are approximate.

Attachment 3
CHRIS Records Search Results

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Sacred Lands File Search Results

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

Attachment 5
NAHC Tribal Contact List

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person
Tulare	Kitanemuk & Yowlumne Tejon Indians	N	Delia Dominguez, Chairperson
	Santa Rosa Rancheria Tachi Yokut Tribe	F	Samantha McCarty, Cultural Specialist II
	Santa Rosa Rancheria Tachi Yokut Tribe	F	Nichole Escalon, Cultural Specialist I
	Santa Rosa Rancheria Tachi Yokut Tribe	F	Shana Powers, THPO
	Table Mountain Rancheria	F	Michelle Heredia-Cordova, Chairperson
	Table Mountain Rancheria	F	Bob Pennell, Cultural Resource Director
	Traditional Choinumni Tribe	N	David Alvarez, Chairperson
	Tule River Indian Tribe	F	Neil Peyron, Chairperson
	Tule River Indian Tribe	F	Joey Garfield, Tribal Archaeologist
	Tule River Indian Tribe	F	Kerri Vera, Environmental Department
	Wuksachi Indian Tribe/Eshom Valley Band	N	Kenneth Woodrow, Chairperson

Native American Heritage Commission
Native American Contact List
Tulare County
1/27/2025

Contact Address	Phone #	Fax #	Email Address
115 Radio Street Bakersfield, CA, 93305	(626) 339-6785		2deedominguez@gmail.com
P.O. Box 8 Lemoore, CA, 93245	(559) 633-3440		smccarty@tachi-yokut-nsn.gov
P.O. Box 8 Lemoore, CA, 93245	(559) 924-1278		
P.O. Box 8 Lemoore, CA, 93245	(559) 423-3900		
P.O. Box 410 Friant, CA, 93626	(559) 822-2587	(559) 822-2693	mhcordova@tmr.org
P.O. Box 410 Friant, CA, 93626	(559) 325-0351	(559) 325-0394	rpennell@tmr.org
2415 E. Houston Avenue Fresno, CA, 93720	(559) 217-0396	(559) 292-5057	davealvarez@sbcglobal.net
P.O. Box 589 Porterville, CA, 93258	(559) 781-4271	(559) 781-4610	neil.peyron@tulerivertribe-nsn.gov
P. O. Box 589 Porterville, CA, 93258	(559) 783-8892	(559) 783-8932	joey.garfield@tulerivertribe-nsn.gov
P. O. Box 589 Porterville, CA, 93258	(559) 783-8892	(559) 783-8932	kerri.vera@tulerivertribe-nsn.gov
1179 Rock Haven Ct. Salinas, CA, 93906	(831) 443-9702		kwood8934@aol.com

Cultural Affiliation	Counties	Last Updated
Kitanemuk Southern Valley Yokut	Fresno,Kern,Kings,Los Angeles,Madera,Monterey,San Benito,San Luis Obispo,Tulare	
Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
Southern Valley Yokut	Fresno,Kern,Kings,Merced,Monterey,San Benito,San Luis Obispo,Tulare	10/3/2023
Yokut	Fresno,Kern,Kings,Madera,Monterey,San Benito,San Luis Obispo,Tulare	12/21/2023
Yokut	Fresno,Kern,Kings,Madera,Monterey,San Benito,San Luis Obispo,Tulare	
Foothill Yokut	Fresno,Kern,Madera,Tulare	
Yokut	Alameda,Amador,Calaveras,Contra Costa,Fresno,Inyo,Kern,Kings,Madera,Mariposa,Merced,Monterey,Sacramento,San	
Yokut	Alameda,Amador,Calaveras,Contra Costa,Fresno,Inyo,Kern,Kings,Madera,Mariposa,Merced,Monterey,Sacramento,San	7/22/2016
Yokut	Alameda,Amador,Calaveras,Contra Costa,Fresno,Inyo,Kern,Kings,Madera,Mariposa,Merced,Monterey,Sacramento,San	7/22/2016
Foothill Yokut Mono	Alameda,Calaveras,Contra Costa,Fresno,Inyo,Kings,Madera,Marin,Mariposa,Merced,Mono,Monterey,San Benito,San	6/19/2023

Attachment 6
Tribal Consultation Letters

March 27, 2025

Chairperson Delia Dominguez
Kitanemuk & Yowlumne Tejon Indians
115 Radio Street
Bakersfield, CA, 93305

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Chairperson Dominguez,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

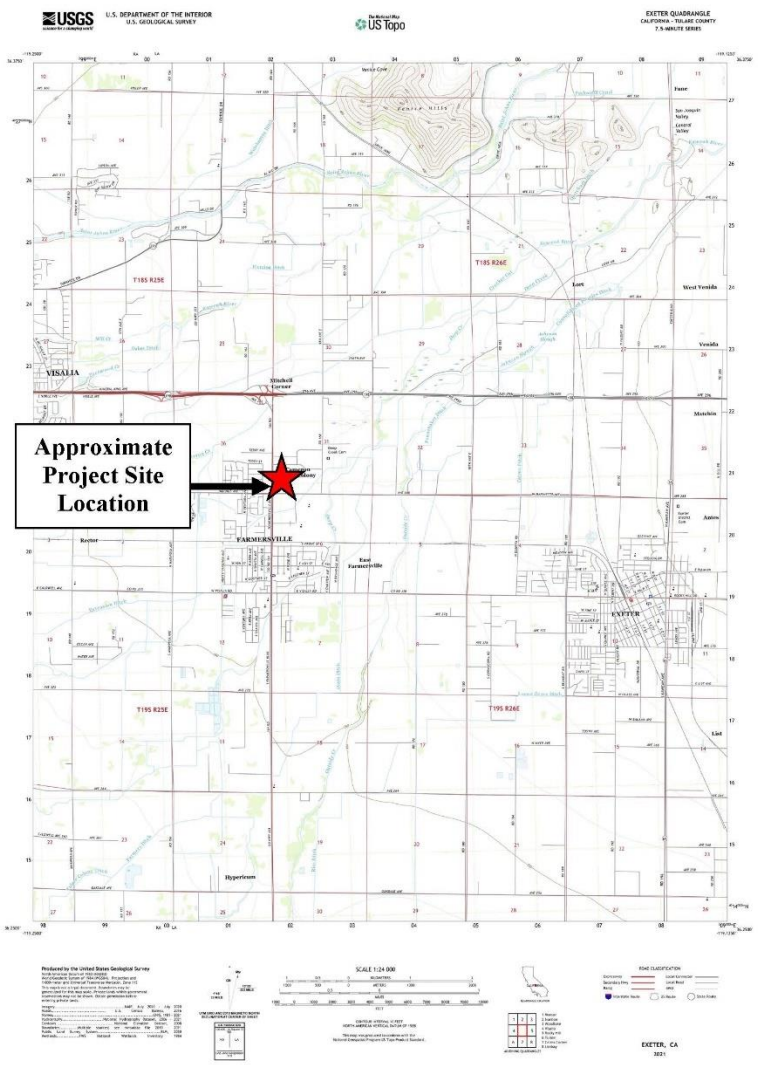
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Cultural Specialist Samantha McCarty
Santa Rosa Rancheria Tachi Yokut Tribe
P.O Box 8
Lemoore, CA, 93245

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Cultural Specialist McCarty,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

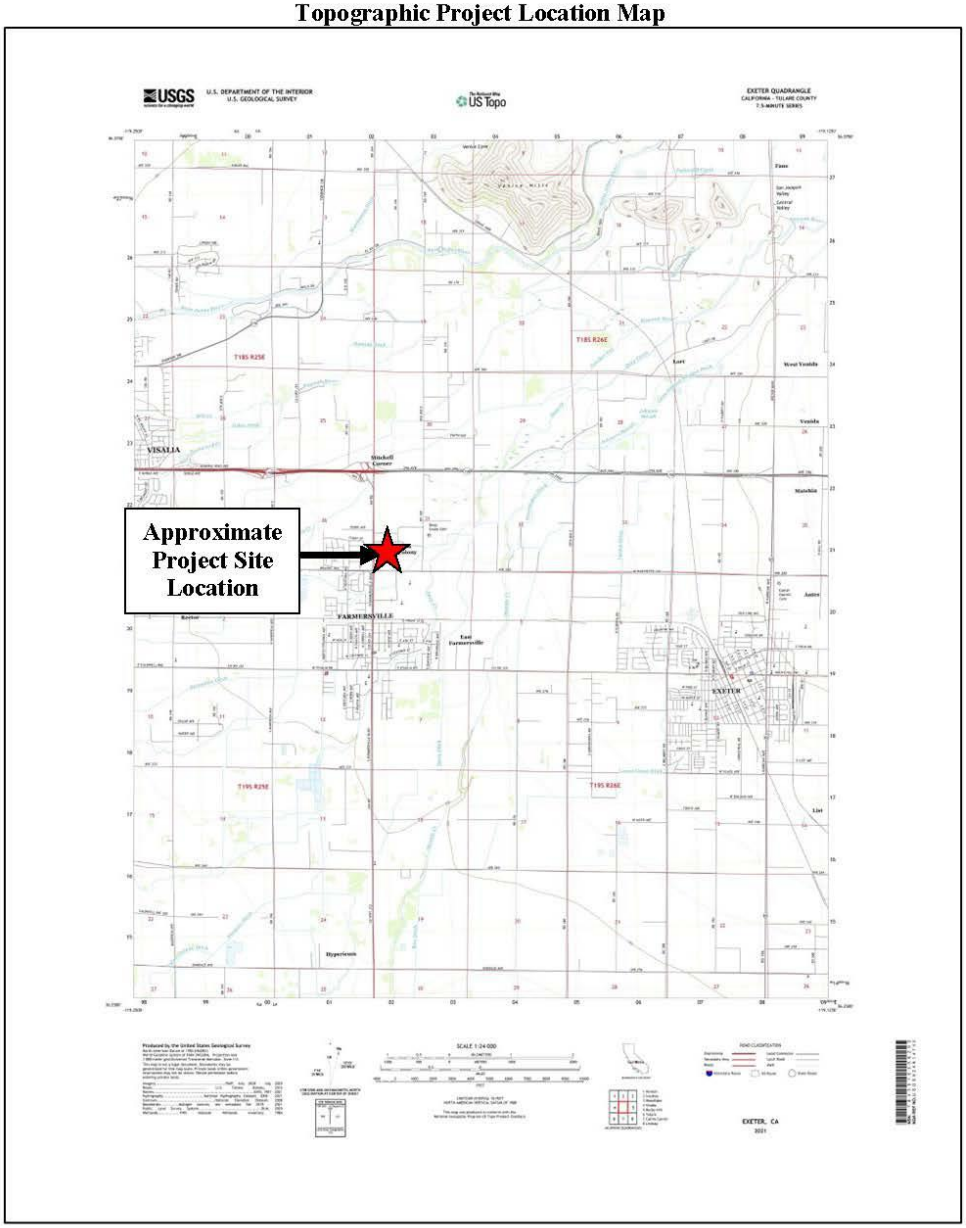
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

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Record Search 23-182

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COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

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NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

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VICE-CHAIRPERSON
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SECRETARY
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Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

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If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Cultural Specialist Nichole Escalon
Santa Rosa Rancheria Tachi Yokut Tribe
P.O Box 8
Lemoore, CA, 93245

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Cultural Specialist Escalon,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

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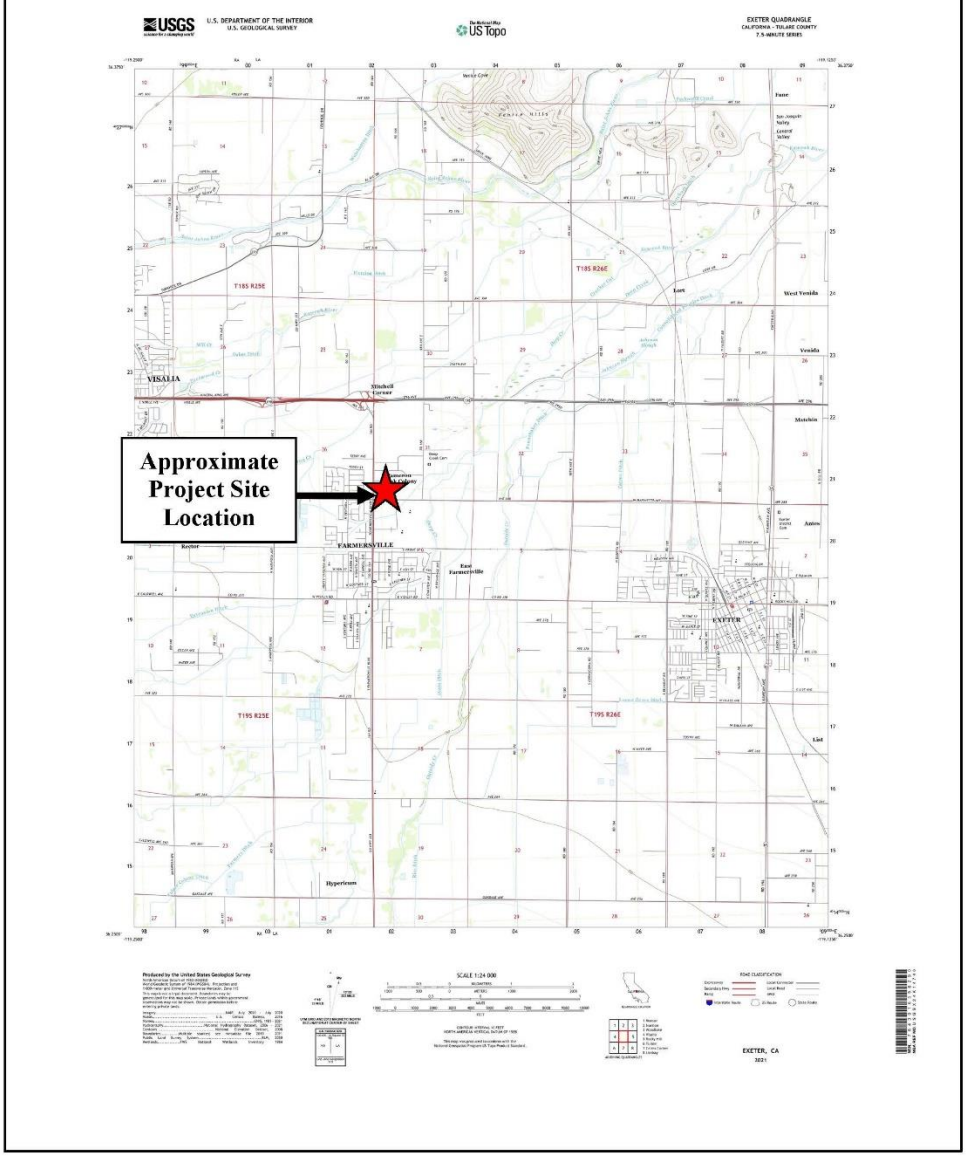

Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

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Record Search 23-182

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

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NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
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NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Cultural Department Director Shana Powers
Santa Rosa Rancheria Tachi Yokut Tribe
P.O Box 8
Lemoore, CA93245

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Director Powers,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

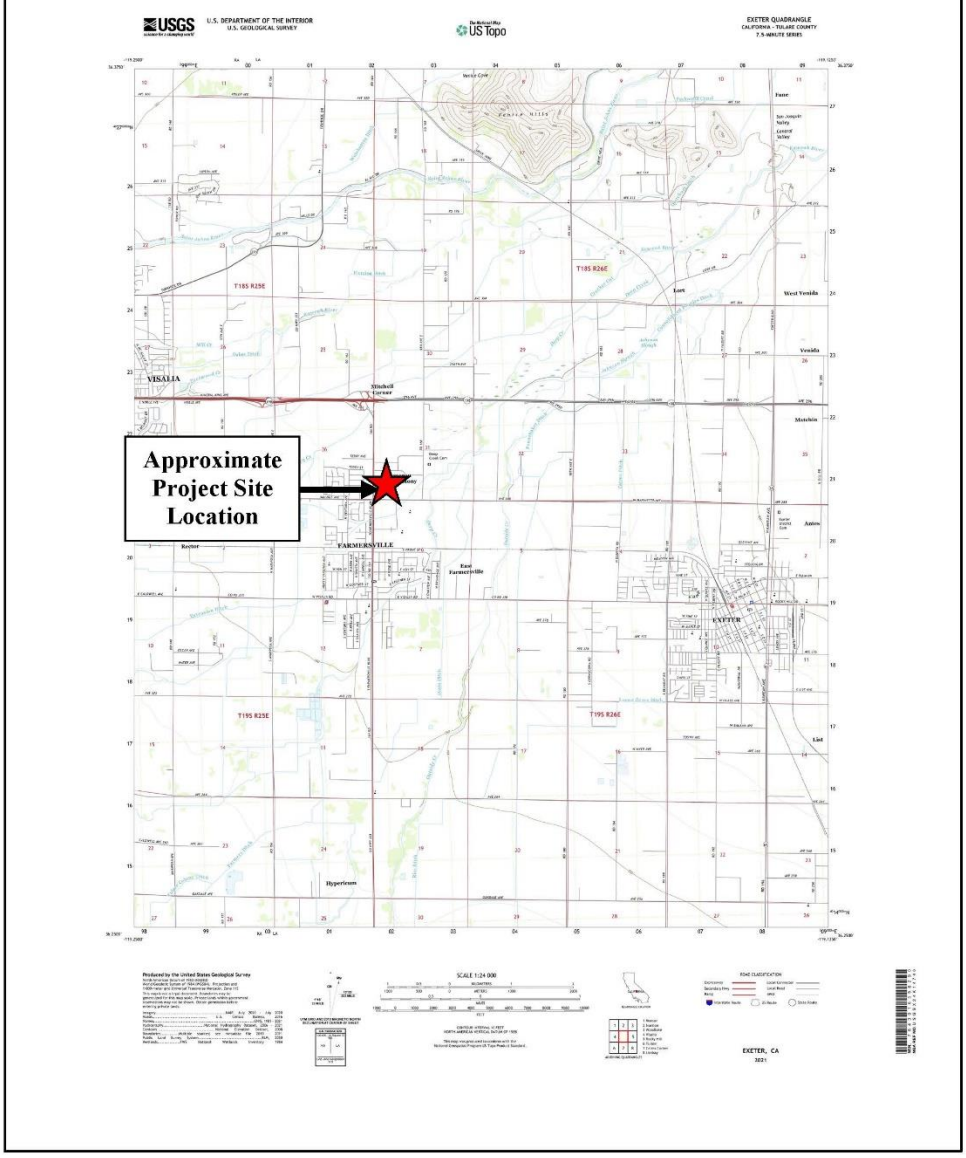
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

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January 24, 2025

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Via Email to: rods@raneymanagement.com

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If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Chairperson Michelle Heredia-Cordova
Table Mountain Rancheria
P.O Box 410
Friant, CA, 93626

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Chairperson Heredia-Cordova,

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The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

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Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

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Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

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1. Topographic Project Location Map
2. Project Boundaries Map
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4. NAHC Records Search

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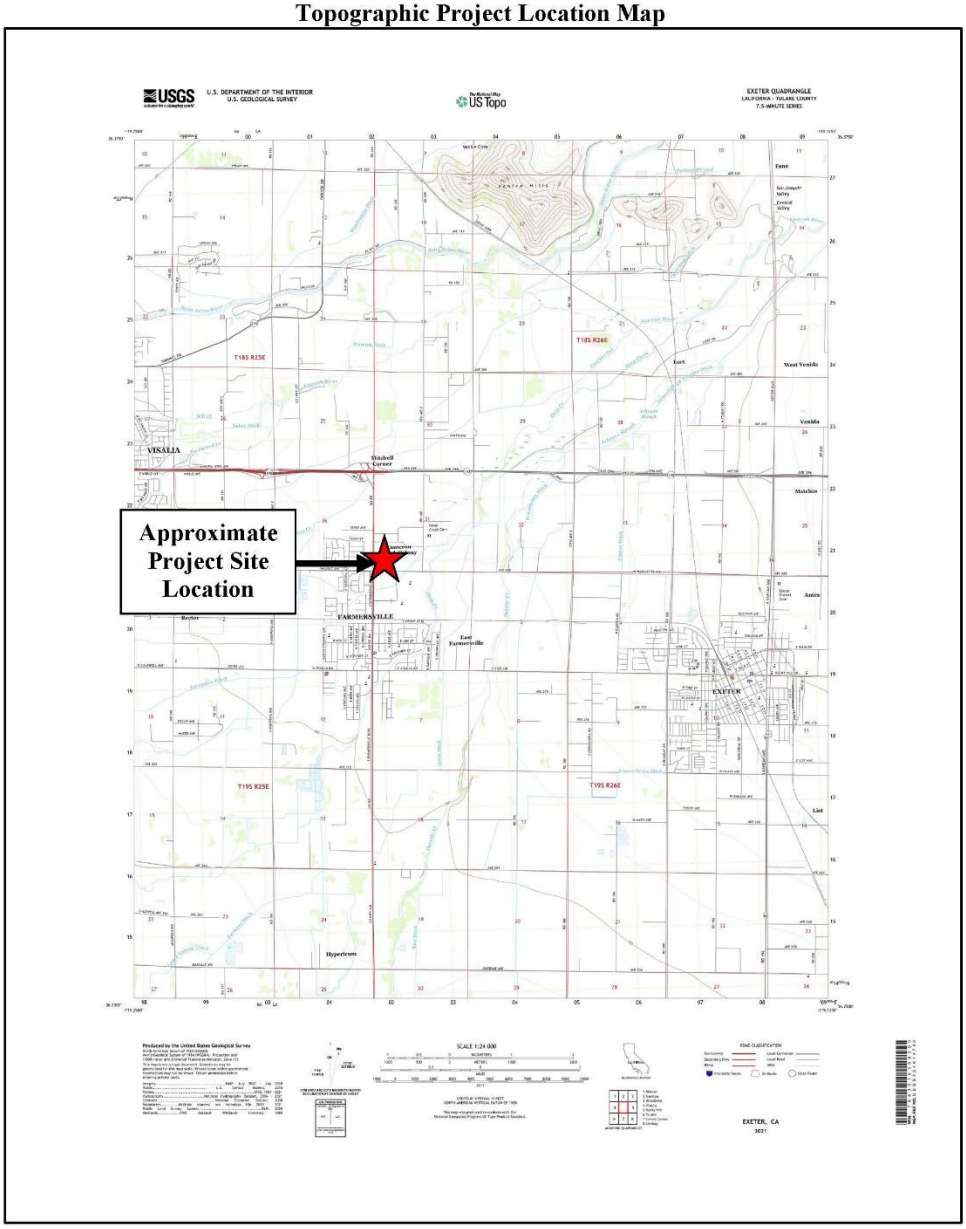

Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

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Record Search 23-182

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

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NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

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January 24, 2025

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Via Email to: rods@raneymanagement.com

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Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Cultural Resource Director Bob Pennell
Table Mountain Rancheria
P.O Box 410
Friant, CA, 93626

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Director Pennell,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

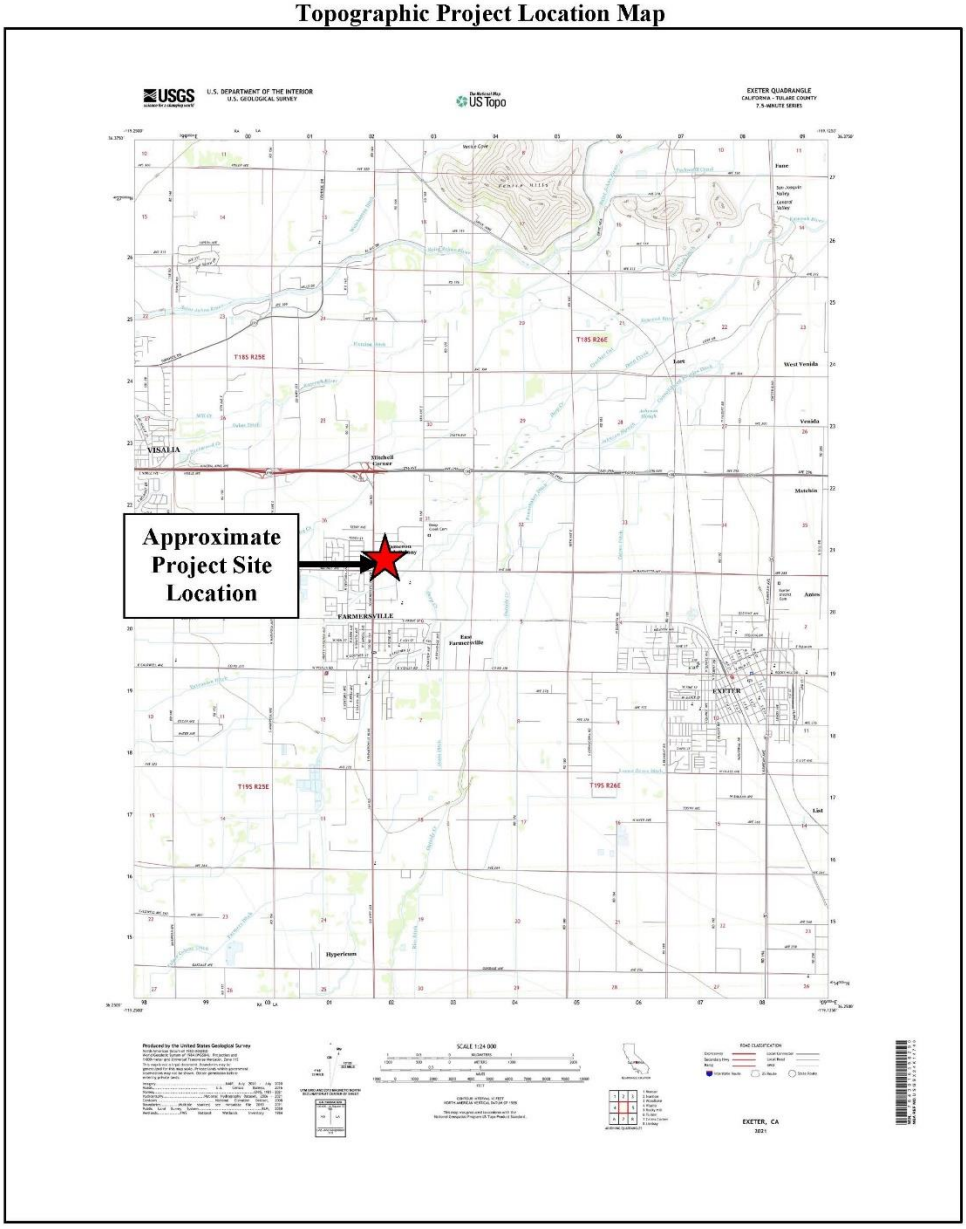
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Chairperson David Alvarez
Traditional Choinumni Tribe
2415 E. Houston Avenue
Fresno, CA, 93720

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Chairperson Alvarez,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

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Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

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Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

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Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

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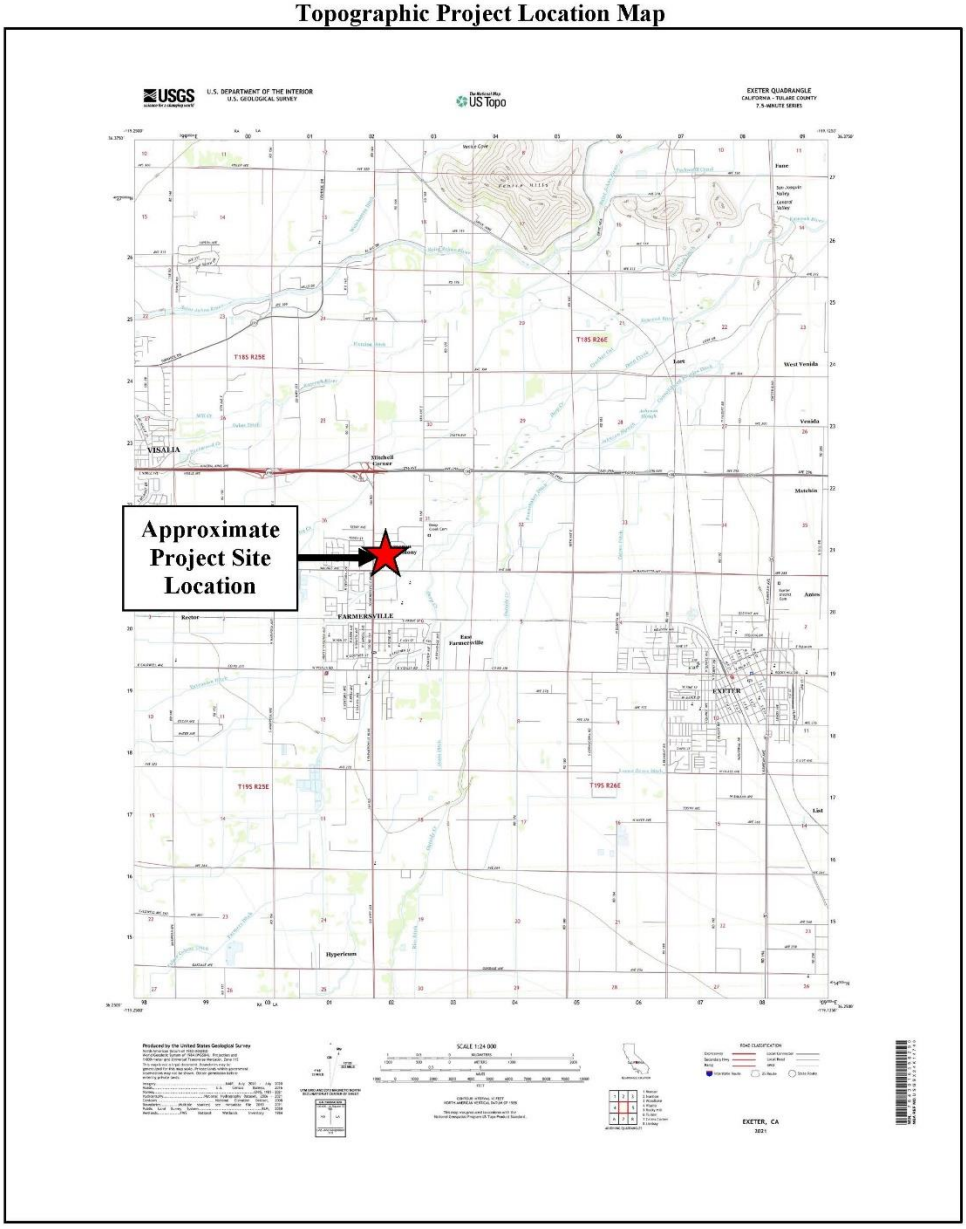

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Project Boundaries Map

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California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

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Record Search 23-182

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

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Attachment 4
NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

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If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Chairperson Neil Peyron
Tule River Indian Tribe
P.O Box 589
Porterville, CA, 93258

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Chairperson Peyron,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

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The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

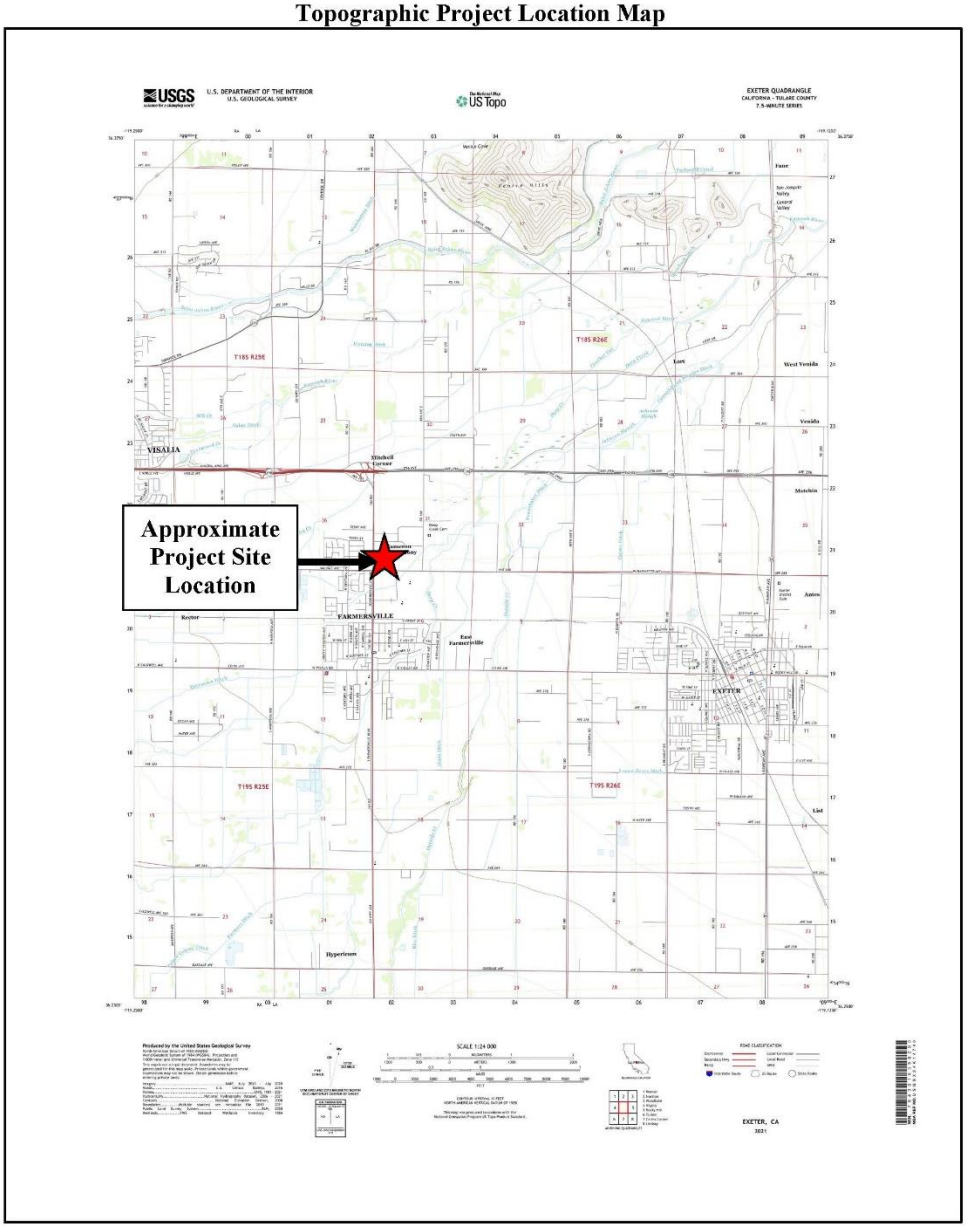
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Tribal Archeologist Joey Garfield
Tule River Indian Tribe
P.O Box 589
Porterville, CA, 93258

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Mr. Garfield,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

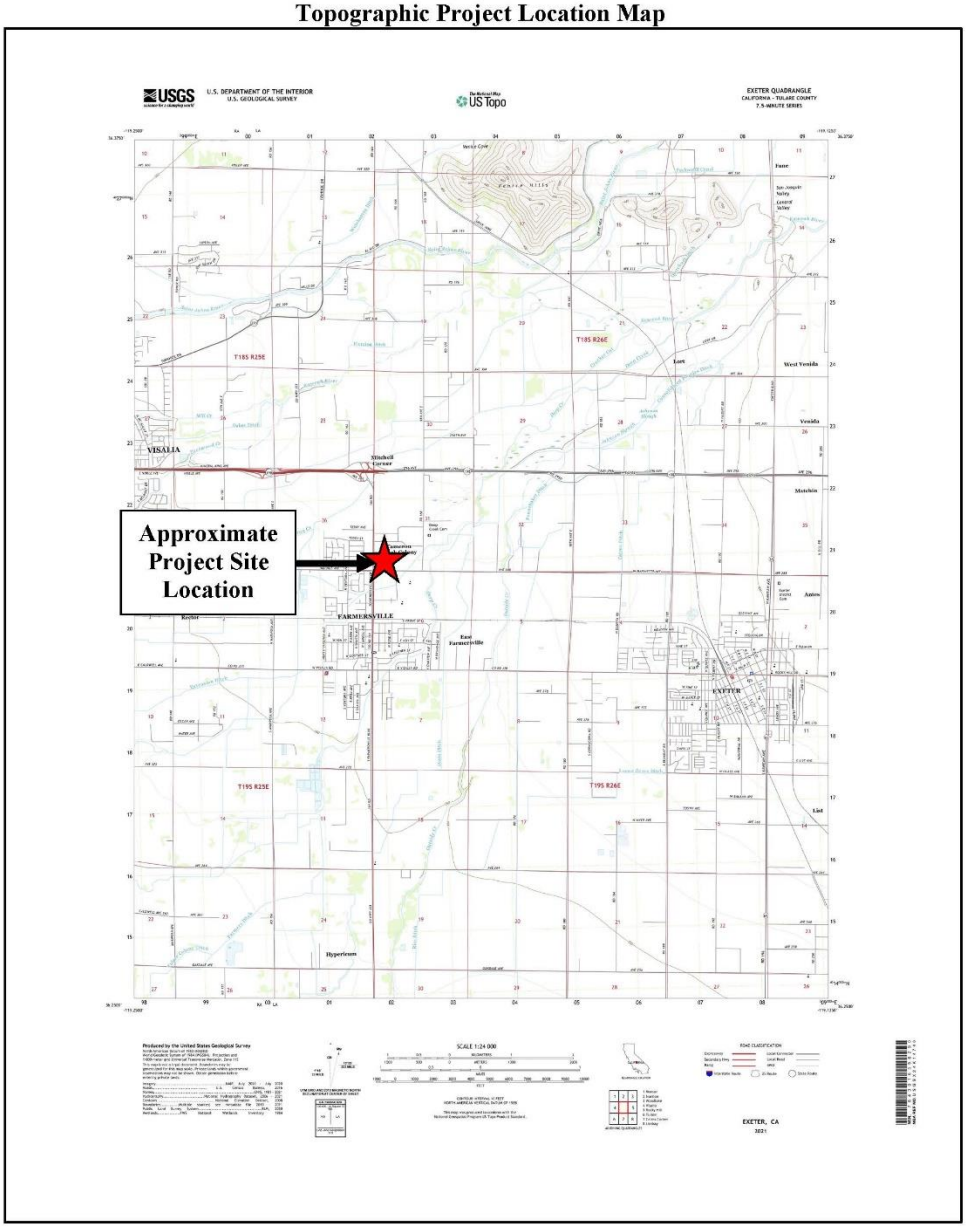
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

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Record Search 23-182

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There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Department of Environmental Protection Director Kerri Vera
Tule River Indian Tribe
P.O Box 589
Porterville, CA, 93258

Subject: **Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review**

Director Vera,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

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The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

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Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

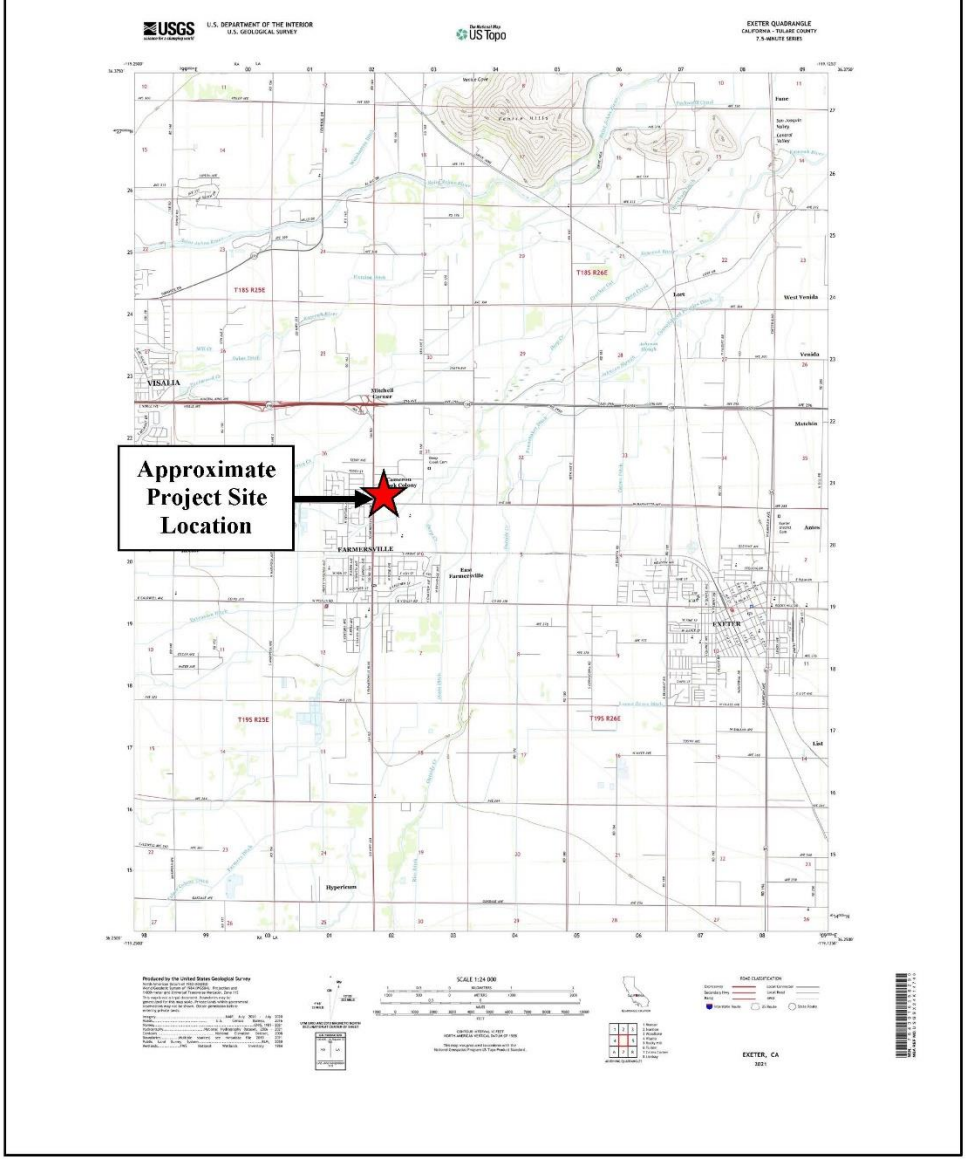
Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

Attachments:

1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

Attachment 1
Topographic Project Location Map



Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU-00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

March 27, 2025

Chairperson Kenneth Woodrow
Wuksachi Indian Tribe/Eshom Valley Band
1179 Rock Haven Ct.
Salinas, CA, 93906

Subject: Gardenia Courtyard Mixed-Use Project, in the City of Farmersville, California 93223, Section 106 Review

Chairperson Woodrow,

The Pacific Companies is seeking U.S. Department of Housing and Urban Development (HUD) Project-Based Vouchers and HOME Investment Partnerships Program (HOME) funds, administered through the California Department of Housing and Community Development (HCD) for the Gardenia Courtyard Mixed-Use Project (proposed project). Under regulation 24 CFR 58.4, the City of Farmersville has assumed HCD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HCD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City has conducted a review of the project under the California Environmental Quality Act (CEQA) with an Initial Study/Mitigated Negative Declaration (IS/MND), approved on January 25, 2024. The City is now conducting a review of the project under the National Environmental Policy Act (NEPA), including compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800). We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize, or mitigate potential adverse effects.

The project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California (see Attachment 1). The 9.4-acre project site, identified as Assessor's Parcel Number 111-290-015, is undeveloped with a private, dirt road bisecting the site. Surrounding existing land uses include single-family residences to the north and east; the approved, but not yet constructed, Camino Castaneda Mixed-Use Project and a Rite Aid to the south; and an auto parts store, a self-storage facility and other commercial uses to the west, across Farmersville Road (see Attachment 2). The City of Farmersville General Plan designates the project site as Medium High Density Residential and the site is zoned as Medium High Density Residential (RM-2.5).

The proposed project would include the development of two affordable, mixed-use communities and three commercial building pads. The northern portion of the project site would include a 42-unit senior housing development with four residential buildings. A retention basin would be located in the southwest corner of the senior housing development. The southern portion of the project site would include a 40-unit affordable housing apartment complex with four residential buildings and a 1,830-square foot (sf) community building. Two retention basins would be located along the western side of the apartment complex. A 1,187-sf drive-through restaurant building pad and retention basin would be located west of the senior housing development and a 6,960-sf commercial use building pad, 2,820-sf drive-through restaurant building pad, and a retention basin would be located west of the affordable housing apartment complex. The existing dirt road bisecting the project site would be paved into a private drive, and site access would be provided by two new driveways off of Farmersville Road. Ground disturbance associated with the proposed project would include, but not be limited to, site preparation, trenching for utilities, paving, and building construction.

As part of compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR Part 800), a records search of the California Historical Resources Information System (CHRIS) was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at the California State University, Bakersfield for the project site and vicinity (see Attachment 3). The CHRIS records search included review of archaeological resource records, historic properties records, including the National Register of Historic Places and the California Register of Historical Resources, and official records and maps of archaeological sites and surveys in Tulare County. According to the CHRIS results, previous cultural resource studies have not been conducted within the project area. However, eight cultural resource studies have been conducted within a one-half mile radius. The results demonstrated that known historical resources do not exist on the project site. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File for the project area was completed and returned negative results, indicating that known tribal cultural resources do not exist on-site (see Attachment 4).

Because a cultural resources study has not been conducted for the project area, it is unknown if cultural resources are on-site. Portions of the project along existing sites, roads, and trails are sensitive for archaeological resources. Other areas of sensitivity are flats near creeks, springs, seeps, or rock outcrops that may be located in the project area. Due to the previous ground disturbance within the project site, the probability of the proposed project inadvertently uncovering unknown subsurface archeological resources during the project's limited ground-disturbing activities is low.

Based on the findings described above, the discovery of tribal cultural resources is not anticipated to occur during implementation of the proposed project. However, because the potential exists for unrecorded, subsurface Native American resources to be located within the project site, standard mitigation measures will be included in the Environmental Assessment (EA) to prevent potential impacts to cultural and tribal cultural resources, should any such resources be encountered during ground-disturbing activities associated with the proposed project.

Should historic and/or cultural resources be encountered during site grading or other site work, the mitigation measures would require that all such work be immediately halted within the area of the discovery, followed by immediate notification of the City regarding the discovery. A qualified archaeologist would review the discovery and submit a report to the City of the findings and method of curation or protection of the resource. Further grading or site work within the vicinity of the discovery would be prohibited until the aforementioned requirements are completed. In addition, if prehistoric human interments are encountered during project construction, pursuant to the mitigation measure included in the EA, all work would be halted in the immediate vicinity of the find and the County Coroner, project superintendent, and the City would be contacted immediately. A qualified archaeologist would evaluate the significance of the find. In the event that the archaeologist suspects that potentially significant cultural remains or human burials have been encountered, further requirements would be implemented. In all cases where prehistoric or historic era Native American resources are involved, the NAHC would be contacted to designate appropriate representatives of the local Native American community, who also would be contacted about their concerns.

Pursuant to Section 106 of 24 CFR Part 58, if you wish to consult or have any specific information or questions, please contact me within 30 days of the date of this letter by email at DGarcia-Guizar@cityoffarmersville-ca.gov or by phone at (559) 747-0458. If you have any initial concerns, please note them in your response. If you do not wish to consult on this project, please inform us. Please include in your reply the name and contact information for the tribe's principal representative in the consultation. Thank you for your time and attention to this matter.

Sincerely,

Tom Navarro

Tom Navarro
Senior City Planning Consultant
City of Farmersville, Planning Division
909 W. Visalia Road
Farmersville, CA 93223

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1. Topographic Project Location Map
2. Project Boundaries Map
3. CHRIS Records Search
4. NAHC Records Search

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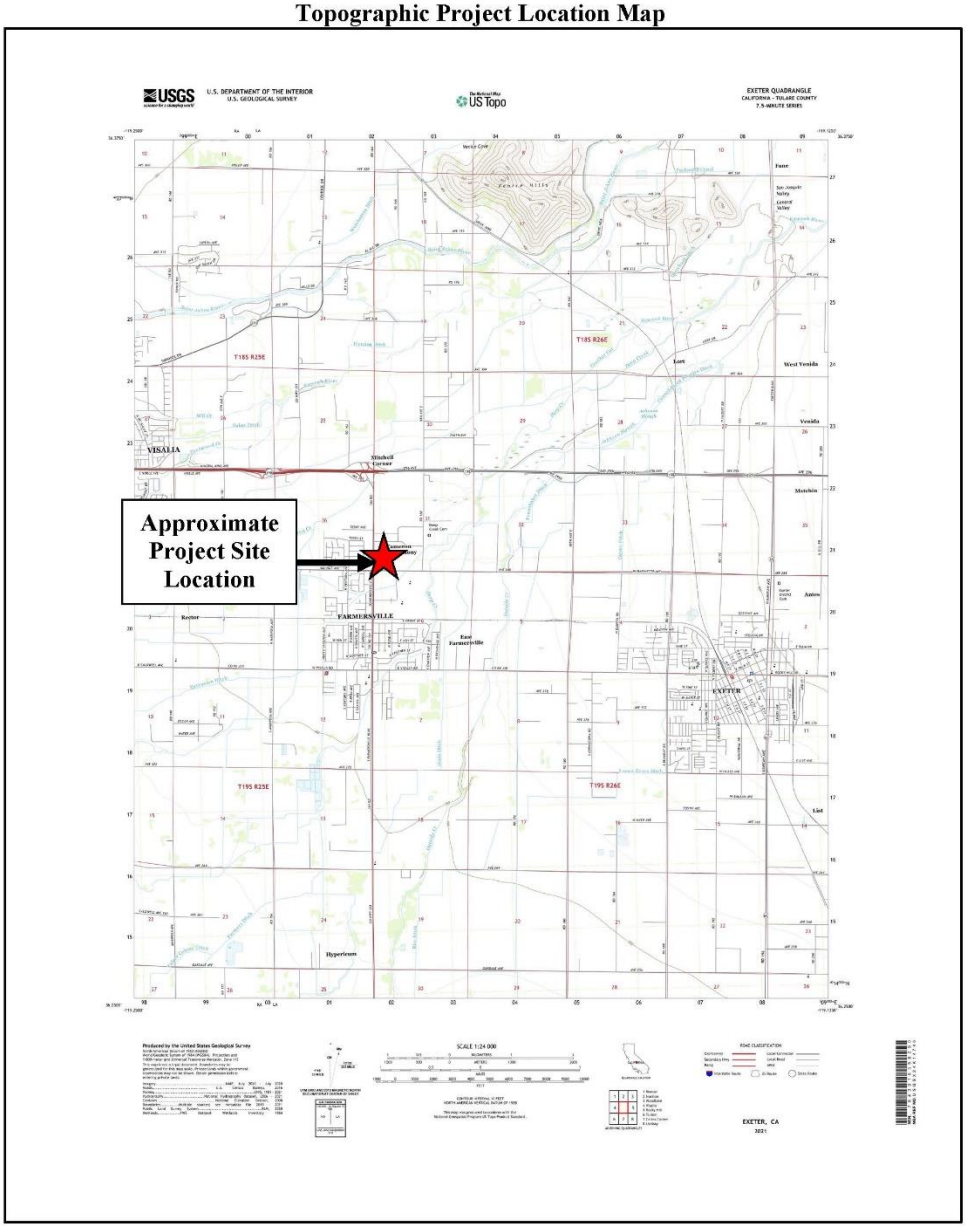

Attachment 2
Project Boundaries Map

Note: Area of Potential Effects boundaries are approximate

Attachment 3
CHRIS Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 23-182

Date: May 30, 2023

Re: Farmersville Gardenia Courtyards Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

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Record Search 23-182

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

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There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand the project intends to construct and operate multi-family residences and three commercial pads. Additionally, we understand the proposed Project includes development of 58 senior apartments, 104 multi-family units, and approximately 14,000 sq.ft. of commercial space. Further, we understand the project area is an undeveloped and vacant property. Because a cultural resources study has not been conducted on this project area, it is unknown if any cultural resources are present. Therefore, prior to any ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

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By:

Jeremy E David, Assistant Coordinator **Date**: May 30, 2023

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Attachment 4
NAHC Records Search

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

ACTING EXECUTIVE SECRETARY
STEVEN QUINN

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

January 24, 2025

Rod Stinson
Raney Planning and Management, Inc.

Via Email to: rods@raneymanagement.com

Re: Gardenia Courtyard Mixed-Use Project, Tulare County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

APPENDIX J

ADDITIONAL SOURCES

Appendix J Contents:

1. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective.* April 2005. (Appendix J)
2. California Department of Fish and Wildlife. *California Department of Fish and Wildlife BIOS.* Available at: https://apps.wildlife.ca.gov/bios6/. Accessed May 2025. (Appendix J)
3. California Department of Fish and Wildlife. *California Natural Diversity Database: Rarefind 5.* Available at: https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx. Accessed May 2025. (Appendix J)
4. California Department of Forestry and Fire Protection. *FHSZ Viewer*. Available at: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/. Accessed May 2025. (Appendix J)
5. California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details, Visalia Disposal Site (54-AA-0009).* Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/822?siteID=3839. Accessed June 2025. (Appendix J)
6. California Energy Commission. *2022 Building Energy Efficiency Standards*. Available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed May 2025. (Appendix J)
7. California Environmental Protection Agency. *CalEPA Regulated Site Portal*. Available at: https://siteportal.calepa.ca.gov/nsite/map/results. Accessed December 2025. (Appendix J)
8. California Geological Survey. *Earthquake Zone of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/eqzapp/app/. Accessed May 2025. (Appendix J)
9. City of Farmersville. *City of Farmersville 2023-2031 Housing Element*. Adopted June 2024. (Appendix J)
10. City of Farmersville. *Comprehensive Infrastructure Master Plan*. November 2012. (Appendix J)
11. City of Farmersville. *Farmersville General Plan Update*. Adopted November 6, 2002. (Appendix J)
12. City of Farmersville. *Initial Study/Mitigated Negative Declaration, Gardenia Courtyards Development Project*. October 2023. (Appendix J)
13. City of Farmersville. *NPDES Phase II Storm Water Management Plan*. May 2007. (Appendix J)
14. City of Farmersville. *Parks and Recreation*. Available at: https://www.cityoffarmersville-ca.gov/200/Parks-Recreation. Accessed May 2025. (Appendix J)
15. City of Farmersville. *Wastewater Treatment Plant Data – Annual - 2014*. 2014. (Appendix J)
16. City of Farmersville. *Well Production Annual Data*. 2014. (Appendix J)
17. City of Woodlake. *Woodlake Airport*. Available at: https://cityofwoodlake.com/about/airport/. Accessed May 2025. (Appendix J)
18. Department of Toxic Substances Control. *Hazardous Waste and Substances Site List (Cortese).* Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed May 2025. (Appendix J)
19. Federal Emergency Management Agency. *Flood Insurance Rate Map 06107C0954E*. Available at: https://msc.fema.gov/portal/home. Accessed May 2025. (Appendix J)
20. Federal Emergency Management Agency. *Resilience Analysis and Planning Tool (RAPT)*. Available at: https://www.fema.gov/flood-maps/products-tools/national-risk-index. Accessed December 2025. (Appendix J)
21. National Park Service. *Nationwide Rivers Inventory*. Available at: https://experience.arcgis.com/experience/2b84b8786f5a4dea83c28debbe018be9#data_s=id%3AdataSource_1-191e79e8073-layer-4%3A732. Accessed December 2025. (Appendix J)
22. San Joaquin Valley Air Pollution Control District. *Air Quality Thresholds of Significance*. March 19, 2015. (Appendix J)
23. State Water Resources Control Board. *GeoTracker.* Available at: https://geotracker.waterboards.ca.gov/. Accessed May 2025. (Appendix J)

24. Stinson, Roderick, Vice President, Raney Planning and Management, Inc. Personal Communication [email] with Maggie Sepulveda, Senior Fish and Wildlife Biologist, San Joaquin Valley Division, U.S. Fish and Wildlife Service. February 11, 2026. (Appendix J)
25. Tulare County Health and Human Services Agency. *Human Services*. Available at: https://tchhsa.org/eng/human-services/. Accessed May 2025. (Appendix J)
26. Tulare County Regional Area Transit Agency. *Services and Schedules*. Available at: https://gotcrta.org/services-and-schedules/. Accessed June 2025. (Appendix J)
27. U.S. Census Bureau. *QuickFacts: Farmersville city, California*. Available at: https://www.census.gov/quickfacts/fact/table/farmersvillecitycalifornia/INC110223. Accessed June 2025. (Appendix J)
28. U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey.* Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed May 2025. (Appendix J)
29. U.S. Department of Housing and Urban Development. *Acceptable Separation Distance (ASD) Electronic Assessment Tool*. Available at: https://www.hudexchange.info/programs/environmental-review/asd-calculator/. Accessed December 2025. (Appendix J).
30. U.S. Department of Housing and Urban Development. *DNL Calculator*. Available at: https://www.hudexchange.info/programs/environmental-review/dnl-calculator/. Accessed May 2025. (Appendix J)
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AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE

April 2005

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To My Local Government Colleagues....

I am pleased to introduce this informational guide to air quality and land use issues focused on community health. As a former county supervisor, I know from experience the complexity of local land use decisions. There are multiple factors to consider and balance. This document provides important public health information that we hope will be considered along with housing needs, economic development priorities, and other quality of life issues.

An important focus of this document is prevention. We hope the air quality information provided will help inform decision-makers about the benefits of avoiding certain siting situations. The overarching goal is to avoid placing people in harm's way. Recent studies have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities. What is encouraging is that the health risk is greatly reduced with distance. For that reason, we have provided some general recommendations aimed at keeping appropriate distances between sources of air pollution and land uses such as residences.

Land use decisions are a local government responsibility. The Air Resources Board's role is advisory and these recommendations do not establish regulatory standards of any kind. However, we hope that the information in this document will be seriously considered by local elected officials and land use agencies. We also hope that this document will promote enhanced communication between land use agencies and local air pollution control agencies. We developed this document in close coordination with the California Air Pollution Control Officers Association with that goal in mind.

I hope you find this document both informative and useful.

Barbara Riordan

Mrs. Barbara Riordan
Interim Chairman
California Air Resources Board

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Acknowledgments

The ARB staff would like to acknowledge the exceptional contributions made to this document by members of the ARB Environmental Justice Stakeholders Group. Since 2001, ARB staff has consistently relied on this group to provide critical and constructive input on implementing the specifics of ARB's environmental justice policies and actions. The Stakeholders Group is convened by the ARB, and comprised of representatives from local land use and air agencies, community interest groups, environmental justice organizations, academia, and business. Their assistance and suggestions throughout the development of this Handbook have been invaluable.

Executive Summary

The Air Resources Board's (ARB) primary goal in developing this document is to provide information that will help keep California's children and other vulnerable populations out of harm's way with respect to nearby sources of air pollution. Recent air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. Also, ARB community health risk assessments and regulatory programs have produced important air quality information about certain types of facilities that should be considered when siting new residences, schools, day care centers, playgrounds, and medical facilities (i.e., sensitive land uses). Sensitive land uses deserve special attention because children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the non-cancer effects of air pollution. There is also substantial evidence that children are more sensitive to cancer-causing chemicals.

Focusing attention on these siting situations is an important preventative action. ARB and local air districts have comprehensive efforts underway to address new and existing air pollution sources under their respective jurisdictions. The issue of siting is a local government function. As more data on the connection between proximity and health risk from air pollution become available, it is essential that air agencies share what we know with land use agencies. We hope this document will serve that purpose.

The first section provides ARB recommendations regarding the siting of new sensitive land uses near freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities. This list consists of the air pollution sources that we have evaluated from the standpoint of the proximity issue. It is based on available information and reflects ARB's primary areas of jurisdiction – mobile sources and toxic air contaminants. A key air pollutant common to many of these sources is particulate matter from diesel engines. Diesel particulate matter (diesel PM) is a carcinogen identified by ARB as a toxic air contaminant and contributes to particulate pollution statewide.

Reducing diesel particulate emissions is one of ARB's highest public health priorities and the focus of a comprehensive statewide control program that is reducing diesel PM emissions each year. ARB's long-term goal is to reduce diesel PM emissions 85% by 2020. However, cleaning up diesel engines will take time as new engine standards phase in and programs to accelerate fleet turnover or retrofit existing engines are implemented. Also, these efforts are reducing diesel particulate emissions on a statewide basis, but do not yet capture every site where diesel vehicles and engines may congregate. Because living or going to school too close to such air pollution sources may increase both cancer and non-cancer health risks, we are recommending that proximity be considered in the siting of new sensitive land uses.

There are also other key toxic air contaminants associated with specific types of facilities. Most of these are subject to stringent state and local air district regulations. However, what we know today indicates that keeping new homes and other sensitive land uses from siting too close to such facilities would provide additional health protection. Chrome platers are a prime example of facilities that should not be located near vulnerable communities because of the cancer health risks from exposure to the toxic material used during their operations.

In addition to source specific recommendations, we also encourage land use agencies to use their planning processes to ensure the appropriate separation of industrial facilities and sensitive land uses. While we provide some suggestions, how to best achieve that goal is a local issue. In the development of these guidelines, we received valuable input from local government about the spectrum of issues that must be considered in the land use planning process. This includes addressing housing and transportation needs, the benefits of urban infill, community economic development priorities, and other quality of life issues. All of these factors are important considerations. The recommendations in the Handbook need to be balanced with other State and local policies.

Our purpose with this document is to highlight the potential health impacts associated with proximity to air pollution sources so planners explicitly consider this issue in planning processes. We believe that with careful evaluation, infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level. One suggestion for achieving this goal is more communication between air agencies and land use planners. Local air districts are an important resource that should be consulted regarding sources of air pollution in their jurisdictions. ARB staff will also continue to provide updated technical information as it becomes available.

Our recommendations are as specific as possible given the nature of the available data. In some cases, like refineries, we suggest that the siting of new sensitive land uses should be avoided immediately downwind. However, we leave definition of the size of this area to local agencies based on facility specific considerations. Also, project design that would reduce air pollution exposure may be part of the picture and we encourage consultation with air agencies on this subject.

In developing the recommendations, our first consideration was the adequacy of the data available for an air pollution source category. Using that data, we assessed whether we could reasonably characterize the relative exposure and health risk from a proximity standpoint. That screening provided the list of air pollution sources that we were able to address with specific recommendations. We also considered the practical implications of making hard and fast recommendations where the potential impact area is large, emissions will be reduced with time, and air agencies are in the process of looking at options for additional emission control. In the end, we tailored our recommendations to minimize the highest exposures for each source category independently. Due to the large variability in relative risk in the source categories, we chose not to apply

a uniform, quantified risk threshold as is typically done in air quality permitting programs. Instead, because these guidelines are not regulatory or binding on local agencies, we took a more qualitative approach in developing the distance-based recommendations.

Where possible, we recommend a minimum separation between a new sensitive land use and known air pollution risks. In other cases, we acknowledge that the existing health risk is too high in a relatively large area, that air agencies are working to reduce that risk, and that in the meantime, we recommend keeping new sensitive land uses out of the highest exposure areas. However, it is critical to note that our implied identification of the high exposure areas for these sources does not mean that the risk in the remaining impact area is insignificant. Rather, we hope this document will bring further attention to the potential health risk throughout the impact area and help garner support for our ongoing efforts to reduce health risk associated with air pollution sources. Areas downwind of major ports, rail yards, and other inter-modal transportation facilities are prime examples.

We developed these recommendations as a means to share important public health information. The underlying data are publicly available and referenced in this document. We also describe our rationale and the factors considered in developing each recommendation, including data limitations and uncertainties. These recommendations are advisory and should not be interpreted as defined "buffer zones." We recognize the opportunity for more detailed site-specific analyses always exists, and that there is no "one size fits all" solution to land use planning.

As California continues to grow, we collectively have the opportunity to use all the information at hand to avoid siting scenarios that may pose a health risk. As part of ARB's focus on communities and children's health, we encourage land use agencies to apply these recommendations and work more closely with air agencies. We also hope that this document will help educate a wider audience about the value of preventative action to reduce environmental exposures to air pollution.

1. ARB Recommendations on Siting New Sensitive Land Uses

Protecting California's communities and our children from the health effects of air pollution is one of the most fundamental goals of state and local air pollution control programs. Our focus on children reflects their special vulnerability to the health impacts of air pollution. Other vulnerable populations include the elderly, pregnant women, and those with serious health problems affected by air pollution. With this document, we hope to more effectively engage local land use agencies as partners in our efforts to reduce health risk from air pollution in all California communities.

Later sections emphasize the need to strengthen the connection between air quality and land use in both planning and permitting processes. Because the siting process for many, but not all air pollution sources involves permitting by local air districts, there is an opportunity for interagency coordination where the proposed location might pose a problem. To enhance the evaluation process from a land use perspective, section 4 includes recommended project related questions to help screen for potential proximity related issues.

Unlike industrial and other stationary sources of air pollution, the siting of new homes or day care centers does not require an air quality permit. Because these situations fall outside the air quality permitting process, it is especially important that land use agencies be aware of potential air pollution impacts.

The following recommendations address the issue of siting "sensitive land uses" near specific sources of air pollution; namely:

- High traffic freeways and roads
- Distribution centers
- Rail yards
- Ports
- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities

The recommendations for each category include a summary of key information and guidance on what to avoid from a public health perspective.

Sensitive individuals refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses where sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses).

We are characterizing sensitive land uses as simply as we can by using the example of residences, schools, day care centers, playgrounds, and medical facilities. However, a variety of facilities are encompassed. For example, residences can include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds could be play areas associated with parks or community centers.

In developing these recommendations, ARB first considered the adequacy of the data available for each air pollution source category. We assessed whether we could generally characterize the relative exposure and health risk from a proximity standpoint. The documented non-cancer health risks include triggering of asthma attacks, heart attacks, and increases in daily mortality and hospitalization for heart and respiratory diseases. These health impacts are well documented in epidemiological studies, but less easy to quantify from a particular air pollution source. Therefore, the cancer health impacts are used in this document to provide a picture of relative risk. This screening process provided the list of source categories we were able to address with specific recommendations. In evaluating the available information, we also considered the practical implications of making hard and fast recommendations where the potential impact area is large, emissions will be reduced with time, and air agencies are in the process of looking at options for additional emission control. Due to the large variability in relative risk between the source categories, we chose not to apply a uniform, quantified risk threshold as is typically done in regulatory programs. Therefore, in the end, we tailored our recommendations to minimize the highest exposures for each source category independently. Additionally, because this guidance is not regulatory or binding on local agencies, we took a more qualitative approach to developing distance based recommendations.

Where possible, we recommend a minimum separation between new sensitive land uses and existing sources. However, this is not always possible, particularly where there is an elevated health risk over large geographical areas. Areas downwind of ports and rail yards are prime examples. In such cases, we recommend doing everything possible to avoid locating sensitive receptors within the highest risk zones. Concurrently, air agencies and others will be working to reduce the overall risk through controls and measures within their scope of authority.

The recommendations were developed from the standpoint of siting new sensitive land uses. Project-specific data for new and existing air pollution sources are available as part of the air quality permitting process. Where such information is available, it should be used. Our recommendations are designed to fill a gap where information about existing facilities may not be readily available. These recommendations are only guidelines and are not designed to substitute for more specific information if it exists.

A summary of our recommendations is shown in Table 1-1. The basis and references[1] supporting each of these recommendations, including health studies, air quality modeling and monitoring studies is discussed below beginning with freeways and summarized in Table 1-2. As new information becomes available, it will be included on ARB's community health web page.

[1]Detailed information on these references are available on ARB's website at: http://www.ARB.ca.gov/ch/landuse.htm.

Table 1-1

Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities*

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

*Notes:

- These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

- Recommendations are based primarily on data showing that the air pollution exposures addressed here (i.e., localized) can be reduced as much as 80% with the recommended separation.
- The relative risk for these categories varies greatly (see Table 1-2). To determine the actual risk near a particular facility, a site-specific analysis would be required. Risk from diesel PM will decrease over time as cleaner technology phases in.
- These recommendations are designed to fill a gap where information about existing facilities may not be readily available and are not designed to substitute for more specific information if it exists. The recommended distances take into account other factors in addition to available health risk data (see individual category descriptions).
- Site-specific project design improvements may help reduce air pollution exposures and should also be considered when siting new sensitive land uses.
- This table does not imply that mixed residential and commercial development in general is incompatible. Rather it focuses on known problems like dry cleaners using perchloroethylene that can be addressed with reasonable preventative actions.
- A summary of the basis for the distance recommendations can be found in Table 1-2.

Table 1-2

Summary of Basis for Advisory Recommendations

Source Category	Range of Relative Cancer Risk[1,2]	Summary of Basis for Advisory Recommendations
Freeways and High-Traffic Roads	300 – 1,700	• In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70% drop off in particulate pollution levels at 500 feet.
Distribution Centers[3]	Up to 500	• Because ARB regulations will restrict truck idling at distribution centers, transport refrigeration unit (TRU) operations are the largest onsite diesel PM emission source followed by truck travel in and out of distribution centers. • Based on ARB and South Coast District emissions and modeling analyses, we estimate an 80 percent drop-off in pollutant concentrations at approximately 1,000 feet from a distribution center.
Rail Yards	Up to 500	• The air quality modeling conducted for the Roseville Rail Yard Study predicted the highest impact is within 1,000 feet of the Yard, and is associated with service and maintenance activities. The next highest impact is between a half to one mile of the Yard, depending on wind direction and intensity.
Ports	Studies underway	• ARB will evaluate the impacts of ports and develop a new comprehensive plan that will describe the steps needed to reduce public health impacts from port and rail activities in California. In the interim, a general advisory is appropriate based on the magnitude of diesel PM emissions associated with ports.
Refineries	Under 10	• Risk assessments conducted at California refineries show risks from air toxics to be under 10 chances of cancer per million.[4] • Distance recommendations were based on the amount and potentially hazardous nature of many of the pollutants released as part of the refinery process, particularly during non-routine emissions releases.
Chrome Platers	10-100	• ARB modeling and monitoring studies show localized risk of hexavalent chromium diminishing significantly at 300 feet. There are data limitations in both the modeling and monitoring studies. These include variability of plating activities and uncertainty of emissions such as fugitive dust. Hexavalent chromium is one of the most potent toxic air contaminants. Considering these factors, a distance of 1,000 feet was used as a precautionary measure.
Dry Cleaners Using Perchloro-ethylene (perc)	15-150	• Local air district studies indicate that individual cancer risk can be reduced by as much as 75 percent by establishing a 300 foot separation between a sensitive land use and a one-machine perc dry cleaning operation. For larger operations (2 machines or more), a separation of 500 feet can reduce risk by over 85 percent.

Source Category	Range of Relative Cancer Risk[1,2]	Summary of Basis for Advisory Recommendations
Gasoline Dispensing Facilities (GDF)[5]	Typical GDF: Less than 10 Large GDF: Between Less than 10 and 120	• Based on the CAPCOA Gasoline Service Station Industry-wide Risk Assessment Guidelines, most typical GDFs (less than 3.6 million gallons per year) have a risk of less than 10 at 50 feet under urban air dispersion conditions. Over the last few years, there has been a growing number of extremely large GDFs with sales over 3.6 and as high as 19 million gallons per year. Under rural air dispersion conditions, these large GDFs can pose a larger risk at a greater distance.

[1]For cancer health effects, risk is expressed as an estimate of the increased chances of getting cancer due to facility emissions over a 70-year lifetime. This increase in risk is expressed as chances in a million (e.g., 10 chances in a million).

[2]The estimated cancer risks are a function of the proximity to the specific category and were calculated independent of the regional health risk from air pollution. For example, the estimated regional cancer risk from air toxics in the Los Angeles region (South Coast Air Basin) is approximately 1,000 in a million.

[3]Analysis based on refrigerator trucks.

[4]Although risk assessments performed by refineries indicate they represent a low cancer risk, there is limited data on non-cancer effects of pollutants that are emitted from these facilities. Refineries are also a source of non-routine emissions and odors.

[5]A typical GDF in California dispenses under 3.6 million gallons of gasoline per year. The cancer risk for this size facility is likely to be less than 10 in a million at the fence line under urban air dispersion conditions.

A large GDF has fuel throughputs that can range from 3.6 to 19 million gallons of gasoline per year. The upper end of the risk range (i.e., 120 in a million) represents a hypothetical worst case scenario for an extremely large GDF under rural air dispersion conditions.

Freeways and High Traffic Roads

Air pollution studies indicate that living close to high traffic and the associated emissions may lead to adverse health effects beyond those associated with regional air pollution in urban areas. Many of these epidemiological studies have focused on children. A number of studies identify an association between adverse non-cancer health effects and living or attending school near heavily traveled roadways (see findings below). These studies have reported associations between residential proximity to high traffic roadways and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children.

One such study that found an association between traffic and respiratory symptoms in children was conducted in the San Francisco Bay Area. Measurements of traffic-related pollutants showed concentrations within 300 meters (approximately 1,000 feet) downwind of freeways were higher than regional values. Most other studies have assessed exposure based on proximity factors such as distance to freeways or traffic density.

These studies linking traffic emissions with health impacts build on a wealth of data on the adverse health effects of ambient air pollution. The data on the effects of proximity to traffic-related emissions provides additional information that can be used in land use siting and regulatory actions by air agencies. The key observation in these studies is that close proximity increases both exposure and the potential for adverse health effects. Other effects associated with traffic emissions include premature death in elderly individuals with heart disease.

Key Health Findings

- Reduced lung function in children was associated with traffic density, especially trucks, within 1,000 feet and the association was strongest within 300 feet. (Brunekreef, 1997)
- Increased asthma hospitalizations were associated with living within 650 feet of heavy traffic and heavy truck volume. (Lin, 2000)
- Asthma symptoms increased with proximity to roadways and the risk was greatest within 300 feet. (Venn, 2001)
- Asthma and bronchitis symptoms in children were associated with proximity to high traffic in a San Francisco Bay Area community with good overall regional air quality. (Kim, 2004)
- A San Diego study found increased medical visits in children living within 550 feet of heavy traffic. (English, 1999)

In these and other proximity studies, the distance from the roadway and truck traffic densities were key factors affecting the strength of the association with adverse health effects. In the above health studies, the association of traffic-related emissions with adverse health effects was seen within 1,000 feet and was

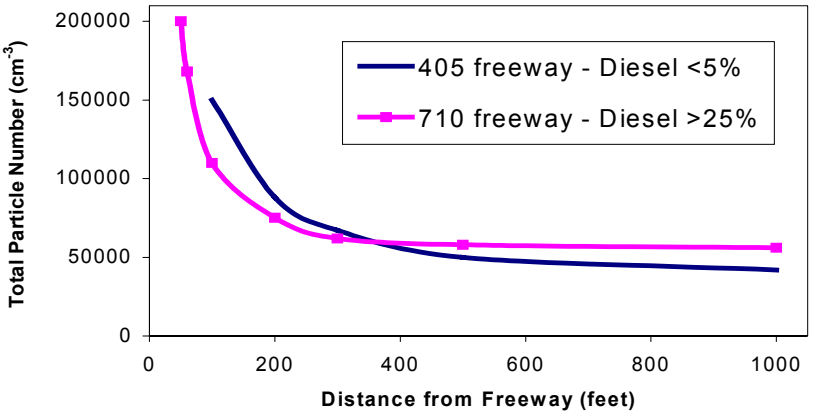
strongest within 300 feet. This demonstrates that the adverse effects diminished with distance.

In addition to the respiratory health effects in children, proximity to freeways increases potential cancer risk and contributes to total particulate matter exposure. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risk from motor vehicle traffic – diesel particulate matter (diesel PM) from trucks, and benzene and 1,3-butadiene from passenger vehicles. On a typical urban freeway (truck traffic of 10,000-20,000/day), diesel PM represents about 70 percent of the potential cancer risk from the vehicle traffic. Diesel particulate emissions are also of special concern because health studies show an association between particulate matter and premature mortality in those with existing cardiovascular disease.

Distance Related Findings

A southern California study (Zhu, 2002) showed measured concentrations of vehicle-related pollutants, including ultra-fine particles, decreased dramatically within approximately 300 feet of the 710 and 405 freeways. Another study looked at the validity of using distance from a roadway as a measure of exposure

Figure 1-1
Decrease In Concentration of Freeway Diesel PM Emissions With Distance



to traffic related air pollution (Knape, 1999). This study showed that concentrations of traffic related pollutants declined with distance from the road, primarily in the first 500 feet.

These findings are consistent with air quality modeling and risk analyses done by ARB staff that show an estimated range of potential cancer risk that decreases with distance from freeways. The estimated risk varies with the local meteorology, including wind pattern. As an example, at 300 feet downwind from a freeway (Interstate 80) with truck traffic of 10,000 trucks per day, the potential cancer risk was as high as 100 in one million (ARB Roseville Rail Yard Study). The cancer health risk at 300 feet on the upwind side of the freeway was much

less. The risk at that distance for other freeways will vary based on local conditions – it may be higher or lower. However, in all these analyses the relative exposure and health risk dropped substantially within the first 300 feet. This phenomenon is illustrated in Figure 1-1.

State law restricts the siting of new schools within 500 feet of a freeway, urban roadways with 100,000 vehicles/day, or rural roadways with 50,000 vehicles with some exceptions.[2] However, no such requirements apply to the siting of residences, day care centers, playgrounds, or medical facilities. The available data show that exposure is greatly reduced at approximately 300 feet. In the traffic-related studies the additional health risk attributable to the proximity effect was strongest within 1,000 feet.

The combination of the children's health studies and the distance related findings suggests that it is important to avoid exposing children to elevated air pollution levels immediately downwind of freeways and high traffic roadways. These studies suggest a substantial benefit to a 500-foot separation.

The impact of traffic emissions is on a gradient that at some point becomes indistinguishable from the regional air pollution problem. As air agencies work to reduce the underlying regional health risk from diesel PM and other pollutants, the impact of proximity will also be reduced. In the meantime, as a preventative measure, we hope to avoid exposing more children and other vulnerable individuals to the highest concentrations of traffic-related emissions.

Recommendation

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

References

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[2] Section 17213 of the California Education Code and section 21151.8 of the California Public Resources Code. See also Appendix E for a description of special processes that apply to school siting.

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Distribution Centers

Distribution centers or warehouses are facilities that serve as a distribution point for the transfer of goods. Such facilities include cold storage warehouses, goods transfer facilities, and inter-modal facilities such as ports. These operations involve trucks, trailers, shipping containers, and other equipment with diesel engines. A distribution center can be comprised of multiple centers or warehouses within an area. The size can range from several to hundreds of acres, involving a number of different transfer operations and long waiting periods. A distribution center can accommodate hundreds of diesel trucks a day that deliver, load, and/or unload goods up to seven days a week. To the extent that these trucks are transporting perishable goods, they are equipped with diesel-powered transport refrigeration units (TRUs) or TRU generator sets.

The activities associated with delivering, storing, and loading freight produces diesel PM emissions. Although TRUs have relatively small diesel-powered engines, in the normal course of business, their emissions can pose a significant health risk to those nearby. In addition to onsite emissions, truck travel in and out of distribution centers contributes to the local pollution impact.

ARB is working to reduce diesel PM emissions through regulations, financial incentives, and enforcement programs. In 2004, ARB adopted two airborne toxic control measures that will reduce diesel PM emissions associated with distribution centers. The first will limit nonessential (or unnecessary) idling of diesel-fueled commercial vehicles, including those entering from other states or countries. This statewide measure, effective in 2005, prohibits idling of a vehicle more than five minutes at any one location.[3] The elimination of unnecessary idling will reduce the localized impacts caused by diesel PM and other air toxics

[3] For further information on the Anti-Idling ATCM, please click on: http://www.arb.ca.gov/toxics/idling/outreach/factsheet.pdf

in diesel vehicle exhaust. This should be a very effective new strategy for reducing diesel PM emissions at distribution centers as well as other locations.

The second measure requires that TRUs operating in California become cleaner over time. The measure establishes in-use performance standards for existing TRU engines that operate in California, including out-of-state TRUs. The requirements are phased-in beginning in 2008, and extend to 2019.[4]

ARB also operates a smoke inspection program for heavy-duty diesel trucks that focuses on reducing truck emissions in California communities. Areas with large numbers of distribution centers are a high priority.

Key Health Findings

Diesel PM has been identified by ARB as a toxic air contaminant and represents 70 percent of the known potential cancer risk from air toxics in California. Diesel PM is an important contributor to particulate matter air pollution. Particulate matter exposure is associated with premature mortality and health effects such as asthma exacerbation and hospitalization due to aggravating heart and lung disease.

Distance Related Findings

Although distribution centers are located throughout the state, they are usually clustered near transportation corridors, and are often located in or near population centers. Diesel PM emissions from associated delivery truck traffic and TRUs at these facilities may result in elevated diesel PM concentrations in neighborhoods surrounding those sites. Because ARB regulations will restrict truck idling at distribution centers, the largest continuing onsite diesel PM emission source is the operation of TRUs. Truck travel in and out of distribution centers also contributes to localized exposures, but specific travel patterns and truck volumes would be needed to identify the exact locations of the highest concentrations.

As part of the development of ARB's regulation for TRUs, ARB staff performed air quality modeling to estimate exposure and the associated potential cancer risk of onsite TRUs for a typical distribution center. For an individual person, cancer risk estimates for air pollution are commonly expressed as a probability of developing cancer from a lifetime (i.e., 70 years) of exposure. These risks were calculated independent of regional risk. For example, the estimated regional cancer risk from air toxics in the Los Angeles region (South Coast Air Basin) is approximately 1,000 additional cancer cases per one million population.

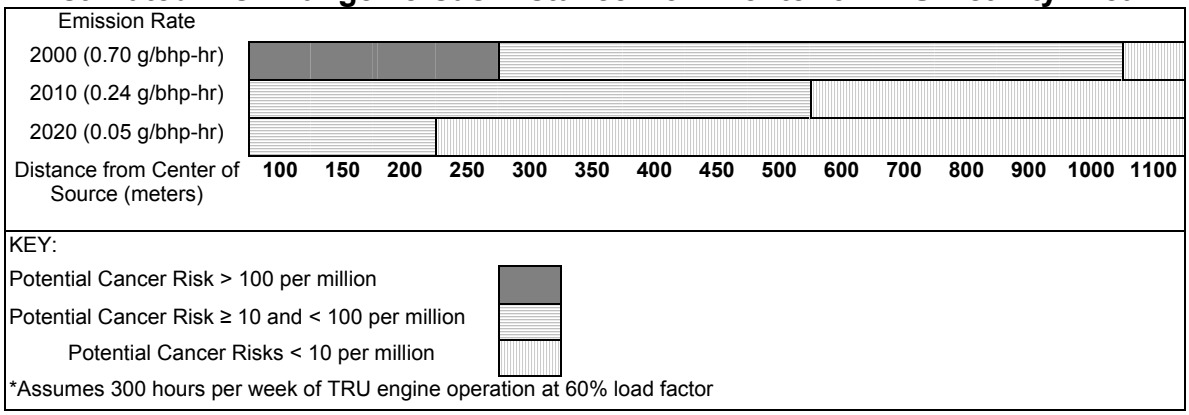
[4] For further information on the Transport Refrigeration Unit ATCM, please click on: http://www.arb.ca.gov/diesel/documents/trufaq.pdf

The diesel PM emissions from a facility are dependent on the size (horsepower), age, and number of engines, emission rates, the number of hours the truck engines and/or TRUs operate, distance, and meteorological conditions at the site. This assessment assumes a total on-site operating time for all TRUs of 300 hours per week. This would be the equivalent of 40 TRU-equipped trucks a day, each loading or unloading on-site for one hour, 12 hours a day and seven days a week.

As shown in Figure 1-2 below, at this estimated level of activity and assuming a current fleet diesel PM emission rate, the potential cancer risk would be over 100 in a million at 800 feet from the center of the TRU activity. The estimated potential cancer risk would be in the 10 to 100 per million range between 800 to 3,300 feet and fall off to less than 10 per million at approximately 3,600 feet. However with the implementation of ARB's regulation on TRUs, the risk will be significantly reduced.[5] We have not conducted a risk assessment for distribution centers based on truck traffic alone, but on an emissions basis, we would expect similar risks for a facility with truck volumes in the range of 100 per day.

Figure 1-2

Estimated Risk Range versus Distance from Center of TRU Activity Area*

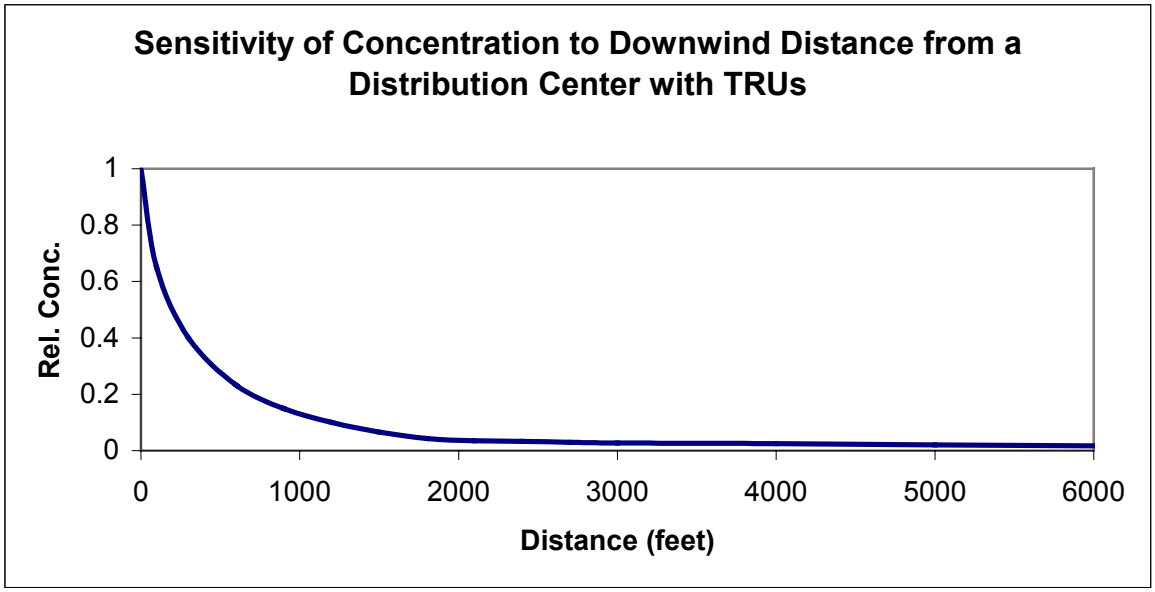


The estimated potential cancer risk level in Figure 1-2 is based on a number of assumptions that may not reflect actual conditions for a specific site. For example, increasing or decreasing the hours of diesel engine operations would change the potential risk levels. Meteorological and other facility specific parameters can also impact the results. Therefore, the results presented here are not directly applicable to any particular facility or operation. Rather, this information is intended to provide an indication as to the potential relative levels of risk that may be observed from operations at distribution centers. As shown in Figure 1-2, the estimated risk levels will decrease over time as lower-emitting diesel engines are used.

[5] These risk values assume an exposure duration of 70 years for a nearby resident and uses the methodology specified in the 2003 OEHHA health risk assessment guidelines.

Another air modeling analysis, performed by the South Coast Air Quality Management District (South Coast AQMD), evaluated the impact of diesel PM emissions from distribution center operations in the community of Mira Loma in southern California. Based on dispersion of diesel PM emissions from a large distribution center, Figure 1-3 shows the relative pollution concentrations at varying distances downwind. As Figure 1-3 shows, there is about an 80 percent drop off in concentration at approximately 1,000 feet.

Figure 1-3
Decrease In Relative Concentration of Risk
With Distance



Both the ARB and the South Coast AQMD analyses indicate that providing a separation of 1,000 feet would substantially reduce diesel PM concentrations and public exposure downwind of a distribution center. While these analyses do not provide specific risk estimates for distribution centers, they provide an indication of the range of risk and the benefits of providing a separation. ARB recommends a separation of 1,000 feet based on the combination of risk analysis done for TRUs and the decrease in exposure predicted with the South Coast AQMD modeling. However, ARB staff plans to provide further information on distribution centers as we collect more data and implement the TRU control measure.

Taking into account the configuration of distribution centers can also reduce population exposure and risk. For example, locating new sensitive land uses away from the main entry and exit points helps to reduce cancer risk and other health impacts.

Recommendations

- Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating TRUs per day, or where TRU unit operations exceed 300 hours per week).

- Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.

References

- *Airborne Toxic Control Measure To Limit Diesel-Fueled Commercial Motor Vehicle Idling.* ARB (August 20, 2004). Rule effectiveness date awaiting submittal of regulation to the Office of Administration Law. http://www.arb.ca.gov/regact/idling/idling.htm

- *Revised Staff Report: Initial Statement of Reasons for Proposed Rulemaking. Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate.* ARB (October 28, 2003). http://www.arb.ca.gov/regact/trude03/revisor.doc

- *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis.* SCAQMD (August 2003) http://www.aqmd.gov/ceqa/handbook/diesel_analysis.doc

- *"Mira Loma Study: Analysis of the Impact of Diesel Particulate Emissions from Warehouse/Distribution Center Operations",* PowerPoint presentation. SCAQMD (July 31, 2002)

Rail Yards

Rail yards are a major source of diesel particulate air pollution. They are usually located near inter-modal facilities, which attract heavy truck traffic, and are often sited in mixed industrial and residential areas. ARB, working with the Placer County air district and Union Pacific Railroad, recently completed a study[6] of the Roseville Rail Yard (Yard) in northern California that focused on the health risk from diesel particulate. A comprehensive emissions analysis and air quality modeling were conducted to characterize the estimated potential cancer risk associated with the facility.

[6] To review the study, please click on: http://www.arb.ca.gov/diesel/documents/rrstudy.htm

The Yard encompasses about 950 acres on a one-quarter mile wide by four-mile long strip of land that parallels Interstate 80. It is surrounded by commercial, industrial, and residential properties. The Yard is one of the largest service and maintenance rail yards in the West with over 30,000 locomotives visiting annually.

Using data provided by Union Pacific Railroad, the ARB determined the number and type of locomotives visiting the Yard annually and what those locomotives were doing - moving, idling, or undergoing maintenance testing. Union Pacific provided the annual, monthly, daily, and hourly locomotive activity in the yard including locomotive movements; routes for arrival, departure, and through trains; and locomotive service and testing. This information was used to estimate the emissions of particulate matter from the locomotives, which was then used to model the potential impacts on the surrounding community.

The key findings of the study are:

- Diesel PM emissions in 2000 from locomotive operations at the Roseville Yard were estimated at about 25 tons per year.

- Of the total diesel PM in the Yard, moving locomotives accounted for about 50 percent, idling locomotives about 45 percent, and locomotive testing about five percent.

- Air quality modeling predicts potential cancer risks greater than 500 in a million (based on 70 years of exposure) in a 10-40 acre area immediately adjacent to the Yard's maintenance operations.

- The risk assessment also showed elevated cancer risk impacting a larger area covering about a 10 by 10 mile area around the Yard.

The elevated concentrations of diesel PM found in the study contribute to an increased risk of cancer and premature death due to cardiovascular disease, and non-cancer health effects such as asthma and other respiratory illnesses. The magnitude of the risk, the general location, and the size of the impacted area depended on the meteorological data used to characterize conditions at the Yard, the dispersion characteristics, and exposure assumptions. In addition to these variables, the nature of locomotive activity will influence a risk characterization at a particular rail yard. For these reasons, the quantified risk estimates in the Roseville Rail Yard Study cannot be directly applied to other rail yards. However, the study does indicate the health risk due to diesel PM from rail yards needs to be addressed. ARB, in conjunction with the U.S. Environmental Protection Agency (U.S. EPA), and local air districts, is working with the rail industry to identify and implement short term, mid-term and long-term mitigation strategies. ARB also intends to conduct a second rail study in southern California to increase its understanding of rail yard operations and the associated public health impacts.

Key Health Findings

Diesel PM has been identified by ARB as a toxic air contaminant and represents 70 percent of the known potential cancer risk from air toxics in California. Diesel PM is an important contributor to particulate matter air pollution. Particulate matter exposure is associated with premature mortality and health effects such as asthma exacerbation and hospitalization due to aggravating heart and lung disease.

Distance Related Findings

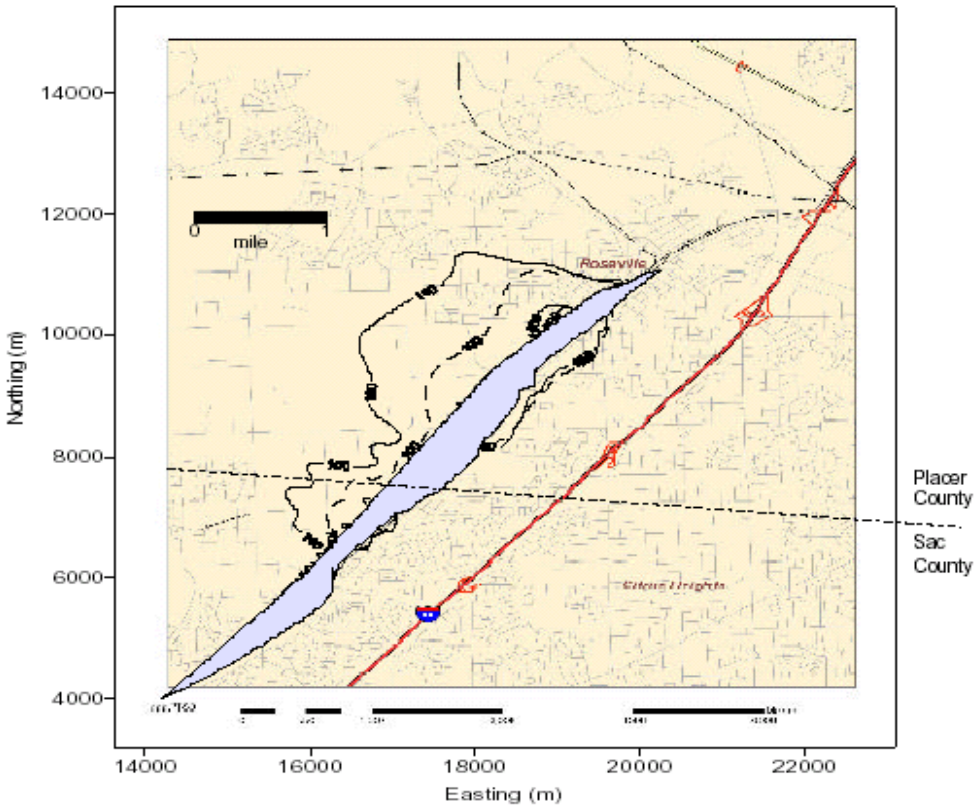
Two sets of meteorological data were used in the Roseville study because of technical limitations in the data. The size of the impact area was highly dependent on the meteorological data set used. The predicted highest impact area ranged from 10 - 40 acres with the two different meteorological data sets. This area, with risks estimated above 500 in a million, is adjacent to an area that includes a maintenance shop (see Figure 1-4). The high concentration of diesel PM emissions is due to the number of locomotives and nature of activities in this area, particularly idling locomotives.

The area of highest impact is within 1,000 feet of the Yard. The next highest impact zone as defined in the report had a predicted risk between 500 and 100 in one million and extends out between a half to one mile in some spots, depending on which meteorological conditions were assumed. The impact areas are irregular in shape making it difficult to generalize about the impact of distance at a particular location. However, the Roseville Rail Yard Study clearly indicates that the localized health risk is high, the impact area is large, and mitigation of the locomotive diesel PM emissions is needed.

For facilities like rail yards and ports, the potential impact area is so large that the real solution is to substantially reduce facility emissions. However, land use planners can avoid encroaching upon existing rail facilities and those scheduled for expansion. We also recommend that while air agencies tackle this problem, land use planners try not to add new sensitive individuals into the highest exposure areas. Finally, we recommend that land use agencies consider the potential health impacts of rail yards in their planning and permitting processes. Additional limitations and mitigation may be feasible to further reduce exposure on a site-specific basis.

Figure 1-4

Estimated Cancer Risk from the Yard
(100 and 500 in a million risk isopleths)



Notes: 100/Million Contours: Solid Line – Roseville Met Data; Dashed Line-McClellan Met Data, Urban Dispersion Coefficients, 80th Percentile Breathing Rate, All Locomotives' Activities (23 TPY), 70-Year Exposure

Recommendation

- Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard[7].
- Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.

References

- *Roseville Rail Yard Study.* ARB (2004)

[7] The rail yard risk analysis was conducted for the Union Pacific rail yard in Roseville, California. This rail yard is one of the largest in the state. There are other rail yards in California with comparable levels of activity that should be considered "major" for purposes of this Handbook.

Ports

Air pollution from maritime port activities is a growing concern for regional air quality as well as air quality in nearby communities. The primary air pollutant associated with port operations is directly emitted diesel particulate. Port-related activities also result in emissions that form ozone and secondary particulate in the atmosphere. The emission sources associated with ports include diesel engine-powered ocean-going ships, harbor craft, cargo handling equipment, trucks, and locomotives. The size and concentration of these diesel engines makes ports one of the biggest sources of diesel PM in the state. For that reason, ARB has made it a top priority to reduce diesel PM emissions at the ports, in surrounding communities, and throughout California.

International, national, state, and local government collaboration is critical to reducing port emissions based on both legal and practical considerations. For example, the International Maritime Organization (IMO) and the U.S. EPA establish emission standards for ocean-going vessels and U.S.-flagged harbor craft, respectively. ARB is pursuing further federal actions to tighten these standards. In addition, ARB and local air districts are reducing emissions from ports through a variety of approaches. These include: incentive programs to fund cleaner engines, enhanced enforcement of smoke emissions from ships and trucks, use of dockside electricity instead of diesel engines, cleaner fuels for ships, harbor craft, locomotives, and reduced engine idling. The two ATCMs that limit truck idling and reduce emissions from TRUs (discussed under “Distribution Centers”) also apply to ports.

ARB is also developing several other regulations that will reduce port-related emissions. One rule would require ocean-going ships to use a cleaner marine diesel fuel to power auxiliary engines while in California coastal waters and at dock. Ships that frequently visit California ports would also be required to further reduce their emissions. ARB has adopted a rule that would require harbor craft to use the same cleaner diesel fuel used by on-road trucks in California. In 2005, ARB will consider a rule that would require additional controls for in-use harbor craft, such as the use of add-on emission controls and accelerated turnover of older engines.

Key Health Findings

Port activities are a major source of diesel PM. Diesel PM has been identified by ARB as a toxic air contaminant and represents 70 percent of the known potential cancer risk from air toxics in California. Diesel PM is an important contributor to particulate matter air pollution. Particulate matter exposure is associated with premature mortality and health effects such as asthma exacerbation and hospitalization due to aggravating heart and lung disease.

Distance Related Findings

The Ports of Los Angeles and Long Beach provide an example of the emissions impact of port operations. A comprehensive emissions inventory was completed in June 2004. These ports combined are one of the world's largest and busiest seaports. Located in San Pedro Bay, about 20 miles south of downtown Los Angeles, the port complex occupies approximately 16 square miles of land and water. Port activities include five source categories that produce diesel emissions. These are ocean-going vessels, harbor craft, cargo handling equipment, railroad locomotives, and heavy-duty trucks.

The baseline emission inventory provides emission estimates for all major air pollutants. This analysis focuses on diesel PM from in-port activity because these emissions have the most potential health impact on the areas adjacent to the port. Ocean vessels are the largest overall source of diesel PM related to the ports, but these emissions occur primarily outside of the port in coastal waters, making the impact more regional in nature.

The overall in-port emission inventory for diesel particulate for the ports of Los Angeles and Long Beach is estimated to be 550 tons per year. The emissions fall in the following major categories: ocean-going vessels (17%), harbor craft (25%), cargo handling (47%), railroad locomotive (3%), and heavy duty vehicles (8%). In addition to in-port emissions, ship, rail, and trucking activities also contribute to regional emissions and increase emissions in nearby neighborhoods. Off-port emissions associated with related ship, rail, and trucking activities contribute an additional 680 tons per year of diesel particulate at the Port of Los Angeles alone.

To put this in perspective, the diesel PM emissions estimated for the Roseville Yard in ARB's 2004 study are 25 tons per year. The potential cancer risk associated with these emissions is 100 in one million at a distance of one mile, or one half mile, depending on the data set used. This rail yard covers one and a half square miles. The Los Angeles and Long Beach ports have combined diesel PM emissions of 550 tons per year emitted from a facility that covers a much larger area - 16 miles. The ports have about twice the emission density of the rail yard - 34 tons per year per square mile compared to 16 tons per year per square mile. However, while this general comparison is illustrative of the overall size of the complex, a detailed air quality modeling analysis would be needed to assess the potential health impact on specific downwind areas near the ports.

ARB is in the process of evaluating the various port-related emission sources from the standpoint of existing emissions, growth forecasts, new control options, regional air quality impacts, and localized health risk. A number of public processes - both state and local - are underway to address various aspects of these issues. Until more of these analyses are complete, there is little basis for recommending a specific separation between new sensitive land uses and ports.

For example, the type of data we have showing the relationship between air pollutant concentrations and distance from freeways is not yet available.

Also, the complexity of the port facilities makes a site-specific analysis critical. Ports are a concentration of multiple emission sources with differing dispersion and other characteristics. In the case of the Roseville rail yard, we found a high, very localized impact associated with a particular activity, service and maintenance. By contrast, the location, size, and nature of impact areas can be expected to vary substantially for different port activities. For instance, ground level emissions from dockside activities would behave differently from ship stack level emissions.

Nonetheless, on an emissions basis alone, we expect locations downwind of ports to be substantially impacted. For that reason, we recommend that land use agencies track the current assessment efforts, and consider limitations on the siting of new sensitive land uses in areas immediately downwind of ports.

Recommendations

Avoid siting new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.

References

- *Roseville Rail Yard Study.* ARB (2004)
- Final Draft, "*Port-Wide Baseline Air Emissions Inventory."* Port of Los Angeles (June 2004)
- Final Draft, "*2002 Baseline Air Emissions Inventory."* Port of Long Beach (February 2004)

Petroleum Refineries

A petroleum refinery is a complex facility where crude oil is converted into petroleum products (primarily gasoline, diesel fuel, and jet fuel), which are then transported through a system of pipelines and storage tanks for final distribution by delivery truck to fueling facilities throughout the state. In California, most crude oil is delivered either by ship from Alaska or foreign sources, or is delivered via pipeline from oil production fields within the state. The crude oil then undergoes many complex chemical and physical reactions, which include distillation, catalytic cracking, reforming, and finishing. These refining processes have the potential to emit air contaminants, and are subject to extensive emission controls by district regulations.

As a result of these regulations covering the production, marketing, and use of gasoline and other oil by-products, California has seen significant regional air quality benefits both in terms of cleaner fuels and cleaner operating facilities. In

the 1990s, California refineries underwent significant modifications and modernization to produce cleaner fuels in response to changes in state law. Nevertheless, while residual emissions are small when compared to the total emissions controlled from these major sources, refineries are so large that even small amounts of fugitive, uncontrollable emissions and associated odors from the operations, can be significant. This is particularly the case for communities that may be directly downwind of the refinery. Odors can cause health symptoms such as nausea and headache. Also, because of the size, complexity, and vast numbers of refinery processes onsite, the occasional refinery upset or malfunction can potentially result in acute or short-term health effects to exposed individuals.

Key Health Findings

Petroleum refineries are large single sources of emissions. For volatile organic compounds (VOCs), eight of the ten largest stationary sources in California are petroleum refineries. For oxides of nitrogen (NOx), four of the ten largest stationary sources in California are petroleum refineries. Both of these compounds react in the presence of sunlight to form ozone. Ozone impacts lung function by irritating and damaging the respiratory system. Petroleum refineries are also large stationary sources of both particulate matter under 10 microns in size (PM_{10}) and particulate matter under 2.5 microns in size ($PM_{2.5}$). Exposure to particulate matter aggravates a number of respiratory illnesses, including asthma, and is associated with premature mortality in people with existing cardiac and respiratory disease. Both long-term and short-term exposure can have adverse health impacts. Finer particles pose an increased health risk because they can deposit deep in the lung and contain substances that are particularly harmful to human health. NOx are also significant contributors to the secondary formation of $PM_{2.5}$.

Petroleum refineries also emit a variety of toxic air pollutants. These air toxics vary by facility and process operation but may include: acetaldehyde, arsenic, antimony, benzene, beryllium, 1,3-butadiene, cadmium compounds, carbonyl sulfide, carbon disulfide, chlorine, dibenzofurans, diesel particulate matter, formaldehyde, hexane, hydrogen chloride, lead compounds, mercury compounds, nickel compounds, phenol, 2,3,7,8 tetrachlorodibenzo-p-dioxin, toluene, and xylenes (mixed) among others. The potential health effects associated with these air toxics can include cancer, respiratory irritation, and damage to the central nervous system, depending on exposure levels.

Distance Related Findings

Health risk assessments for petroleum refineries have shown risks from toxic air pollutants that have quantifiable health risk values to be around 10 potential cancer cases per million. Routine air monitoring and several air monitoring studies conducted in the San Francisco Bay Area (Crockett) and the South Coast Air Basin (Wilmington) have not identified significant health risks specifically

associated with refineries. However, these studies did not measure diesel PM as no accepted method currently exists, and there are many toxic air pollutants that do not have quantifiable health risk values.

In 2002, ARB published a report on the results of the state and local air district air monitoring done near oil refineries. The purpose of this evaluation was to try to determine how refinery-related emissions might impact nearby communities. This inventory of air monitoring activities included 10 ambient air monitoring stations located near refineries in Crockett and four stations near refineries in Wilmington. These monitoring results did not identify significant increased health risks associated with the petroleum refineries. In 2002-2003, ARB conducted additional monitoring studies in communities downwind of refineries in Crockett and Wilmington. These monitoring results also did not indicate significant increased health risks from the petroleum refineries.

Consequently, there are no air quality modeling or air monitoring data that provides a quantifiable basis for recommending a specific separation between refineries and new sensitive land uses. However, in view of the amount and potentially hazardous nature of many of the pollutants released as part of the refinery process, we believe the siting of new sensitive land uses immediately downwind should be avoided. Land use agencies should consult with the local air district when considering how to define an appropriate separation for refineries within their jurisdiction.

Recommendations

- Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.

References

- *Review of Current Ambient Air Monitoring Activities Related to California Bay Area and South Coast Refineries. ARB (March 2002)* http://www.arb.ca.gov/aaqm/qmosqual/special/mldrefinery.pdf
- *Community Air Quality Monitoring: Special Studies – Crockett. ARB (September 2004)* http://www.arb.ca.gov/ch/communities/studies/crockett/crockett.htm
- *Wilmington Study - Air Monitoring Results. ARB (2003)* http://www.arb.ca.gov/ch/communities/studies/wilmington/wilmington.htm

Chrome Plating Operations

Chrome plating operations rely on the use of the toxic metal hexavalent chromium, and have been subject to ARB and local air district control programs for many years. Regulation of chrome plating operations has reduced statewide emissions substantially. However, due to the nature of chrome plating

operations and the highly toxic nature of hexavalent chromium, the remaining health risk to nearby residents is a continuing concern.

Chrome plating operations convert hexavalent chromium in solution to a chromium metal layer by electroplating, and are categorized based upon the thickness of the chromium metal layer applied. In “decorative plating”, a layer of nickel is first plated over a metal substrate. Following this step, a thin layer of chromium is deposited over the nickel layer to provide a decorative and protective finish, for example, on faucets and automotive wheels. “Hard chrome plating” is a process in which a thicker layer of chromium metal is deposited directly on metal substrates such as engine parts, industrial machinery, and tools to provide greater protection against corrosion and wear.

Hexavalent chromium is emitted into the air when an electric current is applied to the plating bath. Emissions are dependent upon the amount of electroplating done per year and the control requirements. A unit of production referred to as an ampere-hour represents the amount of electroplating produced. Small facilities have an annual production rate of 100,000 – 500,000 ampere-hours, while medium-size facilities may have a production rate of 500,000 to about 3 million ampere-hours. The remaining larger facilities have a range of production rates that can be as high as 80 million ampere-hours.

The control requirements, which reduce emissions from the plating tanks, vary according to the size and type of the operation. Facilities either install add-on pollution control equipment, such as filters and scrubbers, or in-tank controls, such as fume suppressants and polyballs. With this combination of controls, the overall hexavalent chromium emissions have been reduced by over 90 percent. Larger facilities typically have better controls that can achieve efficiencies greater than 99 percent. However, even with stringent controls, the lack of maintenance and good housekeeping practices can lead to problems. And, since the material itself is inherently dangerous, any lapse in compliance poses a significant risk to nearby residents.

A 2002 ARB study in the San Diego community of Barrio Logan measured unexpectedly high concentrations of hexavalent chromium near chrome platers. The facilities were located in a mixed-use area with residences nearby. The study found that fugitive dust laden with hexavalent chromium was an important source of emissions that likely contributed to the elevated cancer risk. Largely as a result of this study, ARB is in the process of updating the current requirements to further reduce the emissions from these facilities.

In December 2004, the ARB adopted an ATCM to reduce emissions of hexavalent chromium and nickel from thermal spraying operations through the installation of best available control technology. The ATCM requires all existing facilities to comply with its requirements by January 1, 2006. New and modified thermal spraying operations must comply upon initial startup. An existing thermal spraying facility may be exempt from the minimum control efficiency

requirements of the ATCM if it is located at least 1,640 feet from the nearest sensitive receptor and emits no more than 0.5 pound per year of hexavalent chromium.[8]

Key Health Findings

Hexavalent chromium is one of the most toxic air pollutants regulated by the State of California. Hexavalent chromium is a carcinogen and has been identified in worker health studies as causing lung cancer. Exposure to even very low levels of hexavalent chromium should be avoided.

The California Office of Environmental Health Hazard Assessment has found that: 1) many epidemiological studies show a strong association between hexavalent chromium exposure in the work place and respiratory cancer; and 2) all short-term assays reported show that hexavalent chromium compounds can cause damage to human DNA.

Hexavalent chromium when inhaled over a period of many years can cause a variety of non-cancer health effects. These health effects include damage to the nose, blood disorders, lung disease, and kidney damage. The non-cancer health impacts occur with exposures considerably higher than exposures causing significant cancer risks. It is less likely that the public would be exposed to hexavalent chromium at levels high enough to cause these non-cancer health effects. Non-cancer health effects, unlike cancer health effects, have a threshold or exposure level below which non-cancer health effects would not be expected.

Distance Related Findings

ARB's 2002 Barrio Logan Study measured concentrations of hexavalent chromium in the air near two chrome plating facilities. The study was conducted from December 2001 to May 2002. There were two chrome platers on the street - one decorative and one hard plater. The purpose of the study was to better understand the near source impact of hexavalent chromium emissions. Air monitors were placed at residences next to the platers and at varying distances down the street. The monitors were moved periodically to look at the spatial distribution of the impact. Source testing and facility inspections identified one of the facilities as the likely source.

The first two weeks of monitoring results showed unexpectedly high levels of hexavalent chromium at a number of the monitoring sites. The high concentrations were intermittent. The concentrations ranged from 1 to 22 ng/m3 compared to the statewide average of 0.1 ng/m3. If these levels were to continue for 70 years, the potential cancer risk would be 150 in one million. The highest value was found at an air monitor behind a house adjacent to one of the

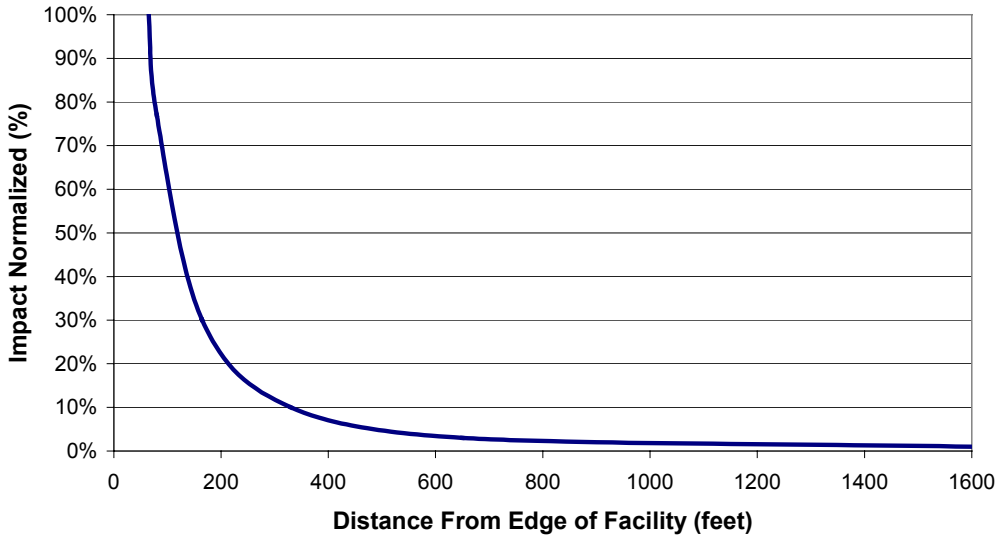
[8] For further information on the ATCM, please refer to: http://www.arb.ca.gov/regact/thermspr/thermalspr.htm

plating facilities–approximately 30 feet from the back entrance. Lower, but significant concentrations were found at an ambient air monitor 250 feet away.

The monitoring covered a period when the facility was not operating its plating tank. During this period, one of the highest concentrations was measured at an adjacent house. It appears that chromium-laden dust was responsible for high concentrations at this location since there was no plating activity at the time. Dust samples from the facility were tested and found to contain high levels of hexavalent chromium. On the day the highest concentration was measured at the house next door, a monitor 350 feet away from the plater's entrance showed very little impact. Similar proximity effects are shown in ARB modeling studies.

Figure 1-5 shows how the relative health risk varies as a function of distance from a chrome plater. This analysis is based on a medium-sized chrome plater with an annual production rate of 3 million ampere-hours. As shown in Figure 1- 5, the potential health risk drops off rapidly, with over 90 percent reduction in risk within 300 feet. This modeling was done in 2003 as part of a review of ARB's current air toxic control measure for chrome platers and is based on data from a recent ARB survey of chrome platers in California. The emission

Figure 1-5
Risk vs. Distance From Chrome Plater
(Based on plating tank emissions)



rates are only for plating operations. Because there are insufficient data available to directly quantify the impacts, the analysis does not include fugitive emissions, which the Barrio Logan analysis indicated could be significant.

Both the ARB Barrio Logan monitoring results and ARB's 2003 modeling analysis suggests that the localized emissions impact of a chrome plater diminishes significantly at 300 feet. However, in developing our recommendation, we also considered the following factors:

- some chrome platers will have higher volumes of plating activity,
- potential dust impacts were not modeled,
- we have only one monitoring study looking at the impact of distance, and,
- hexavalent chromium is one of the most potent toxic air contaminants ARB has identified.

Given these limitations in the analysis, we recommend a separation of 1,000 feet as a precautionary measure. For large chrome platers, site specific information should be obtained from the local air district.

Recommendation

- Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.

References

- *Ambient Air Monitoring for Hexavalent Chromium and Metals in Barrio Logan: May 2001 through May 2002.* ARB, Monitoring and Laboratory Division (October 14, 2003)
- *Draft Barrio Logan Report.* ARB, Planning and Technical Support Division (November 2004)
- *Proposed Amendments to the Hexavalent Chromium Control Measure for Decorative and Hard Chrome Plating and Chromic Acid Anodizing Facilities.* ARB (April 1998)
- Murchison, Linda; Suer, Carolyn; Cook, Jeff. *"Neighborhood Scale Monitoring in Barrio Logan," (*AWMA Annual Conference Proceedings, June 2003)

Dry Cleaners Using Perchloroethylene (Perc Dry Cleaners)

Perchloroethylene (perc) is the solvent most commonly used by the dry cleaning industry to clean clothes or other materials. The ARB and other public health agencies have identified perc as a potential cancer-causing compound. Perc persists in the atmosphere long enough to contribute to both regional air pollution and localized exposures. Perc dry cleaners are the major source of perc emissions in California.

Since 1990, the statewide concentrations and health risk from exposure to perc has dropped over 70 percent. This is due to a number of regulatory requirements on perc dry cleaners and other sources, including degreasing operations, brake cleaners, and adhesives. ARB adopted an Airborne Toxic Control Measure (ATCM) for Perc Emissions from Dry Cleaning Operations in 1993. ARB has also prohibited the use of perc in aerosol adhesives and automotive brake cleaners.

Perc dry cleaners statewide are required to comply with ARB and local air district regulations to reduce emissions. However, even with these controls, some emissions continue to occur. Air quality studies indicate that there is still the potential for significant risks even near well-controlled dry cleaners. The South Coast AQMD has adopted a rule requiring that all new dry cleaners use alternatives to perc and that existing dry cleaners phase out the use of perc by December 2020. Over time, transition to non-toxic alternatives should occur. However, while perc continues to be used, a preventative approach should be taken to siting of new sensitive land uses.

Key Health Findings

Inhalation of perc may result in both cancer and non-cancer health effects. An assessment by California's Office of Environmental Health Hazard Assessment (OEHHA) concluded that perc is a potential human carcinogen and can cause non-cancer health effects. In addition to the potential cancer risk, the effects of long-term exposure include dizziness, impaired judgment and perception, and damage to the liver and kidneys. Workers have shown signs of liver toxicity following chronic exposure to perc, as well as kidney dysfunction and neurological effects. Non-cancer health effects occur with higher exposure levels than those associated with significant cancer risks. The public is more likely to be exposed to perchloroethylene at levels causing significant cancer risks than to levels causing non-cancer health effects. Non-cancer health effects, unlike cancer health effects, have a threshold or exposure level below which non-cancer health effects would not be expected. The ARB formally identified perc as a toxic air contaminant in October 1991.

One study has determined that inhalation of perc is the predominant route of exposure to infants living in apartments co-located in the same building with a business operating perc dry cleaning equipment. Results of air sampling within co-residential buildings indicate that dry cleaners can cause a wide range of exposures depending on the type and maintenance of the equipment. For example, a well-maintained state-of-the-art system may have risks in the range of 10 in one million, whereas a badly maintained machine with major leaks can have potential cancer risks of thousands in one million.

The California Air Pollution Control Officers Association (CAPCOA) is developing Industry-wide Risk Assessment Guidelines for Perchloroethylene Dry Cleaners which, when published, will provide detailed information on public health risk from exposure to emissions from this source.

Distance Related Findings

Risk created by perc dry cleaning is dependent on the amount of perc emissions, the type of dry cleaning equipment, proximity to the source, and how the emissions are released and dispersed (e.g., type of ventilation system, stack parameters, and local meteorology). Dry cleaners are often located near

residential areas, and near shopping centers, schools, day-care centers, and restaurants.

The vast majority of dry cleaners in California have one dry cleaning machine per facility. The South Coast AQMD estimates that an average well-controlled dry cleaner uses about 30 to 160 gallons of cleaning solvent per year, with an average of about 100 gallons. Based on these estimates, the South Coast AQMD estimates a potential cancer risk between 25 to 140 in one million at residential locations 75 feet or less from the dry cleaner, with an average of about 80 in one million. The estimate could be as high as 270 in one million for older machines.

CAPCOA's draft industry-wide risk assessment of perc dry cleaning operations indicates that the potential cancer risk for many dry cleaners may be in excess of potential cancer risk levels adopted by the local air districts. The draft document also indicates that, in general, the public's exposure can be reduced by at least 75 percent, by providing a separation distance of about 300 feet from the operation. This assessment is based on a single machine with perc use of about 100 gallons per year. At these distances, the potential cancer risk would be less than 10 potential cases per million for most scenarios.

The risk would be proportionately higher for large, industrial size, dry cleaners. These facilities typically have two or more machines and use 200 gallons or more per year of perc. Therefore, separation distances need to be greater for large dry cleaners. At a distance of 500 feet, the remaining risk for a large plant can be reduced by over 85 percent.

In California, a small number of dry cleaners that are co-located (sharing a common wall, floor, or ceiling) with a residence have the potential to expose the inhabitants of the residence to high levels of perc. However, while special requirements have been imposed on these existing facilities, the potential for exposure still exists. Avoiding these siting situations in the future is an important preventative measure.

Local air districts are a source of information regarding specific dry cleaning operations—particularly for large industrial operations with multiple machines. The 300 foot separation recommended below reflects the most common situation – a dry cleaner with only one machine. While we recommend 500 feet when there are two or more machines, site specific information should be obtained from the local air district for some very large industrial operations. Factors that can impact the risk include the number and type of machines, controls used, source configuration, building dimensions, terrain, and meteorological data.

Recommendation

- Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines provide 500 feet. For operations with 3 or more machines, consult with the local air district.

- Do not site new sensitive land uses in the same building with perc dry cleaning operations.

References

- *Proposed Amended Rule 1421 – Control of Perchloroethylene Emissions from Dry Cleaning Systems,* Final Staff Report. South Coast AQMD. (October 2002)
- *Air Toxic Control Measure for Emissions of Perchloroethylene from Dry Cleaning Operations.* ARB (1994) (http://www.arb.ca.gov/toxics/atcm/percatcm.htm)
- *"An Assessment of Tetrachloroethylene in Human Breast Milk"*, Judith Schreiber, New York State Department of Health – Bureau of Toxic Substance Assessment, Journal of Exposure Analysis and Environmental Epidemiology, Vol.2, Suppl.2, pp. 15-26, 1992.
- Draft *Air Toxics "Hot Spots" Program Perchloroethylene Dry Cleaner Industry-wide Risk Assessment Guidelines.* (CAPCOA (November 2002)
- *Final Environmental Assessment for Proposed Amended Rule 1421 – Control of Perchloroethylene Emissions from Dry Cleaning Systems.* South Coast AQMD. (October 18, 2002)

Gasoline Dispensing Facilities

Refueling at gasoline dispensing facilities releases benzene into the air. Benzene is a potent carcinogen and is one of the highest risk air pollutants regulated by ARB. Motor vehicles and motor vehicle-related activity account for over 90 percent of benzene emissions in California. While gasoline-dispensing facilities account for a small part of total benzene emissions, near source exposures for large facilities can be significant.

Since 1990, benzene in the air has been reduced by over 75 percent statewide, primarily due to the implementation of emissions controls on motor vehicle vapor recovery equipment at gas stations, and a reduction in benzene levels in gasoline. However, benzene levels are still significant. In urban areas, average benzene exposure is equivalent to about 50 in one million.

Gasoline dispensing facilities tend to be located in areas close to residential and shopping areas. Benzene emissions from the largest gas stations may result in near source health risk beyond the regional background and district health risk thresholds. The emergence of very high gasoline throughput at large retail or

wholesale outlets makes this a concern as these types of outlets are projected to account for an increasing market share in the next few years.

Key Health Findings

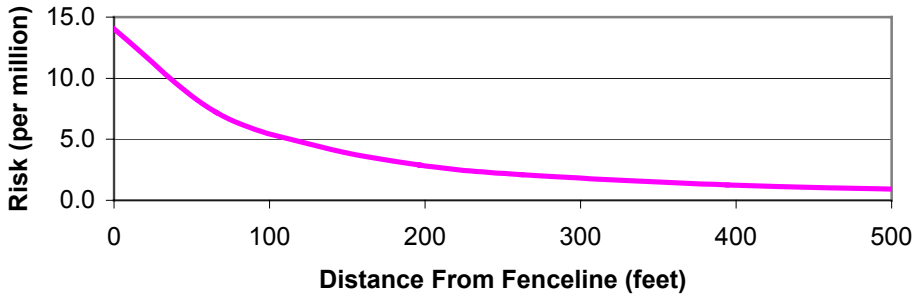
Benzene is a human carcinogen identified by ARB as a toxic air contaminant. Benzene also can cause non-cancer health effects above a certain level of exposure. Brief inhalation exposure to high concentrations can cause central nervous system depression. Acute effects include central nervous system symptoms of nausea, tremors, drowsiness, dizziness, headache, intoxication, and unconsciousness. It is unlikely that the public would be exposed to levels of benzene from gasoline dispensing facilities high enough to cause these non-cancer health effects.

Distance Related Findings

A well-maintained vapor recovery system can decrease emissions of benzene by more than 90% compared with an uncontrolled facility. Almost all facilities have emission control systems. Air quality modeling of the health risks from gasoline dispensing facilities indicate that the impact from the facilities decreases rapidly as the distance from the facility increases.

Statistics reported in the ARB's staff reports on Enhanced Vapor Recovery released in 2000 and 2002, indicated that almost 96 percent of the gasoline dispensing facilities had a throughput less than 2.4 million gallons per year. The remaining four percent, or approximately 450 facilities, had throughputs exceeding 2.4 million gallons per year. For these stations, the average gasoline throughput was 3.6 million gallons per year.

Figure 1-6
Gasoline Dispensing Facility Health Risk
for 3,600,000 gal/yr throughput



As shown in Figure 1-6, the risk levels for a gasoline dispensing facility with a throughput of 3.6 million gallons per year is about 10 in one million at a distance of 50 feet from the fenceline. However, as the throughput increases, the potential risk increases.

As mentioned above, air pollution levels in the immediate vicinity of large gasoline dispensing facilities may be higher than the surrounding area (although tailpipe emissions from motor vehicles dominates the health impacts). Very large gasoline dispensing facilities located at large wholesale and discount centers may dispense nine million gallons of gasoline per year or more. At nine million gallons, the potential risk could be around 25 in one million at 50 feet, dropping to about five in one million at 300 feet. Some facilities have throughputs as high as 19 million gallons.

Recommendation

- Avoid siting new sensitive land uses within 300 feet of a large gasoline dispensing facility (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

References

- *Gasoline Service Station Industry-wide Risk Assessment Guidelines.* California Air Pollution Control Officers Association (December 1997 and revised November 1, 2001)
- *Staff Report on Enhanced Vapor Recovery.* ARB (February 4, 2000)
- *The California Almanac of Emissions and Air Quality.* ARB (2004)
- *Staff Report on Enhanced Vapor Recovery Technology Review.* ARB (October 2002)

Other Facility Types that Emit Air Pollutants of Concern

In addition to source specific recommendations, Table 1-3 includes a list of other industrial sources that could pose a significant health risk to nearby sensitive individuals depending on a number of factors. These factors include the amount of pollutant emitted and its toxicity, the distance to nearby individuals, and the type of emission controls in place. Since these types of facilities are subject to air permits from local air districts, facility specific information should be obtained where there are questions about siting a sensitive land use close to an industrial facility.

Potential Sources of Odor and Dust Complaints

Odors and dust from commercial activities are the most common sources of air pollution complaints and concerns from the public. Land use planning and permitting processes should consider the potential impacts of odor and dust on surrounding land uses, and provide for adequate separation between odor and dust sources. As with other types of air pollution, a number of factors need to be considered when determining an adequate distance or mitigation to avoid odor or

Table 1-3 – Examples of Other Facility Types That Emit[1] Air Pollutants of Concern

Categories	Facility Type	Air Pollutants of Concern
Commercial		
	Autobody Shops	Metals, Solvents
	Furniture Repair	Solvents[2], Methylene Chloride
	Film Processing Services	Solvents, Perchloroethylene
	Distribution Centers	Diesel Particulate Matter
	Printing Shops	Solvents
	Diesel Engines	Diesel Particulate Matter
Industrial		
	Construction	Particulate Matter, Asbestos
	Manufacturers	Solvents, Metals
	Metal Platers, Welders, Metal Spray (flame spray) Operations	Hexavalent Chromium, Nickel, Metals
	Chemical Producers	Solvents, Metals
	Furniture Manufacturers	Solvents
	Shipbuilding and Repair	Hexavalent chromium and other metals, Solvents
	Rock Quarries and Cement Manufacturers	Particulate Matter, Asbestos
	Hazardous Waste Incinerators	Dioxin, Solvents, Metals
	Power Plants	Benzene, Formaldehyde, Particulate Matter
	Research and Development Facilities	Solvents, Metals, etc.
Public		
	Landfills	Benzene, Vinyl Chloride, Diesel Particulate Matter
	Waste Water Treatment Plants	Hydrogen Sulfide
	Medical Waste Incinerators	Dioxin, Benzene, PAH, PCBs, 1,3-Butadiene
	Recycling, Garbage Transfer Stations	Diesel Particulate Matter
	Municipal Incinerators	Dioxin, Benzene, PAH, PCBs, 1,3-Butadiene
Transportation		
	Truck Stops	Diesel Particulate Matter
Agricultural Operations		
	Farming Operations	Diesel Particulate Matter, VOCs, NOx, PM10, CO, SOx, Pesticides
	Livestock and Dairy Operations	Ammonia, VOCs, PM10

[1]Not all facilities will emit pollutants of concern due to process changes or chemical substitution. Consult the local air district regarding specific facilities.
[2]Some solvents may emit toxic air pollutants, but not all solvents are toxic air contaminants.

dust complaints in a specific situation. Local air districts should be consulted for advice when these siting situations arise.

Table 1-4 lists some of the most common sources of odor complaints received by local air districts. Complaints about odors are the responsibility of local air districts and are covered under state law. The types of facilities that can cause odor complaints are varied and can range from small commercial facilities to large industrial facilities, and may include waste disposal and recycling operations. Odors can cause health symptoms such as nausea and headache. Facilities with odors may also be sources of toxic air pollutants (See Table 1-3). Some common sources of odors emitted by facilities are sulfur compounds, organic solvents, and the decomposition/digestion of biological materials. Because of the subjective nature of an individual's sensitivity to a particular type of odor, there is no specific rule for assigning appropriate separations from odor sources. Under the right meteorological conditions, some odors may still be offensive several miles from the source.

Table 1-4
Sources of Odor Complaints

- Sewage Treatment Plants
- Landfills
- Recycling Facilities
- Waste Transfer Stations
- Petroleum Refineries
- Biomass Operations
- Autobody Shops
- Coating Operations
- Fiberglass Manufacturing
- Foundries
- Rendering Plants
- Livestock Operations

Sources of dust are also common sources of air pollution-related complaints. Operations that can result in dust problems are rock crushing, gravel production, stone quarrying, and mining operations. A common source of complaints is the dust and noise associated with blasting that may be part of these operations. Besides the health impacts of dust as particulate matter, thick dust also impairs visibility, aesthetic values, and can soil homes and automobiles. Local air districts typically have rules for regulating dust sources in their jurisdictions, but dust sources can still be a concern. Therefore, separation of these facilities from residential and other new sensitive land uses should be considered.

In some areas of California, asbestos occurs naturally in stone deposits. Asbestos is a potent carcinogenic substance when inhaled. Asbestos-containing dust may be a public health concern in areas where asbestos-containing rock is mined, crushed, processed, or used. Situations where asbestos-containing gravel has been used in road paving materials are also a source of asbestos exposure to the general public. Planners are advised to consult with local air pollution agencies in areas where asbestos-containing gravel or stone products are produced or used.

2. Handbook Development

ARB and local air districts share responsibility for improving statewide air quality. As a result of California's air pollution control programs, air quality has improved and health risk has been reduced statewide. However, state and federal air quality standards are still exceeded in many areas of California and the statewide health risk posed by toxic air contaminants (air toxics) remains too high. Also, some communities experience higher pollution exposures than others - making localized impacts, as well regional or statewide impacts, an important consideration. It is for this reason that this Handbook has been produced - to promote better, more informed decision-making by local land use agencies that will improve air quality and public health in their communities.

Land use policies and practices, including planning, zoning, and siting activities, can play a critical role in air quality and public health at the local level. For instance, even with the best available control technology, some projects that are sited very close to homes, schools, and other public places can result in elevated air pollution exposures. The reverse is also true – siting a new school or home too close to an existing source of air pollution can pose a public health risk. The ARB recommendations in section 1 address this issue.

> *This Handbook is an informational document that we hope will strengthen the relationship between air quality and land use agencies. It highlights the need for land use agencies to address the potential for new projects to result in localized health risk or contribute to cumulative impacts where air pollution sources are concentrated.*

Avoiding these incompatible land uses is a key to reducing localized air pollution exposures that can result in adverse health impacts, especially to sensitive individuals.

Individual siting decisions that result in incompatible land uses are often the result of locating "sensitive" land uses next to polluting sources. These decisions can be of even greater concern when existing air pollution exposures in a community are considered. In general terms, this is often referred to as the issue of "cumulative impacts." ARB is working with local air districts to better define these situations and to make information about existing air pollution levels (e.g., from local businesses, motor vehicles, and other areawide sources) more readily available to land use agencies.

In December 2001, the ARB adopted "Policies and Actions for Environmental Justice" (Policies). These Policies were developed in coordination with a group of stakeholders, representing local government agencies, community interest

groups, environmental justice organizations, academia, and business (Environmental Justice Stakeholders Group).

The Policies included a commitment to work with land use planners, transportation agencies, and local air districts to develop ways to identify, consider, and reduce cumulative air pollution emissions, exposure, and health risks associated with land use planning and decision-making. Developed under the auspices of the ARB's Environmental Justice Stakeholders Group, this Handbook is a first step in meeting that commitment.

ARB has produced this Handbook to help achieve several objectives:

- Provide recommendations on situations to avoid when siting new residences, schools, day care centers, playgrounds, and medical-related facilities (sensitive sites or sensitive land uses);

- Identify approaches that land use agencies can use to prevent or reduce potential air pollution impacts associated with general plan policies, new land use development, siting, and permitting decisions;

- Improve and facilitate access to air quality data and evaluation tools for use in the land use decision-making process;

- Encourage stronger collaboration between land use agencies and local air districts to reduce community exposure to source-specific and cumulative air pollution impacts; and

- Emphasize community outreach approaches that promote active public involvement in the air quality/land use decision-making process.

This Handbook builds upon California's 2003 General Plan Guidelines. These Guidelines, developed by the Governor's Office of Planning and Research (OPR), explain the land use planning process and applicable legal requirements. This Handbook also builds upon a 1997 ARB report, "The Land Use-Air Quality Linkage" ("Linkage Report").[9] The Linkage Report was an outgrowth of the California Clean Air Act which, among other things, called upon local air districts to focus particular attention on reducing emissions from sources that indirectly cause air pollution by attracting vehicle trips. Such indirect sources include, but are not limited to, shopping centers, schools and universities, employment centers, warehousing, airport hubs, medical offices, and sports arenas. The Linkage Report summarizes data as of 1997 on the relationships between land use, transportation, and air quality, and highlights strategies that can help to reduce the use of single occupancy automobile use. Such strategies

[9] To access this report, please refer to ARB's website or click on: http://www.arb.ca.gov/ch/programs/link97.pdf

complement ARB regulatory programs that continue to reduce motor vehicle emissions.

In this Handbook, we identify types of air quality-related information that we recommend land use agencies consider in the land use decision-making processes such as the development of regional, general, and community plans; zoning ordinances; environmental reviews; project siting; and permit issuance. The Handbook provides recommendations on the siting of new sensitive land uses based on current analyses. It also contains information on approaches and methodologies for evaluating new projects from an air pollution perspective.

The Handbook looks at air quality issues associated with emissions from industrial, commercial, and mobile sources of air pollution. Mobile sources continue to be the largest overall contributors to the state's air pollution problems, representing the greatest air pollution health risk to most Californians. Based on current health risk information for air toxics, the most serious pollutants on a statewide basis are diesel PM, benzene, and 1,3-butadiene, all of which are primarily emitted by motor vehicles. From a state perspective, ARB continues to pursue new strategies to further reduce motor vehicle-related emissions in order to meet air quality standards and reduce air toxics risk.

While mobile sources are the largest overall contributors to the state's air pollution problems, industrial and commercial sources can also pose a health risk, particularly to people near the source. For this reason, the issue of incompatible land uses is an important focus of this document.

Handbook Audience

Even though the primary users of the Handbook will likely be agencies responsible for air quality and land use planning, we hope the ideas and technical issues presented in this Handbook will also be useful for:

- public and community organizations and community residents;
- federal, state and regional agencies that fund, review, regulate, oversee, or otherwise influence environmental policies and programs affected by land use policies; and
- private developers.

3. Key Community Focused Issues Land Use Agencies Should Consider

Two key air quality issues that land use agencies should consider in their planning, zoning, and permitting processes are:

1) **Incompatible Land Uses.** Localized air pollution impacts from incompatible land use can occur when polluting sources, such as a heavily trafficked roadway, warehousing facilities, or industrial or commercial facilities, are located near a land use where sensitive individuals are found such as a school, hospital, or homes.

2) **Cumulative Impacts.** Cumulative air pollution impacts can occur from a concentration of multiple sources that individually comply with air pollution control requirements or fall below risk thresholds, but in the aggregate may pose a public health risk to exposed individuals. These sources can be heavy or light-industrial operations, commercial facilities such as autobody shops, large gas dispensing facilities, dry cleaners, and chrome platers, and freeways or other nearby busy transportation corridors.

Incompatible Land Uses

Land use policies and practices can worsen air pollution exposure and adversely affect public health by mixing incompatible land uses. Examples include locating new sensitive land uses, such as housing or schools, next to small metal plating facilities that use a highly toxic form of chromium, or very near large industrial facilities or freeways. Based on recent monitoring and health-based studies, we now know that air quality impacts from incompatible land uses can contribute to increased risk of illness, missed work and school, a lower quality of life, and higher costs for public health and pollution control.[10]

Avoiding incompatible land uses can be a challenge in the context of mixed-use industrial and residential zoning. For a variety of reasons, government agencies and housing advocates have encouraged the proximity of affordable housing to employment centers, shopping areas, and transportation corridors, partially as a means to reduce vehicle trips and their associated emissions. Generally speaking, typical distances in mixed-use communities between businesses and industries and other land uses such as homes and schools, should be adequate to avoid health risks. However, generalizations do not always hold as we addressed in section 1 of this Handbook.

In terms of siting air pollution sources, the proposed location of a project is a major factor in determining whether it will result in localized air quality impacts. Often, the problem can be avoided by providing an adequate distance or setback

[10] For more information, the reader should refer to ARB's website on community health: http://www.arb.ca.gov/ch/ch.htm

between a source of emissions and nearby sensitive land uses. Sometimes, suggesting project design changes or mitigation measures in the project review phase can also reduce or avoid potential impacts. This underscores the importance of addressing potential incompatible land uses as early as possible in the project review process, ideally in the general plan itself.

Cumulative Air Pollution Impacts

The broad concept of cumulative air pollution impacts reflects the combination of regional air pollution levels and any localized impacts. Many factors contribute to air pollution levels experienced in any location. These include urban background air pollution, historic land use patterns, the prevalence of freeways and other transportation corridors, the concentration of industrial and commercial businesses, and local meteorology and terrain.

When considering the potential air quality impacts of polluting sources on individuals, project location and the concentration of emissions from air pollution sources need to be considered in the land use decision-making process. In section 4, the Handbook offers a series of questions that helps land use agencies determine if a project should undergo a more careful analysis. This holds true regardless of whether the project being sited is a polluting source or a sensitive land use project.

Large industrial areas are not the only land uses that may result in public health concerns in mixed-use communities. Cumulative air pollution impacts can also occur if land uses do not adequately provide setbacks or otherwise protect sensitive individuals from potential air pollution impacts associated with nearby light industrial sources. This can occur with activities such as truck idling and traffic congestion, or from indirect sources such as warehousing facilities that are located in a community or neighborhood.

In October 2004, Cal/EPA published its Environmental Justice Action Plan. In February 2005, the Cal/EPA Interagency Working Group approved a working definition of "cumulative impacts" for purposes of initially guiding the pilot projects that are being conducted pursuant to that plan. Cal/EPA is now in the process of developing a Cumulative Impacts Assessment Guidance document. Cal/EPA will revisit the working definition of "cumulative impacts" as the Agency develops that guidance. The following is the working definition:

> *"Cumulative impacts means exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable, and to the extent data are available."*

4. Mechanisms for Integrating Localized Air Quality Concerns Into Land Use Processes

Land use agencies should use each of their existing planning, zoning, and permitting authorities to address the potential health risk associated with new projects. Land use-specific mechanisms can go a long way toward addressing both localized and cumulative impacts from new air pollution sources that are not otherwise addressed by environmental regulations. Likewise, close collaboration and communication between land use agencies and local air districts in both the planning and project approval stages can further reduce these impacts. Local agency partnerships can also result in early identification of potential impacts from proposed activities that might otherwise escape environmental review. When this happens, pollution problems can be prevented or reduced before projects are approved, when it is less complex and expensive to mitigate.

The land use entitlement process requires a series of planning decisions. At the highest level, the General Plan sets the policies and direction for the jurisdiction, and includes a number of mandatory elements dealing with issues such as housing, circulation, and health hazards. Zoning is the primary tool for implementing land use policies. Specific or community plans created in conjunction with a specific project also perform many of the same functions as a zoning ordinance. Zoning can be modified by means of variances and conditional use permits. The latter are frequently used to insure compatibility between otherwise conflicting land uses. Finally, new development usually requires the approval of a parcel or tract map before grading and building permits can be issued. These parcel or tract maps must be consistent with the applicable General Plan, zoning and other standards.

Land use agencies can use their planning authority to separate industrial and residential land uses, or to require mitigation where separation is not feasible. By separating incompatible land uses, land use agencies can prevent or reduce both localized and cumulative air pollution impacts without denying what might otherwise be a desirable project.[11] For instance:

- a dry cleaner could open a storefront operation in a community with actual cleaning operations performed at a remote location away from residential areas;
- gas dispensing facilities with lower fuel throughput could be sited in mixed-use areas;
- enhanced building ventilation or filtering systems in schools or senior care centers can reduce ambient air from nearby busy arterials; or
- landscaping and regular watering can be used to reduce fugitive dust at a building construction site near a school yard.

[11] It should be noted that such actions should also be considered as part of the General Plan or Plan element process.

The following general and specific land use approaches can help to reduce potential adverse air pollution impacts that projects may have on public health.

General Plans

The primary purpose of planning, and the source of government authority to engage in planning, is to protect public health, safety, and welfare. In its most basic sense, a local government General Plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, forming the basis for most land use decisions. Therefore, the most effective mechanism for dealing with the central land use concept of compatibility and its relationship to cumulative air pollution impacts is the General Plan. Well before projects are proposed within a jurisdiction, the General Plan sets the stage for where projects can be sited, and their compatibility with comprehensive community goals, objectives, and policies.

In 2003, OPR revised its General Plan Guidelines, highlighting the importance of incorporating sustainable development and environmental justice policies in the planning process. The OPR General Plan Guidelines provides an effective and long-term approach to reduce cumulative air pollution impacts at the earliest planning stages. In light of these important additions to the Guidelines, land use agencies should consider updating their General Plans or Plan elements to address these revisions.

The General Plan and related Plan elements can be used to avoid incompatible land uses by incorporating air quality considerations into these documents. For instance, a General Plan safety element with an air quality component could be used to incorporate policies or objectives that are intended to protect the public from the potential for facility breakdowns that may result in a dangerous release of air toxics. Likewise, an air quality component to the transportation circulation element of the General Plan could include policies or standards to prevent or reduce local exposure to diesel exhaust from trucks and other vehicles. For instance, the transportation circulation element could encourage the construction of alternative routes away from residential areas for heavy-duty diesel trucks. By considering the relationship between air quality and transportation, the circulation element could also include air quality policies to prevent or reduce trips and travel, and thus vehicle emissions. Policies in the land use element of the General Plan could identify areas appropriate for future industrial, commercial, and residential uses. Such policies could also introduce design and distance parameters that reduce emissions, exposure, and risk from industrial and some commercial land uses (e.g., dry cleaners) that are in close proximity to residential areas or schools.

Land use agencies should also consider updating or creating an air quality element in the jurisdiction's General Plan. In the air quality element, local decision-makers could develop long-term, effective plans and policies to address

air quality issues, including cumulative impacts. The air quality element can also provide a general reference guide that informs local land use planners about regional and community level air quality, regulatory air pollution control requirements and guidelines, and references emissions and pollution source data bases and assessment and modeling tools. As is further described in Appendix C of the Handbook, new assessment tools that ARB is developing can be included into the air quality element by reference. For instance, ARB's statewide risk maps could be referenced in the air quality element as a resource that could be consulted by developers or land use agencies

Zoning

The purpose of "zoning" is to separate different land uses. Zoning ordinances establish development controls to ensure that private development takes place within a given area in a manner in which:

- All uses are compatible (e.g., an industrial plant is not permitted in a residential area);
- Common development standards are used (e.g., all homes in a given area are set back the same minimum distance from the street); and,
- Each development does not unreasonably impose a burden upon its neighbors (e.g., parking is required on site so as not to create neighborhood parking problems).

To do this, use districts called "zones" are established and standards are developed for these zones. The four basic zones are residential, commercial, industrial and institutional.

Land use agencies may wish to consider how zoning ordinances, particularly those for mixed-use areas, can be used to avoid exacerbating poor land use practices of the past or contributing to localized and cumulative air pollution impacts in the community.

Sometimes, especially in mixed-use zones, there is a potential for certain categories of existing businesses or industrial operations to result in cumulative air pollution impacts to new development projects. For example:

- An assisted living project is proposed for a mixed-use zone adjacent to an existing chrome plating facility, or several dry cleaners;
- Multiple industrial sources regulated by a local air district are located directly upwind of a new apartment complex;
- A new housing development is sited in a mixed-use zone that is downwind or adjacent to a distribution center that attracts diesel-fueled delivery trucks and TRUs; or
- A new housing development or sensitive land use is sited without adequate setbacks from an existing major transportation corridor or rail yard.

As part of the public process for making zoning changes, local land use agencies could work with community planning groups, local businesses, and community residents to determine how best to address existing incompatible land uses.

Land Use Permitting Processes

■ Questions to Consider When Reviewing New Projects

Very often, just knowing what questions to ask can yield critical information about the potential air pollution impacts of proposed projects – both from the perspective of a specific project as well as in the nature of existing air pollution sources in the same impact area. Available land use information can reveal the proximity of air pollution sources to sensitive individuals, the potential for incompatible land uses, and the location and nature of nearby air pollution sources. Air quality data, available from the ARB and local air districts, can provide information about the types and amounts of air pollution emitted in an area, regional air quality concentrations, and health risk estimates for specific sources.

General Plans and zoning maps are an excellent starting point in reviewing project proposals for their potential air pollution impacts. These documents contain information about existing or proposed land uses for a specific location as well as the surrounding area. Often, just looking at a map of the proposed location for a facility and its surrounding area will help to identify a potential adjacent incompatible land use.

The following pages are a “pull-out” list of questions to consider along with cross-references to pertinent information in the Handbook. These questions are intended to assist land use agencies in evaluating potential air quality-related concerns associated with new project proposals.

The first group of questions contains project-related queries designed to help identify the potential for localized project impacts, particularly associated with incompatible land uses. The second group of questions focuses on the issue of potential cumulative impacts by including questions about existing emissions and air quality in the community, and community feedback. Depending on the answers to these questions, a land use agency may decide a more detailed review of the proposal is warranted.

The California Department of Education has already developed a detailed process for school siting which is outlined in Appendix E. However, school districts may also find this section helpful when evaluating the most appropriate site for new schools in their area. At a minimum, using these questions may encourage school districts to engage throughout their siting process with land use agencies and local air districts. The combined expertise of these entities can be useful in devising relevant design standards and mitigation measures that can

reduce exposure to cumulative emissions, exposure, and health risk to students and school workers.

As indicated throughout the Handbook, we strongly encourage land use agencies to consult early and often with local air districts. Local air districts have the expertise, many of the analytical tools, and a working knowledge of the sources they regulate. It is also critical to fully involve the public and businesses that could be affected by the siting decision. The questions provided in the chart below do not imply any particular action should be taken by land use agencies. Rather the questions are intended to improve the assessment process and facilitate informed decision-making.

- **Project-Related Questions**

This section includes project-related questions that, in conjunction with the questions in the next section, can be used to tailor the project evaluation. These questions are designed to help identify the potential for incompatible land uses from localized project impacts.

Questions to Consider When Reviewing New Projects

Project-Related Questions	Cross-Reference to Relevant Handbook Sections
1. Is the proposed project: ▲ A business or commercial license renewal ▲ A new or modified commercial project ▲ A new or modified industrial project ▲ A new or modified public facility project ▲ A new or modified transportation project ▲ A housing or other development in which sensitive individuals may live or play	See Appendix A for typical land use classifications and associated project categories that could emit air pollutants.
2. Does the proposed project: ▲ Conform to the zoning designation? ▲ Require a variance to the zoning designation? ▲ Include plans to expand operations over the life of the business such that additional emissions may increase the pollution burden in the community (e.g., from additional truck operations, new industrial operations or process lines, increased hours of operation, build-out to the property line, etc.)?	See Appendix F for a general explanation of land use processes. In addition, Section 3 contains a discussion of how land use planning, zoning, and permitting practices can result in incompatible land uses or cumulative air pollution impacts.
3. Has the local air district provided comments or information to assist in the analysis?	See Section 5 and Appendix C for a description of air quality-related tools that the ARB and local air districts use to provide information on potential air pollution impacts.
4. Have public meetings been scheduled with the affected community to solicit their involvement in the decision-making process for the proposed project?	See Section 7 for a discussion of public participation, information and outreach tools.
5. If the proposed project will be subject to local air district regulations: ▲ Has the project received a permit from the local air district? ▲ Would it comply with applicable local air district requirements? ▲ Is the local air district contemplating new regulations that would reduce emissions from the source over time? ▲ Will potential emissions from the project	See Appendix C for a description of local air district programs.

Project-Related Questions	Cross-Reference to Relevant Handbook Sections
trigger the local air district's new source review for criteria pollutants or air toxics emissions? ▲ Is the local air district expected to ask the proposed project to perform a risk assessment? ▲ Is there sufficient new information or public concern to call for a more thorough environmental analysis of the proposed project? ▲ Are there plans to expand operations over time? ▲ Are there land-use based air quality significance thresholds or design standards that could be applied to this project in addition to applicable air district requirements?	
6. If the proposed project will release air pollution emissions, either directly or indirectly, but is not regulated by the local air district: ▲ Is the local air district informed of the project? ▲ Does the local air district believe that there could be potential air pollution impacts associated with this project category because of the proximity of the project to sensitive individuals? ▲ If the project is one in which individuals live or play (e.g., a home, playground, convalescent home, etc.), does the local air district believe that the project's proximity to nearby sources could pose potential air pollution impacts? ▲ Are there indirect emissions that could be associated with the project (e.g., truck traffic or idling, transport refrigeration unit operations, stationary diesel engine operations, etc.) that will be in close proximity to sensitive individuals? ▲ Will the proposed project increase or serve as a magnet for diesel traffic? ▲ Are there land-use based air quality significance thresholds or design standards that could be applied to this project in addition to applicable air district requirements? ▲ Is there sufficient new information or public concern to call for a more thorough environmental analysis of the proposed project? ▲ Should the site approval process include identification and mitigation of potential	See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).

Project-Related Questions	Cross-Reference to Relevant Handbook Sections
direct or indirect emissions associated with the potential project?	
7. Does the local air district or land use agency have pertinent information on the source, such as: ▲ Available permit and enforcement data, including for the owner or operator of the proposed source that may have other sources in the State. ▲ Proximity of the proposed project to sensitive individuals. ▲ Number of potentially exposed individuals from the proposed project. ▲ Potential for the proposed project to expose sensitive individuals to odor or other air pollution nuisances. ▲ Meteorology or the prevailing wind patterns between the proposed project and the nearest receptor, or between the proposed sensitive receptor project and sources that could pose a localized or cumulative air pollution impact.	See Appendix C for a description of local air district programs. See Appendix B for a listing of useful information that land use agencies should have on hand or have accessible when reviewing proposed projects for potential air pollution impacts. Also, do not hesitate to contact your local air district regarding answers to any of these questions that might not be available at the land use agency. See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).
8. Based upon the project application, its location, and the nature of the source, could the proposed project: ▲ Be a polluting source that is located in proximity to, or otherwise upwind, of a location where sensitive individuals live or play? ▲ Attract sensitive individuals and be located in proximity to or otherwise downwind, of a source or multiple sources of pollution, including polluting facilities or transportation-related sources that contribute emissions either directly or indirectly? ▲ Result in health risk to the surrounding community?	See Section 3 for a discussion of what is an incompatible land use and the potential cumulative air pollution impacts. See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).
9. If a CEQA categorical exemption is proposed, were the following questions considered: ▲ Is the project site environmentally sensitive as defined by the project's location? (A project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant.) ▲ Would the project and successive future projects of the same type in the approximate location potentially result in cumulative impacts? ▲ Are there "unusual circumstances" creating the possibility of significant effects?	See CEQA Guidelines section 15300, and Public Resources Code, section 21084. See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites). See also Section 5 and Appendix C for a description of air quality-related tools that the ARB and local air districts use to provide information on potential air pollution impacts.

- **Questions Related to Cumulative Impact Assessment**

The following questions can be used to provide the decision-maker with a better understanding of the potential for cumulative air pollution impacts to an affected community. Answers to these questions will help to determine if new projects or activities warrant a more detailed review. It may also help to see potential environmental concerns from the perspective of the affected community. Additionally, responses can provide local decision-makers with information with which to assess the best policy options for addressing neighborhood-scale air pollution concerns.

The questions below can be used to identify whether existing tools and procedures are adequate to address land use-related air pollution issues. This process can also be used to pinpoint project characteristics that may have the greatest impact on community-level emissions, exposure, and risk. Such elements can include: the compliance record of existing sources including those owned or operated by the project proponent; the concentration of emissions from polluting sources within the approximate area of sensitive sites; transportation circulation in proximity to the proposed project; compatibility with the General Plan and General Plan elements; etc.

The local air district can provide useful assistance in the collection and evaluation of air quality-related information for some of the questions and should be consulted early in the process.

Questions Related to Cumulative Impact Assessment

Technical Questions	Cross-Reference to Relevant Handbook Sections
1. Is the community home to industrial facilities?	See Appendix A for typical land use classifications and associated project categories that could emit air pollutants.
2. Do one or more major freeways or high-traffic volume surface streets cut through the community?	See transportation circulation element of your general plan. See also Appendix B for useful information that land use agencies should have on hand or have accessible when reviewing proposed projects for potential air pollution impacts. See Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).
3. Is the area classified for mixed-use zoning?	See your general plan and zoning ordinances.
4. Is there an available list of air pollution sources in the community?	Contact your local air district.
5. Has a walk-through of the community been conducted to gather the following information:	See Appendix B for a listing of useful information that land use agencies

Technical Questions	Cross-Reference to Relevant Handbook Sections
▲ Corroborate available information on land use activities in the area (e.g., businesses, housing developments, sensitive individuals, etc.)? ▲ Determine the proximity of existing and anticipated future projects to residential areas or sensitive individuals? ▲ Determine the concentration of emission sources (including anticipated future projects) to residential areas or sensitive individuals?	should have on hand or have accessible when reviewing proposed projects for potential air pollution impacts. Also contact your local air district.
6. Has the local air district been contacted to obtain information on sources in the community?	See Section 7 for a discussion of public participation, information and outreach tools.
7. What categories of commercial establishments are currently located in the area and does the local air district have these sources on file as being regulated or permitted?	See Appendix A for typical land use classifications and associated project categories that could emit air pollutants. Also contact your local air district.
8. What categories of indirect sources such as distribution centers or warehouses are currently located in the area?	See Appendix A for typical land use classifications and associated project categories that emit air pollutants.
9. What air quality monitoring data are available?	Contact your local air district.
10. Have any risk assessments been performed on emission sources in the area?	Contact your local air district.
11. Does the land use agency have the capability of applying a GIS spatial mapping tool that can overlay zoning, sub-development information, and other neighborhood characteristics, with air pollution and transportation data?	See Appendix B for a listing of useful information that land use agencies should have on hand or have accessible when reviewing proposed projects for potential air pollution impacts. Also contact your local air district for tools that can be used to supplement available land use agency tools.
12. Based on available information, is it possible to determine if the affected community or neighborhood experiences elevated health risk due to a concentration of air pollution sources in close proximity, and if not, can the necessary information be obtained?	Contact your local air district. Also see Section 1 for recommendations on situations to avoid when siting projects where sensitive individuals would be located (sensitive sites).
13. Does the community have a history of chronic complaints about air quality?	See Section 7 for a discussion of public participation, information and outreach tools. Also contact your local air district.
14. Is the affected community included in the public participation process for the agency's decision?	See Section 7 for a discussion of public participation, information and outreach tools.
15. Have community leaders or groups been contacted about any pre-existing or chronic community air quality concerns?	See Section 7 for a discussion of public participation, information and outreach tools. Also contact your local air district.

- **Mitigation Approaches**

In addition to considering the suitability of the project location, opportunities for mitigation of air pollution impacts should be considered. Sometimes, a land use agency may find that selection of a different project location to avoid a health risk is not feasible. When that happens, land use agencies should consider design improvements or other strategies that would reduce the risk. Such strategies could include performance or design standards, consultation with local air districts and other agencies on appropriate actions that these agencies should, or plan to, undertake, and consultation and outreach in the affected community. Potential mitigation measures should be feasible, cost-effective solutions within the available resources and authority of implementing agencies to enforce.[12]

- **Conditional Use Permits and Performance Standards**

Some types of land uses are only allowed upon approval of a conditional use permit (also called a CUP or special use permit). A conditional use permit does not re-zone the land but specifies conditions under which a particular land use will be permitted. Such land uses could be those with potentially significant environmental impacts. Local zoning ordinances specify the uses for which a conditional use permit is required, the zones they may be allowed in, and public hearing procedures. The conditional use permit imposes special requirements to ensure that the use will not be detrimental to its surroundings.

In the context of land use planning, performance standards are requirements imposed on projects or project categories through conditional use permits to ensure compliance with general plan policies and local ordinances. These standards could apply to such project categories as distribution centers, very large gas dispensing facilities, autobody shops, dry cleaners, and metal platers. Land use agencies may wish to consider adding land use-based performance standards to zoning ordinances in existing mixed-use communities for certain air pollution project categories. Such standards would provide certainty and equitable treatment to all projects of a similar nature, and reserve the more resource intensive conditional or special use permits to projects that require a more detailed analysis. In developing project design or performance standards, land use agencies should consult with the local air district. Early and regular consultation can avoid duplication or inconsistency with local air district control requirements when considering the site-specific design and operation of a project.

[12] A land use agency has the authority to condition or deny a project based upon information collected and evaluated through the land use decision-making process. However, any denial would need to be based upon identifiable, generally applicable, articulated standards set forth in the local government's General Plan and zoning codes. One way of averting this is to conduct early and regular outreach to the community and the local air district so that community and environmental concerns can be addressed and accommodated into the project proposal.

Examples of land use-based air quality-specific performance standards include the following:

- Placing a process vent away from the direction of the local playground that is nearby or increasing the stack height so that emissions are dispersed to reduce the emissions impact on surrounding homes or schools.
- Setbacks between the project fence line and the population center.
- Limiting the hours of operation of a facility to avoid excess emissions exposure or foul odors to nearby individuals.
- An ordinance that requires fleet operators to use cleaner vehicles before project approval (if a new business), or when expanding the fleet (if an existing business); and
- Providing alternate routes for truck operations that discourage detours into residential neighborhoods.

Outreach to Other Agencies

When questions arise regarding the air quality impacts of projects, including potential cumulative impacts, land use agencies should consult the local air district. Land use agencies should also consider the following suggestions to avoid creating new incompatible land uses:

- Consult with the local air district to help determine if emissions from a particular project will adversely impact sensitive individuals in the area, if existing or future effective regulations or permit requirements will affect the proposed project or other sources in the vicinity of the proposed project, or if additional inspections should be required.
- Check with ARB for new information and modeling tools that can help evaluate projects seeking to site within your jurisdiction.
- Become familiar with ARB's Land Use-Air Quality Linkage Report to determine whether approaches and evaluation tools contained in the Report can be used to reduce transportation-related impacts on communities.
- Contact and collaborate with other state agencies that play a role in the land use decision-making process, e.g., the State Department of Education, the California Energy Commission, and Caltrans. These agencies have information on mitigation measures and mapping tools that could be useful in addressing local problems.

- **Information Clearinghouse**

  - Land use agencies can refer to the ARB statewide electronic information clearinghouse for information on what measures other jurisdictions are using to address comparable issues or sources.[13]

[13] This information can be accessed from ARB's website by going to: http://www.arb.ca.gov/ch/clearinghouse.htm

The next section addresses available air quality assessment tools that land use agencies can use to evaluate the potential for localized or cumulative impacts in their communities.

5. Available Tools to Evaluate Cumulative Air Pollution Emissions and Risk

Until recently, California has traditionally approached air pollution control from the perspective of assessing whether the pollution was regional, category-specific, or from new or existing sources. This methodology has been generally effective in reducing statewide and regional air pollution impacts and risk levels. However, such an incremental, category-by-category, source-by-source approach may not always address community health impacts from multiple sources - including mobile, industrial, and commercial facilities.

As a result of air toxics and children's health concerns over the past several years, ARB and local air districts have begun to develop new tools to evaluate and inform the public about cumulative air pollution impacts at the community level. One aspect of ARB's programs now underway is to consolidate and make accessible air toxics emissions and monitoring data by region, using modeling tools and other analytical techniques to take a preliminary look at emissions, exposure, and health risk in communities.

ARB has developed multiple tools to assist local air districts perform assessments of cumulative emissions, exposure, and risk on a neighborhood scale. These tools include:

- Regional risk maps that show trends in potential cancer risk from toxic air pollutants in southern and central California between 1990 and 2010. These maps are based on the U.S. EPA's ASPEN model. These maps provide an estimate of background levels of toxic air pollutant risk but are not detailed enough to assess individual neighborhoods or facilities.[14]

- The Community Health Air Pollution Information System (CHAPIS) is a user-friendly, Internet-based system for displaying information on emissions from sources of air pollution in an easy to use mapping format. CHAPIS contains information on air pollution emissions from selected large facilities and small businesses that emit criteria and toxic air pollutants. It also contains information on air pollution emissions from motor vehicles. When released in 2004, CHAPIS did not contain information on every source of air pollution or every air pollutant. However, ARB continues to work with local air districts to include all of the largest air pollution sources and those with the highest documented air pollution risk. Additional facilities will be added to CHAPIS as more data become available.[15]

[14] For further information on these maps, please visit ARB's website at: http://www.arb.ca.gov/toxics/cti/hlthrisk/hlthrisk.htm

[15] For further information on CHAPIS, please click on: http://www.arb.ca.gov/ch/chapis1/chapis1.htm

- The Hot Spots Analysis and Reporting Program (HARP) is a software database package that evaluates emissions from one or more facilities to determine the overall health risk posed by the facility(-ies) on the surrounding community. Proper use of HARP ensures that the risk assessment meets the latest risk assessment guidelines published by the State Office of Environmental Health Hazard Assessment (OEHHA). HARP is designed with air quality professionals in mind and is available from the ARB.

- The Urban Emissions Model (URBEMIS) is a computer program that can be used to estimate emissions associated with land development projects in California such as residential neighborhoods, shopping centers, office buildings, and construction projects. URBEMIS uses emission factors available from the ARB to estimate vehicle emissions associated with new land uses.

Local air districts, and others can use these tools to assess a new project, or plan revision. For example, these tools can be used to:

- Identify if there are multiple sources of air pollution in the community;
- Identify the major sources of air pollution in the area under consideration;
- Identify the background potential cancer risk from toxic air pollution in the area under consideration;
- Estimate the risk from a new facility and how it adds to the overall risk from other nearby facilities; and
- Provide information to decision-makers and key stakeholders on whether there may be significant issues related to cumulative emissions, exposure, and health risk due to a permitting or land use decision.

If an air agency wishes to perform a cumulative air pollution impact analysis using any of these tools, it should consult with the ARB and/or the local air district to obtain information or assistance on the data inputs and procedures necessary to operate the program. In addition, land use agencies could consult with local air districts to determine the availability of land use and air pollution data for entry into an electronic Geographical Information System (GIS) format. GIS is an easier mapping tool than the more sophisticated models described in Appendix C. GIS mapping makes it possible to superimpose land use with air pollution information so that the spatial relationship between air pollution sources, sensitive receptors, and air quality can be visually represented. Appendix C provides a general description of the impact assessment process and micro-scale, or community level modeling tools that are available to evaluate potential cumulative air pollution impacts. Modeling protocols will be accessible on ARB's website as they become available. The ARB will also provide land use agencies and local air districts with statewide regional modeling results and information regarding micro-scale modeling.

6. ARB Programs to Reduce Air Pollution in Communities

ARB's regulatory programs reduce air pollutant emissions through statewide strategies that improve public health in all California communities. ARB's overall program addresses motor vehicles, consumer products, air toxics, air-quality planning, research, education, enforcement, and air monitoring. Community health and environmental justice concerns are a consideration in all these programs. ARB's programs are statewide but recognize that extra efforts may be needed in some communities due to historical mixed land-use patterns, limited participation in public processes in the past, and a greater concentration of air pollution sources in some communities.

ARB's strategies are intended to result in better air quality and reduced health risk to residents throughout California. The ARB's priority is to prevent or reduce the public's exposure to air pollution, including from toxic air contaminants that pose the greatest risk, particularly to infants and children who are more vulnerable to air pollution.

In October 2003, ARB updated its statewide control strategy to reduce emissions from source categories within its regulatory authority. A primary focus of the strategy is to achieve federal and state air quality standards for ozone and particulate matter throughout California, and to reduce health risk from diesel PM. Along with local air districts, ARB will continue to address air toxics emissions from regulated sources (see Table 6-1 for a summary of ARB activities). As indicated earlier, ARB will also provide analytical tools and information to land use agencies and local air districts to help assess and mitigate cumulative air pollution impacts.

The ARB will continue to consider the adoption of or revisions to needed air toxics control measures as part of the state's ongoing air toxics assessment program.[16]

As part of its effort to reduce particulate matter and air toxics emissions from diesel PM, the ARB has developed a Diesel Risk Reduction Program[17] that lays out several strategies in a three-pronged approach to reduce emissions and their associated risk:

- Stringent emission standards for all new diesel-fueled engines;
- Aggressive reductions from in-use engines; and
- Low sulfur fuel that will reduce PM and still provide the quality of diesel fuel needed to control diesel PM.

[16] For continuing information and updates on state measures, the reader can refer to ARB's website at http://www.arb.ca.gov/toxics/toxics.htm.
[17] For a comprehensive description of the program, please refer to ARB's website at http://www.arbB.ca.gov/diesel/dieselrrp.htm.

Table 6-1
ARB ACTIONS TO ADDRESS
CUMULATIVE AIR POLLUTION IMPACTS IN COMMUNITIES

Information Collection

- Improve emission inventories, air monitoring data, and analysis tools that can help to identify areas with high cumulative air pollution impacts
- Conduct studies in coordination with OEHHA on the potential for cancer and non-cancer health effects from air pollutants emitted by specific source categories
- Establish web-based clearinghouse for local land use strategies

Emission Reduction Approaches (2004-2006)*

- Through a public process, consider development and/or amendment of regulations and related guidance to reduce emissions, exposure, and health risk at a statewide and local level for the following sources:
  - Diesel PM sources such as stationary diesel engines, transport refrigeration units, portable diesel engines, on-road public fleets, off-road public fleets, heavy-duty diesel truck idling, harbor craft vessels, waste haulers
  - Other air toxics sources, such as formaldehyde in composite wood products, hexavalent chromium for chrome plating and chromic acid anodizing, thermal spraying, and perchloroethylene dry cleaning
- Develop technical information for the following:*
  - Distribution centers
  - Modeling tools such as HARP and CHAPIS
- Adopt rules and pollution prevention initiatives within legal authority to reduce emissions from mobile sources and fuels, and consumer products
- Develop and maintain Air Quality Handbook as a tool for use by land use agencies and local air districts to address cumulative air pollution impacts

Other Approaches

- Establish guidelines for use of statewide incentive funding for high priority mobile source emission reduction projects

*Because ARB will continue to review the need to adopt or revise statewide measures, the information contained in this chart will be updated on an ongoing basis.

A number of ARB's diesel risk reduction strategies have been adopted. These include measures to reduce emissions from refuse haulers, urban buses, transport refrigeration units, stationary and portable diesel engines, and idling trucks and school buses. These sources are all important from a community perspective.[18]

[18] The reader can refer to ARB's website for information on its mobile source-related programs at: http://www.arb.ca.gov/msprog/msprog.htm, as well as regulations adopted and under consideration as part of the Diesel Risk Reduction Program at: http://www.arb.ca.gov/diesel/dieselrrp.htm

The ARB will continue to evaluate the health effects of air pollutants while implementing programs with local air districts to reduce air pollution in all California communities.

Local air districts also have ambitious programs to reduce criteria pollutants and air toxics from regulated sources in their region. Many of these programs also benefit air quality in local communities as well as in the broader region. For more information on what is being done in your area to reduce cumulative air pollution impacts through air pollution control programs, you should contact your local air district.[19]

[19] Local air district contacts can be found on the inside cover to this Handbook.

7. Ways to Enhance Meaningful Public Participation

Community involvement is an important part of the land use process. The public is entitled to the best possible information about the air they breathe and what is being done to prevent or reduce unhealthful air pollution in their communities. In particular, information on how land use decisions can affect air pollution and public health should be made accessible to all communities, including low-income and minority communities.

Effective community participation consistently relies on a two-way flow of information – from public agencies to community members about opportunities, constraints, and impacts, and from community members back to public officials about needs, priorities, and preferences. The outreach process needed to build understanding and local neighborhood involvement requires data, methodologies, and formats tailored to the needs of the specific community. More importantly, it requires the strong collaboration of local government agencies that review and approve projects and land uses to improve the physical and environmental surroundings of the local community.

Many land use agencies, especially those in major metropolitan areas, are familiar with, and have a long-established public review process. Nevertheless, public outreach can often be improved. Active public involvement requires engaging the public in ways that do not require their previous interest in or knowledge of the land use or air pollution control requirements, and a commitment to taking action where appropriate to address the concerns that are raised.

■ Direct Community Outreach

In conjunction with local air districts, land use agencies should consider designing an outreach program for community groups, other stakeholders, and local government agency staffs that address the problem of cumulative air pollution impacts, and the public and government role in reducing them. Such a program could consider analytical tools that assist in the preparation and presentation of information in a way that supports sensible decision-making and public involvement. Table 7-1 contains some general outreach approaches that might be considered.

Table 7-1
Public Participation Approaches

- Staff and community leadership awareness training on environmental justice programs and community-based issues
- Surveys to identify the website information needs of interested community-based organizations and other stakeholders
- Information materials on local land use and air district authorities
- Community-based councils to facilitate and invite resident participation in the planning process
- Neighborhood CEQA scoping sessions that allows for community input prior to technical analysis
- Public information materials on siting issues are under review including materials written for the affected community, and in different media that widens accessibility
- Public meetings
- Identify other opportunities to include community-based organizations in the process

To improve outreach, local land use agencies should consider the following activities:

- Hold meetings in communities affected by agency programs, policies, and projects at times and in places that encourage public participation, such as evenings and weekends at centrally located community meeting rooms, libraries, and schools.
- Assess the need for and provide translation services at public meetings.
- Hold community meetings to update residents on the results of any special air monitoring programs conducted in their neighborhood.
- Hold community meetings to discuss and evaluate the various options to address cumulative impacts in their community.
- In coordination with local air districts, make staff available to attend meetings of community organizations and neighborhood groups to listen to and, where appropriate, act upon community concerns.
- Establish a specific contact person for environmental justice issues.
- Increase student and community awareness of local government land use activities and policies through outreach opportunities.
- Make air quality and land use information available to communities in an easily understood and useful format, including fact sheets, mailings, brochures, public service announcements, and web pages, in English and other languages.
- On the local government web-site, dedicate a page or section to what the land use program is doing regarding environmental justice and cumulative environmental impacts, and, as applicable, activities conducted with local air districts such as neighborhood air monitoring studies, pollution prevention, air pollution sources in neighborhoods, and risk reduction.

- Allow, encourage, and promote community access to land use activities, including public meetings, General Plan or Community Plan updates, zoning changes, special studies, CEQA reviews, variances, etc.
- Distribute information in multiple languages, as needed, on how to contact the land use agency or local air district to obtain information and assistance regarding environmental justice programs, including how to participate in public processes.
- Create and distribute a simple, easy-to-read, and understandable public participation handbook, which may be based on the "Public Participation Guidebook" developed by ARB.

- **Other Opportunities for Meaningful Public Outreach**

  - Community-Based Planning Committees

  Neighborhood-based or community planning advisory councils could be established to invite and facilitate direct resident participation into the planning process. With the right training and technical assistance, such councils can provide valuable input and a forum for the review of proposed amendments to plans, zone changes, land use permits, and suggestions as to how best to prevent or reduce cumulative air pollution impacts in their community.

  - Regional Partnerships

  Consider creating regional coalitions of key growth-related organizations from both the private and public sectors, with corporations, communities, other jurisdictions, and government agencies. Such partnerships could facilitate agreement on common goals and win-win solutions tailored specifically for the region. With this kind of dialogue, shared vision, and collaboration, barriers can be overcome and locally acceptable sustainable solutions implemented. Over the long term, such strategies will help to bring about clean air in communities as well as regionally.

LAND USE CLASSIFICATIONS AND ASSOCIATED FACILITY CATEGORIES THAT COULD EMIT AIR POLLUTANTS

(1) Land Use Classifications – by Activity[i]	(2) Facility or Project Examples	(3) Key Pollutants[ii,iii]	(4) Air Pollution Permits[iv]
COMMERCIAL/ LIGHT INDUSTRIAL: SHOPPING, BUSINESS, AND COMMERCIAL			
▲ Primarily retail shops and stores, office, commercial activities, and light industrial or small business	Dry cleaners; drive-through restaurants; gas dispensing facilities; auto body shops; metal plating shops; photographic processing shops; textiles; apparel and furniture upholstery; leather and leather products; appliance repair shops; mechanical assembly cleaning; printing shops	VOCs, air toxics, including diesel PM, NOx, CO, SOx	Limited; Rules for applicable equipment
▲ Goods storage or handling activities, characterized by loading and unloading goods at warehouses, large storage structures, movement of goods, shipping, and trucking.	Warehousing; freight-forwarding centers; drop-off and loading areas; distribution centers	VOCs, air toxics, including diesel PM, NOx, CO, SOx	No[v]
LIGHT INDUSTRIAL: RESEARCH AND DEVELOPMENT			
▲ Medical waste at research hospitals and labs	Incineration; surgical and medical instrument manufacturers, pharmaceutical manufacturing, biotech research facilities	Air toxics, NOx, CO, SOx	Yes
▲ Electronics, electrical apparatus, components, and accessories	Computer manufacturer; integrated circuit board manufacturer; semi-conductor production	Air toxics, VOCs	Yes
▲ College or university lab or research center	Medical waste incinerators; lab chemicals handling, storage and disposal	Air toxics, NOx, CO, SOx, PM10	Yes
▲ Research and development labs	Satellite manufacturer; fiber-optics manufacturer; defense contractors; space research and technology; new vehicle and fuel testing labs	Air toxics, VOCs	Yes
▲ Commercial testing labs	Consumer products; chemical handling, storage and disposal	Air toxics, VOCs	Yes

(1) Land Use Classifications – by Activity[i]	(2) Facility or Project Examples	(3) Key Pollutants[ii,iii]	(4) Air Pollution Permits[iv]
INDUSTRIAL: NON-ENERGY-RELATED			
▲ Assembly plants, manufacturing facilities, industrial machinery	Adhesives; chemical; textiles; apparel and furniture upholstery; clay, glass, and stone products production; asphalt materials; cement manufacturers, wood products; paperboard containers and boxes; metal plating; metal and canned food product fabrication; auto manufacturing; food processing; printing and publishing; drug, vitamins, and pharmaceuticals; dyes; paints; pesticides; photographic chemicals; polish and wax; consumer products; metal and mineral smelters and foundries; fiberboard; floor tile and cover; wood and metal furniture and fixtures; leather and leather products; general industrial and metalworking machinery; musical instruments; office supplies; rubber products and plastics production; saw mills; solvent recycling; shingle and siding; surface coatings	VOCs, air toxics, including diesel PM, NOx, PM, CO, SOx	Yes
INDUSTRIAL: ENERGY AND UTILITIES			
▲ Water and sewer operations	Pumping stations; air vents; treatment	VOCs, air toxics, NOx, CO, SOx, PM10	Yes
▲ Power generation and distribution	Power plant boilers and heaters; portable diesel engines; gas turbine engines	NOx, diesel PM, NOx, CO, SOx, PM10, VOCs	Yes
▲ Refinery operations	Refinery boilers and heaters; coke cracking units; valves and flanges; flares	VOCs, air toxics, including diesel PM, NOx, CO, SOx, PM10	Yes
▲ Oil and gas extraction	Oil recovery systems; uncovered wells	NOx, diesel PM, VOCs, CO, SOx, PM10	Yes
▲ Gasoline storage, transmission, and marketing	Above and below ground storage tanks; floating roof tanks; tank farms; pipelines	VOCs, air toxics, including diesel PM, NOx, CO, SOx, PM10	Yes
▲ Solid and hazardous waste treatment, storage, and disposal activities.	Landfills; methane digester systems; process recycling facility for concrete and asphalt materials	VOCs, air toxics, NOx, CO, SOx, PM10	Yes
CONSTRUCTION (NON-TRANSPORTATION)			
	Building construction; demolition sites	PM (re-entrained road dust), asbestos, diesel PM, NOx, CO, SOx, PM10, VOCs	Limited; state and federal off-road equipment standards

(1) Land Use Classifications – by Activity[i]	(2) Facility or Project Examples	(3) Key Pollutants[ii,iii]	(4) Air Pollution Permits[iv]
DEFENSE			
	Ordnance and explosives demolition; range and testing activities; chemical production; degreasing; surface coatings; vehicle refueling; vehicle and engine operations and maintenance	VOCs, air toxics, including diesel PM, NOx, CO, SOx, PM10	Limited; prescribed burning; equipment and solvent rules
TRANSPORTATION			
▲ Vehicular movement	Residential area circulation systems; parking and idling at parking structures; drive-through establishments; car washes; special events; schools; shopping malls, etc.	VOCs, NOx, PM (re-entrained road dust) air toxics e.g., benzene, diesel PM, formaldehyde, acetaldehyde, 1,3 butadiene, CO, SOx, PM10	No
▲ Road construction and surfacing	Street paving and repair; new highway construction and expansion	VOCs, air toxics, including diesel PM, NOx, CO, SOx, PM10	No
▲ Trains	Railroads; switch yards; maintenance yards	VOCs, NOx, CO, SOx, PM10, air toxics, including diesel PM	Limited; Applicable state and federal MV standards, and possible equipment rules
▲ Marine and port activities	Recreational sailing; commercial marine operations; hotelling operations; loading and un-loading; servicing; shipping operations; port or marina expansion; truck idling		
▲ Aircraft	Takeoff, landing, and taxiing; aircraft maintenance; ground support activities		
▲ Mass transit and school buses	Bus repair and maintenance		
NATURAL RESOURCES			
▲ Farming operations	Agricultural burning; diesel operated engines and heaters; small food processors; pesticide application; agricultural off-road equipment	Diesel PM, VOCs, NOx, PM10, CO, SOx, pesticides	Limited[vi]; Agricultural burning requirements, applicable state and federal mobile source standards; pesticide rules
▲ Livestock and dairy operations	Dairies and feed lots	Ammonia, VOCs, PM10	Yes[vii]
▲ Logging	Off-road equipment e.g., diesel fueled chippers, brush hackers, etc.	Diesel PM, NOx, CO, SOx, PM10, VOCs	Limited; Applicable state/federal mobile source standards
▲ Mining operations	Quarrying or stone cutting; mining; drilling or dredging	PM10, CO, SOx, VOCs, NOx, and asbestos in some geographical areas	Applicable equipment rules and dust controls

(1) Land Use Classifications – by Activity[i]	(2) Facility or Project Examples	(3) Key Pollutants[ii,iii]	(4) Air Pollution Permits[iv]
RESIDENTIAL			
Housing	Housing developments; retirement developments; affordable housing	Fireplace emissions (PM10, NOx, VOCs, CO, air toxics); Water heater combustion (NOx, VOCs, CO)	No[vii]
ACADEMIC AND INSTITUTIONAL			
▲ Schools, including school-related recreational activities	Schools; school yards; vocational training labs/classrooms such as auto repair/painting and aviation mechanics	Air toxics	Yes/No[viii]
▲ Medical waste	Incineration	Air toxics, NOx, CO, PM10	Yes
▲ Clinics, hospitals, convalescent homes		Air toxics	Yes

[i] These classifications were adapted from the American Planning Association's "Land Based Classification Standards." The Standards provide a consistent model for classifying land uses based on their characteristics. The model classifies land uses by refining traditional categories into multiple dimensions, such as activities, functions, building types, site development character, and ownership constraints. Each dimension has its own set of categories and subcategories. These multiple dimensions allow users to have precise control over land-use classifications. For more information, the reader should refer to the Association's website at http://www.planning.org/LBCS/GeneralInfo/.

[ii] This column includes key criteria pollutants and air toxic contaminants that are most typically associated with the identified source categories.

Additional information on specific air toxics that are attributed to facility categories can be found in ARB's Emission Inventory Criteria and Guidelines Report for the Air Toxics Hot Spots Program (May 15, 1997). This information can be viewed at ARB's web site at http://www.arb.ca.gov/ab2588/final96/guide96.pdf.

Criteria air pollutants are those air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Criteria pollutants include ozone (formed by the reaction of volatile organic compounds and nitrogen oxides in the presence of sunlight), particulate matter, nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead.

Volatile organic compounds (VOCs) combine with nitrogen oxides to form ozone, as well as particulate matter. VOC emissions result primarily from incomplete fuel combustion and the evaporation of chemical solvents and fuels. On-road mobile sources are the largest contributors to statewide VOC emissions. Stationary sources of VOC emissions include processes that use solvents (such as dry-cleaning, degreasing, and coating operations) and petroleum-related processes (such as petroleum refining, gasoline marketing and dispensing, and oil and gas extraction). Areawide VOC sources include consumer products, pesticides, aerosols and paints, asphalt paving and roofing, and other evaporative emissions.

Nitrogen oxides (NOx) are a group of gaseous compounds of nitrogen and oxygen, many of which contribute to the formation of ozone and particulate matter. Most NOx emissions are produced by the combustion of fuels. Mobile sources make up about 80 percent of the total statewide NOx emissions. Mobile sources include on-road vehicles and trucks, aircraft, trains, ships, recreational boats, industrial and construction equipment, farm

equipment, off-road recreational vehicles, and other equipment. Stationary sources of NOx include both internal and external combustion processes in industries such as manufacturing, food processing, electric utilities, and petroleum refining. Areawide source, which include residential fuel combustion, waste burning, and fires, contribute only a small portion of the total statewide NOx emissions, but depending on the community, may contribute to a cumulative air pollution impact.

Particulate matter (PM) refers to particles small enough to be breathed into the lungs (under 10 microns in size). It is not a single substance, but a mixture of a number of highly diverse types of particles and liquid droplets. It can be formed directly, primarily as dust from vehicle travel on paved and unpaved roads, agricultural operations, construction and demolition.

Carbon monoxide (CO) is a colorless and odorless gas that is directly emitted as a by-product of combustion. The highest concentrations are generally associated with cold stagnant weather conditions that occur during winter. CO problems tend to be localized.

An Air Toxic Contaminant (air toxic) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serous illness, or which may pose a present or potential hazard to human health. Similar to criteria pollutants, air toxics are emitted from stationary, areawide, and mobile sources. They contribute to elevated regional and localized risks near industrial and commercial facilities and busy roadways. The ten compounds that pose the greatest statewide risk are: acetaldehyde; benzene; 1,3-butadiene; carbon tetrachloride; diesel particulate matter (diesel PM); formaldehyde; hexavalent chromium; methylene chloride; para-dichlorobenzene; and perchloroethylene. The risk from diesel PM is by far the largest, representing about 70 percent of the known statewide cancer risk from outdoor air toxics. The exhaust from diesel-fueled engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. Diesel PM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute about 26 percent of statewide diesel PM emissions, with an additional 72 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and other equipment. Stationary engines in shipyards, warehouses, heavy equipment repair yards, and oil and gas production operations contribute about two percent of statewide emissions. However, when this number is disaggregated to a sub-regional scale such as neighborhoods, the risk factor can be far greater.

[iii] The level of pollution emitted is a major determinant of the significance of the impact.

[iv] Indicates whether facility activities listed in column 4 are generally subject to local air district permits to operate. This does not include regulated products such as solvents and degreasers that may be used by sources that may not require an operating permit per se, e.g., a gas station or dry cleaner.

[v] Generally speaking, warehousing or distribution centers are not subject to local air district permits. However, depending on the district, motor vehicle fleet rules may apply to trucks or off-road vehicles operated and maintained by the facility operator. Additionally, emergency generators or internal combustion engines operated on the site may require an operating permit.

[vi] Authorized by recent legislation SB700.

[vii] Local air districts do not require permits for woodburning fireplaces inside private homes. However, some local air districts and land use agencies do have rules or ordinances that require new housing developments or home re-sales to install U.S. EPA –certified stoves. Some local air districts also ban residential woodburning during weather inversions that concentrate smoke in residential areas. Likewise, home water heaters are not subject to permits; however, new heaters could be subject to emission limits that are imposed by federal or local agency regulations.

[viii] Technical training schools that conduct activities normally permitted by a local air district could be subject to an air permit.

LAND USE-BASED REFERENCE TOOLS TO EVALUATE NEW PROJECTS FOR POTENTIAL AIR POLLUTION IMPACTS

Land use agencies generally have a variety of tools and approaches at hand, or accessible from local air districts that can be useful in performing an analysis of potential air pollution impacts associated with new projects. These tools and approaches include:

- Base map of the city or county planning area and terrain elevations.
- General Plan designations of land use (existing and proposed).
- Zoning maps.
- Land use maps that identify existing land uses, including the location of facilities that are permitted or otherwise regulated by the local air district. Land use agencies should consult with their local air district for information on regulated facilities.
- Demographic data, e.g., population location and density, distribution of population by income, distribution of population by ethnicity, and distribution of population by age. The use of population data is a normal part of the planning process. However, from an air quality perspective, socioeconomic data is useful to identify potential community health and environmental justice issues.
- Emissions, monitoring, and risk-based maps created by the ARB or local air districts that show air pollution-related health risk by community across the state.
- Location of public facilities that enhance community quality of life, including parks, community centers, and open space.
- Location of industrial and commercial facilities and other land uses that use hazardous materials, or emit air pollutants. These include chemical storage facilities, hazardous waste disposal sites, dry cleaners, large gas dispensing facilities, auto body shops, and metal plating and finishing shops.
- Location of sources or facility types that result in diesel on-road and off-road emissions, e.g., stationary diesel power generators, forklifts, cranes, construction equipment, on-road vehicle idling, and operation of transportation refrigeration units. Distribution centers, marine terminals and ports, rail yards, large industrial facilities, and facilities that handle bulk goods are all examples of complex facilities where these types of emission sources are frequently concentrated.[1] Very large facilities, such as ports, marine terminals, and airports, could be analyzed regardless of proximity to a receptor if they are within the modeling area.
- Location and zoning designations for existing and proposed schools, buildings, or outdoor areas where sensitive individuals may live or play.
- Location and density of existing and proposed residential development.
- Zoning requirements, property setbacks, traffic flow requirements, and idling restrictions for trucks, trains, yard hostlers[2], construction equipment, or school buses.
- Traffic counts (including diesel truck traffic counts), within a community to validate or augment existing regional motor vehicle trip and speed data.

[1] The ARB is currently evaluating the types of facilities that may act as complex point sources and developing methods to identify them.

[2] Yard hostler means a tractor less than 300 horsepower that is used to transfer semi-truck or tractor-trailer containers in and around storage, transfer, or distribution yards or areas and is often equipped with a hydraulic lifting fifth wheel for connection to trailer containers.

ARB AND LOCAL AIR DISTRICT INFORMATION AND TOOLS CONCERNING CUMULATIVE AIR POLLUTION IMPACTS

It is the ARB's policy to support research and data collection activities toward the goal of reducing cumulative air pollution impacts. These efforts include updating and improving the air toxics emissions inventory, performing special air monitoring studies in specific communities, and conducting a more complete assessment of non-cancer health effects associated with air toxics and criteria pollutants.[1] This information is important because it helps us better understand links between air pollution and the health of sensitive individuals -- children, the elderly, and those with pre-existing serious health problems affected by air quality.

ARB is working with CAPCOA and OEHHA to improve air pollutant data and evaluation tools to determine when and where cumulative air pollution impacts may be a problem. The following provides additional information on this effort.

How are emissions assessed?

Detailed information about the sources of air pollution in an area is collected and maintained by local air districts and the ARB in what is called an emission inventory. Emission inventories contain information about the nature of the business, the location, type and amount of air pollution emitted, the air pollution-producing processes, the type of air pollution control equipment, operating hours, and seasonal variations in activity. Local districts collect emission inventory data for most stationary source categories.

Local air districts collect air pollution emission information directly from facilities and businesses that are required to obtain an air pollution operating permit. Local air districts use this information to compile an emission inventory for areas within their jurisdiction. The ARB compiles a statewide emission inventory based on the information collected by the ARB and local air districts. Local air districts provide most of the stationary source emission data, and ARB provides mobile source emissions as well as some areawide emission sources such as consumer products and paints. ARB is also developing map-based tools that will display information on air pollution sources.

Criteria pollutant data have been collected since the early 1970's, and toxic pollutant inventories began to be developed in the mid-1980's.

[1] A criteria pollutant is any air pollutant for which EPA has established a National Ambient Air Quality Standard or for which California has established a State Ambient Air Quality Standard, including: carbon monoxide, lead, nitrogen oxides, ozone, particulates and sulfur oxides. Criteria pollutants are measured in each of California's air basins to determine whether the area meets or does not meet specific federal or state air quality standards. Air toxics or air toxic contaminants are listed pollutants recognized by California or EPA as posing a potential risk to health.

How is the toxic emission inventory developed?

Emissions data for toxic air pollutants is a high priority for communities because of concerns about potential health effects. Most of ARB's air toxics data is collected through the toxic "Hot Spots" program. Local air districts collect emissions data from industrial and commercial facilities. Facilities that exceed health-based thresholds are required to report their air toxics emissions as part of the toxic "Hot Spots" program and update their emissions data every four years. Facilities are required to report their air toxics emissions data if there is an increase that would trigger the reporting threshold of the hotspots program. Air toxics emissions from motor vehicles and consumer products are estimated by the ARB. These estimates are generally regional in nature, reflecting traffic and population.

The ARB also maintains chemical speciation profiles that can be used to estimate toxics emissions when no toxic emissions data is available.

What additional toxic emissions information is needed?

In order to assess cumulative air pollution impacts, updated information from individual facilities is needed. Even for sources where emissions data are available, additional information such as the location of emissions release points is often needed to better model cumulative impacts. In terms of motor vehicles, emissions data are currently based on traffic models that only contain major roads and freeways. Local traffic data are needed so that traffic emissions can be more accurately assigned to specific streets and roads. Local information is also needed for off-road emission sources, such as ships, trains, and construction equipment. In addition, hourly maximum emissions data are needed for assessing acute air pollution impacts.

What work is underway?

ARB is working with CAPCOA to improve toxic emissions data, developing a community health air pollution information system to improve access to emission information, conducting neighborhood assessment studies to better understand toxic emission sources, and conducting surveys of sources of toxic pollutants.

How is air pollution monitored?

While emissions data identify how much air pollution is going into the air, the state's air quality monitoring network measures air pollutant levels in outdoor air. The statewide air monitoring network is primarily designed to measure regional exposure to air pollutants, and consists of more than 250 air monitoring sites.

The air toxics monitoring network consists of approximately 20 permanent sites. These sites are supplemented by special monitoring studies conducted by ARB and local air districts. These sites measure approximately sixty toxic air pollutants. Diesel PM, which is the major driver of urban air toxic risk, is not monitored directly. Ten of the

60 toxic pollutants, not including diesel, account for most of the remaining potential cancer risk in California urban areas.

What additional monitoring has been done?

Recently, additional monitoring has been done to look at air quality at the community level. ARB's community monitoring was conducted in six communities located throughout the state. Most sites were in low-income, minority communities located near major sources of air pollution, such as refineries or freeways. The monitoring took place for a year or more in each community, and included measurements of both criteria and toxic pollutants.

What is being learned from community monitoring?

In some cases, the ARB or local air districts have performed air quality monitoring or modeling studies covering a particular region of the state. When available, these studies can give information about regional air pollution exposures.

The preliminary results of ARB's community monitoring are providing insights into air pollution at the community level. Urban background levels are a major contributor to the overall risk from air toxics in urban areas, and this urban background tends to mask the differences between communities. When localized elevated air pollutant levels were measured, they were usually associated with local ground-level sources of toxic pollutants. The most common source of this type was busy streets and freeways. The impact these ground-level sources had on local air quality decreased rapidly with distance from the source. Pollutant levels usually returned to urban background levels within a few hundred meters of the source.

These results indicate that tools to assess cumulative impacts must be able to account for both localized, near-source impacts, as well as regional background air pollution. The tools that ARB is developing for this purpose are air quality models.

How can air quality modeling be used?

While air monitoring can directly measure cumulative exposure to air pollution, it is limited because all locations cannot be monitored. To address this, air quality modeling provides the capability to estimate exposure when air monitoring is not feasible. Air quality modeling can be refined to assess local exposure, identify locations of potential hot spots, and identify the relative contribution of emission sources to exposure at specific locations. The ARB has used this type of information to develop regional cumulative risk maps that estimate the cumulative cancer air pollution risk for most of California. While these maps only show one air pollution-related health risk, it does provide a useful starting point.

What is needed for community modeling?

Air quality models have been developed to assess near-source impacts, but they have very exacting data requirements. These near-source models estimate the impact of local sources, but do not routinely include the contribution from regional air pollution background. To estimate cumulative air pollution exposure at a neighborhood scale, a modeling approach needs to combine features of both micro-scale and regional models.

In addition, improved methods are needed to assess near-source impacts under light and variable wind conditions, when high local concentrations are more likely to occur. A method for modeling long-term exposure to air pollutants near freeways and other high traffic areas is also needed.

What modeling work has ARB developed?

A key component of ARB's Community Health Program is the Neighborhood Assessment Program (NAP). As described later in this section, the NAP studies are being conducted to better understand pollution impacts at the community level. Through two such studies conducted in Barrio Logan (San Diego) and Wilmington (Los Angeles), ARB is refining community-level modeling methodologies. Regional air toxics modeling is also being performed to better understand regional air pollution background levels.

In a parallel effort, ARB is developing modeling protocols for estimating cumulative emissions, exposure, and risk from air pollution. The protocols will cover modeling approaches and uncertainties, procedures for running the models, the development of statewide risk maps, and methods for estimating health risks. The protocols are subject to an extensive peer review process prior to release.

How are air pollution impacts on community health assessed?

On a statewide basis, ARB's toxic air contaminant program identifies and reduces public exposure to air toxics. The focus of the program has been on reducing potential cancer risk, because monitoring results show potential urban cancer risk levels are too high. ARB has also looked for potential non-cancer risks based on health reference levels provided by OEHHA. On a regional basis, the pollutants measured in ARB's toxic monitoring network are generally below the OEHHA non-cancer reference exposure levels.

As part of its community health program, the ARB is looking at potential cancer and non-cancer risk. This could include chronic or acute health effects. If the assessment work shows elevated exposures on a localized basis, ARB will work with OEHHA to assess the health impacts.

What tools has ARB developed to assess cumulative air pollution impacts?

ARB has developed the following tools and reports to assist land use agencies and local air districts assess and reduce cumulative emissions, exposure, and risk on a neighborhood scale.

Statewide Risk Maps

ARB has produced regional risk maps that show the statewide trends for Southern and Central California in estimated potential cancer risk from air toxics between 1990 and 2010.[2] These maps will supplement U.S. EPA's ASPEN model and are available on the ARB's Internet site. These maps are best used to obtain an estimate of the regional background air pollution health risk and are not detailed enough to estimate the exact risk at a specific location.

ARB also has maps that focus in more detail on smaller areas that fall within the Southern and Central California regions for these same modeled years. The finest visual resolution available in the maps on this web site is two by two kilometers. These maps are not detailed enough to assess individual neighborhoods or facilities.

Community Health Air Pollution Information System (CHAPIS)

CHAPIS is an Internet-based procedure for displaying information on emissions from sources of air pollution in an easy to use mapping format. CHAPIS uses Geographical Information System (GIS) software to deliver interactive maps over the Internet. CHAPIS relies on emission estimates reported to the ARB's emission inventory database - California Emissions Inventory Development and Reporting System, or CEIDARS.

Through CHAPIS, air district staff can quickly and easily identify pollutant sources and emissions within a specified area. CHAPIS contains information on air pollution emissions from selected large facilities and small businesses that emit criteria and toxic air pollutants. It also contains information on air pollution emissions from motor vehicle and areawide emissions. CHAPIS does not contain information on every source of air pollution or every air pollutant. It is a major long-term objective of CHAPIS to include all of the largest air pollution sources and those with the highest documented air pollution risk. CHAPIS will be updated on a periodic basis and additional facilities will be added to CHAPIS as more data becomes available.

CHAPIS is being developed in stages to assure data quality. The initial release of CHAPIS will include facilities emitting 10 or more tons per year of nitrogen oxides, sulfur dioxide, carbon monoxide, PM10, or reactive organic gases; air toxics from refineries and power plants of 50 megawatts or more; and facilities that conducted health risk

[2]ARB maintains state trends and local potential cancer risk maps that show statewide trends in potential inhalable cancer risk from air toxics between 1990 and 2010. This information can be viewed at ARB's web site at http://www.arb.ca.gov/toxics/cti/hlthrisk/hlthrisk.htm)

assessments under the California Air Toxics "Hot Spots" Information and Assessment Program.[3]

CHAPIS can be used to identify the emission contributions from mobile, area, and point sources on that community.

"Hot Spots" Analysis and Reporting Program (HARP)

HARP[4] is a software package available from the ARB and is designed with air quality professionals in mind. It models emissions and release data from one or more facilities to estimate the potential health risk posed by the selected facilities on the neighboring community. HARP uses the latest risk assessment guidelines published by OEHHA.

With HARP, a user can perform the following tasks:

- Create and manage facility databases;
- Perform air dispersion modeling;
- Conduct health risk analyses;
- Output data reports; and
- Output results to GIS mapping software.

HARP can model downwind concentrations of air toxics based on the calculated emissions dispersion at a single facility. HARP also has the capability of assessing the risk from multiple facilities, and for multiple locations of concern near those facilities. While HARP has the capability to assess multiple source impacts, there had been limited application of the multiple facility assessment function in the field at the time of HARP's debut in 2003. HARP can also evaluate multi-pathway, non-inhalation health risk resulting from air pollution exposure, including skin and soil exposure, and ingestion of meat and vegetables contaminated with air toxics, and other toxics that have accumulated in a mother's breast milk.

Neighborhood Assessment Program (NAP)

The NAP[5] has been a key component of ARB's Community Health Program. It includes the development of tools that can be used to perform assessments of cumulative air pollution impacts on a neighborhood scale. The NAP studies have been done to better understand how air pollution affects individuals at the neighborhood level. Thus far, ARB has conducted neighborhood scale assessments in Barrio Logan and Wilmington.

As part of these studies, ARB is collecting data and developing a modeling protocol that can be used to conduct cumulative air pollution impact assessments. Initially these

[3] California Health & Safety Code section 44300, et seq.
[4] More detailed information can be found on ARB's website at: http://www.arb.ca.gov/toxics/harp/harp.htm
[5] For more information on the Program, please refer to: http://www.arb.ca.gov/ch/programs/nap/nap.htm

assessments will focus on cumulative inhalation cancer health risk and chronic non-cancer impacts. The major challenge is developing modeling methods that can combine both regional and localized air pollution impacts, and identifying the critical data necessary to support these models. The objective is to develop methods and tools from these studies that can ultimately be applied to other areas of the state. In addition, the ARB plans to use these methods to replace the ASPEN regional risk maps currently posted on the ARB Internet site.

Urban Emissions Model (URBEMIS)

URBEMIS[6] is a computer program that can be used to estimate emissions associated with land development projects in California such as residential neighborhoods, shopping centers, office buildings, and construction projects. URBEMIS uses emission factors available from the ARB to estimate vehicle emissions associated with new land uses. URBEMIS estimates sulfur dioxide emissions from motor vehicles in addition to reactive organic gases, nitrogen oxides, carbon monoxide, and PM10.

Land-Use Air Quality Linkage Report[7]

This report summarizes data currently available on the relationships between land use, transportation and air quality. It also highlights strategies that can help to reduce the use of the private automobile. It also briefly summarizes two ARB-funded research projects. The first project analyzes the travel patterns of residents living in five higher density, mixed use neighborhoods in California, and compares them to travel in more auto-oriented areas. The second study correlates the relationship between travel behavior and community characteristics, such as density, mixed land uses, transit service, and accessibility for pedestrians.

[6] For more information on this model, please refer to ARB's website at http://www.arb.ca.gov/html/soft.htm.

[7] To access this report, please refer to ARB's website or click on: http://www.arb.ca.gov/ch/programs/link97.pdf

LAND USE AND AIR QUALITY AGENCY ROLES IN THE LAND USE PROCESS

A wide variety of federal, state, and local government agencies are responsible for regulatory, planning, and siting decisions that can have an impact on air pollution. They include local land use agencies, regional councils of government, school districts, local air districts, ARB, the California Department of Transportation (Caltrans), and the Governor's Office of Planning and Research (OPR) to name a few. This Section will focus on the roles and responsibilities of local and state agencies. The role of school districts will be discussed in Appendix E.

Local Land Use Agencies

Under the State Constitution, land use agencies have the primary authority to plan and control land use.[1] Each of California's incorporated cities and counties are required to adopt a comprehensive, long-term General Plan.[2]

The General Plan's long-term goals are implemented through zoning ordinances. These are local laws adopted by counties and cities that describe for specific areas the kinds of development that will be allowed within their boundaries.

Land use agencies are also the lead for doing environmental assessments under CEQA for new projects that may pose a significant environmental impact, or for new or revised General Plans.

Local Agency Formation Commissions (LAFCOs)

Operating in each of California's 58 counties, LAFCOs are composed of local elected officials and public members who are responsible for coordinating changes in local governmental boundaries, conducting special studies that review ways to reorganize, simplify, and streamline governmental structures, and preparing a sphere of influence for each city and special district within each county. Each Commission's efforts are directed toward seeing that local government services are provided efficiently and economically while agricultural and open-space lands are protected. LAFCO decisions strive to balance the competing needs in California for efficient services, affordable housing, economic opportunity, and conservation of natural resources.

[1] The legal basis for planning and land use regulation is the "police power" of the city or county to protect the public's health, safety and welfare. The California Constitution gives cities and counties the power to make and enforce all local police, sanitary and other ordinances and regulations not in conflict with general laws. State law reference: California Constitution, Article XI §7.

[2] OPR General Plan Guidelines, 2003: http://www.opr.ca.gov/planning/PDFs/General_Plan_Guidelines_2003.pdf

Councils of Government (COG)

COGs are organizations composed of local counties and cities that serve as a focus for the development of sound regional planning, including plans for transportation, growth management, hazardous waste management, and air quality. They can also function as the metropolitan planning organization for coordinating the region's transportation programs. COGs also prepare regional housing need allocations for updates of General Plan housing elements.

Local Air Districts

Under state law, air pollution control districts or air quality management districts (local air districts) are the local government agencies responsible for improving air quality and are generally the first point of contact for resolving local air pollution issues or complaints. There are 35 local air districts in California[3] that have authority and primary responsibility for regional clean air planning. Local air districts regulate stationary sources of air pollutants within their jurisdiction including but not limited to industrial and commercial facilities, power plants, construction activities, outdoor burning, and other non-mobile sources of air pollution. Some local air districts also regulate public and private motor vehicle fleet operators such as public bus systems, private shuttle and taxi services, and commercial truck depots.

- **Regional Clean Air Plans**

Local air districts are responsible for the development and adoption of clean air plans that protect the public from the harmful effects of air pollution. These plans incorporate strategies that are necessary to attain ambient air quality standards. Also included in these regional air plans are ARB and local district measures to reduce statewide emissions from mobile sources, consumer products, and industrial sources.

- **Facility-Specific Considerations**

Permitting. In addition to the planning function, local air districts adopt and enforce regulations, issue permits, and evaluate the potential environmental impacts of projects.

Pollution is regulated through permits and technology-based rules that limit emissions from operating units within a facility or set standards that vehicle fleet operators must meet. Permits to construct and permits to operate contain very specific requirements and conditions that tell each regulated source what it must do to limit its air pollution in compliance with local air district rules, regulations, and state law. Prior to receiving a permit, new facilities must go through a New Source Review (NSR) process that establishes air pollution control requirements for the facility. Permit conditions are typically contained in the permit to operate and specify requirements that businesses must follow; these may include limits on the amount of pollution that can be emitted, the

[3] Contact information for local air districts in California is listed in the front of this Handbook.

type of pollution control equipment that must be installed and maintained, and various record-keeping requirements.

Local air districts also notify the public about new permit applications for major new facilities, or major modifications to existing facilities that seek to locate within 1,000 feet of a school.

Local air districts can also regulate other types of sources to reduce emissions. These include regulations to reduce emissions from the following sources:

- hazardous materials in products used by industry such as paints, solvents, and de-greasers;
- agricultural and residential burning;
- leaking gasoline nozzles at service stations;
- public fleet vehicles such as sanitation trucks and school buses; and
- fugitive or uncontrolled dust at construction sites.

However, while emissions from industrial and commercial sources are typically subject to the permit authority of the local air district, sensitive sites such as a day care center, convalescent home, or playground are not ordinarily subject to an air permit. Local air district permits address the air pollutant emissions of a project but not its location.

Under the state's air toxics program, local air districts regulate air toxic emissions by adopting ARB air toxic control measures, or more stringent district-specific requirements, and by requiring individual facilities to perform a health risk assessment if emissions at the source exceed district-specific health risk thresholds[4], [5] (See the section on ARB programs for a more detailed summary of this program).

One approach by which local air districts regulate air toxics emissions is through the "Hot Spots" program.[6] The risk assessments submitted by the facilities under this

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[4] Cal/EPA's Office of Environmental Health Hazard Assessment has published "A Guide to Health Risk Assessment" for lay people involved in environmental health issues, including policymakers, businesspeople, members of community groups, and others with an interest in the potential health effects of toxic chemicals. To access this information, please refer to http://www.oehha.ca.gov/pdf/HRSguide2001.pdf

[5] Section 44306 of the California Health & Safety Code defines a health risk assessment as a detailed comprehensive analysis that a polluting facility uses to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations, and to assess and quantify both the individual and population-wide health risks associated with those levels of exposure.

[6] AB-2588 (the Air Toxics "Hot Spots" Information and Assessment Act) requires local air districts to prioritize facilities by high, intermediate, and low priority categories to determine which must perform a health risk assessment. Each district is responsible for establishing the prioritization score threshold at which facilities are required to prepare a health risk assessment. In establishing priorities for each facility, local air districts must consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors that the district determines may indicate that the facility may pose a significant risk. All facilities within the highest category must prepare a health risk assessment. In addition, each district may require facilities in the intermediate and low priority categories to also submit a health risk assessment.

Table D-1
Local Sources of Air Pollution, Responsible Agencies, and Associated Regulatory Programs

Source	Examples	Primary Agency	Applicable Regulations
Large Stationary	Refineries, power plants, chemical facilities, certain manufacturing plants	Local air districts	Operating permit rules Air Toxics "Hot Spots" Law (AB 2588) Local district rules Air Toxic Control Measures (ATCMs)* New Source Review rules Title V permit rules
Small Stationary	Dry cleaners, auto body shops, welders, chrome plating facilities, service stations, certain manufacturing plants	Local air districts	Operating permit conditions, Air Toxics "Hot Spots" Law (AB 2588) Local district rules ATCMs* New Source Review rules
Mobile (non-fleet)	Cars, trucks, buses	ARB	Emission standards Cleaner-burning fuels (e.g., unleaded gasoline, low-sulfur diesel) Inspection and repair programs (e.g., Smog Check)
Mobile Equipment	Construction equipment	ARB, U.S. EPA	ARB rules U.S. EPA rules
Mobile (fleet)	Truck depots, school buses, taxi services	Local air districts, ARB	Local air district rules ARB urban bus fleet rule
Areawide	Paints and consumer products such as hair spray and spray paint	Local air district, ARB	ARB rules Local air district rules

*ARB adopts ATCMs, but local air districts have the responsibility to implement and enforce these measures or more stringent ones.

program are reviewed by OEHHA and approved by the local air district. Risk assessments are available by contacting the local air district.

Enforcement. Local air districts also take enforcement action to ensure compliance with air quality requirements. They enforce air toxic control measures, agricultural and residential burning programs, gasoline vapor control regulations, laws that prohibit air pollution nuisances, visible emission limits, and many other requirements designed to

clean the air. Local districts use a variety of enforcement tools to ensure compliance. These include notices of violation, monetary penalties, and abatement orders. Under some circumstances, a permit may be revoked.

- **Environmental Review**

As required by the California Environmental Quality Act (CEQA), local air districts also review and comment on proposed land use plans and development projects that can have a significant effect on the environment or public health.[7]

California Air Resources Board

The ARB is the air pollution control agency at the state level that is responsible for the preparation of air plans required by state and federal law. In this regard, it coordinates the activities of all local air districts to ensure all statutory requirements are met and to reduce air pollution emissions for sources under its jurisdiction.

Motor vehicles are the single largest emissions source category under ARB's jurisdiction as well as the largest overall emissions source statewide. ARB also regulates emissions from other mobile equipment and engines as well as emissions from consumer products such as hair sprays, perfumes, cleaners, and aerosol paints.

Air Toxics Program

Under state law, the ARB has a critical role to play in the identification, prioritization, and control of air toxic emissions. The ARB statewide comprehensive air toxics program was established in the early 1980's. The Toxic Air Contaminant Identification and Control Act of 1983 (AB 1807, Tanner 1983) created California's program to reduce exposure to air toxics.[8] The Air Toxics "Hot Spots" Information and Assessment Act (Hot Spots program) supplements the AB 1807 program, by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

Under AB 1807, the ARB is required to use certain criteria to prioritize the identification and control of air toxics. In selecting substances for review, the ARB must consider criteria relating to emissions, exposure, and health risk, as well as persistence in the atmosphere, and ambient concentrations in the community. AB 1807 also requires the ARB to use available information gathered from the Hot Spots program when prioritizing compounds.

The ARB identifies pollutants as toxic air contaminants and adopts statewide air toxic control measures (ATCMs). Once ARB adopts an ATCM, local air districts must

[7] Section 4 of this Handbook contains more information on the CEQA process.
[8] For a general background on California's air toxics program, the reader should refer to ARB's website at http://www.arb.ca.gov/toxics/tac/appendxb.htm.

implement the measure, or adopt and implement district-specific measures that are at least as stringent as the state standard. Taken in the aggregate, these ARB programs will continue to further reduce emissions, exposure, and health risk statewide.

With regard to the land use decision-making process, ARB, in conjunction with local air districts, plays an advisory role by providing technical information on land use-related air issues.

Other Agencies

Governor's Office of Planning and Research (OPR)

In addition to serving as the Governor's advisor on land use planning, research, and liaison with local government, OPR develops and implements the state's policy on land use planning and coordinates the state's environmental justice programs. OPR updated its General Plan Guidelines in 2003 to highlight the importance of sustainable development and environmental justice policies in the planning process. OPR also advises project proponents and government agencies on CEQA provisions and operates the State Clearinghouse for environmental and federal grant documents.

California Department of Housing and Community Development

The Department of Housing and Community Development (HCD) administers a variety of state laws, programs and policies to preserve and expand housing opportunities, including the development of affordable housing. All local jurisdictions must update their housing elements according to a staggered statutory schedule, and are subject to certification by HCD. In their housing elements, cities and counties are required to include a land inventory which identifies and zones sites for future residential development to accommodate a mix of housing types, and to remove barriers to the development of housing.

An objective of state housing element law is to increase the overall supply and affordability of housing. Other fundamental goals include conserving existing affordable housing, improving the condition of the existing housing stock, removing regulatory barriers to housing production, expanding equal housing opportunities, and addressing the special housing needs of the state's most vulnerable residents (frail elderly, disabled, large families with children, farmworkers, and the homeless).

Transportation Agencies

Transportation agencies can also influence mobile source-related emissions in the land use decision-making process. Local transportation agencies work with land use agencies to develop a transportation (circulation) element for the General Plan. These local government agencies then work with other transportation-related agencies, such as the Congestion Management Agency (CMA), Metropolitan Planning Organization

(MPO), Regional Transportation Planning Agency (RTPA), and Caltrans to develop long and short range transportation plans and projects.

Caltrans is the agency responsible for setting state transportation goals and for state transportation planning, design, construction, operations and maintenance activities. Caltrans is also responsible for delivering California's multibillion-dollar state Transportation Improvement Program, a list of transportation projects that are approved for funding by the California Transportation Commission in a 4-year cycle.

When safety hazards or traffic circulation problems are identified in the existing road system, or when land use changes are proposed such as a new residential subdivision, shopping mall or manufacturing center, Caltrans and/or the local transportation agency ensure the projects meet applicable state, regional, and local goals and objectives.

Caltrans also evaluates transportation-related projects for regional air quality impacts, from the perspective of travel-related emissions as well as road congestion and increases in road capacity (new lanes).

California Energy Commission (CEC)

The CEC is the state's CEQA lead agency for permitting large thermal power plants (50 megawatts or greater). The CEC works closely with local air districts and other federal, state and local agencies to ensure compliance with applicable laws, ordinances, regulations and standards in the permitting, construction, operation and closure of such plants. The CEC uses an open and public review process that provides communities with outreach and multiple opportunities to participate and be heard. In addition to its comprehensive environmental impact and engineering design assessment process, the CEC also conducts an environmental justice evaluation. This evaluation involves an initial demographic screening to determine if a qualifying minority or low-income population exists in the vicinity of the proposed project. If such a population is present, staff considers possible environmental justice impacts including from associated project emissions in its technical assessments.[9]

Department of Pesticides Regulation (DPR)

Pesticides are industrial chemicals produced specifically for their toxicity to a target pest. They must be released into the environment to do their job. Therefore, regulation of pesticides focuses on using toxicity and other information to ensure that when pesticides are used according to their label directions, potential for harm to people and the environment is minimized. DPR imposes strict controls on use, beginning before pesticide products can be sold in California, with an extensive scientific program to ensure they can be used safely. DPR and county enforcement staff tracks the use of pesticides to ensure that pesticides are used properly. DPR collects periodic

[9] See California Energy Commission, "Environmental Performance Report," July 2001 at http://www.energy.ca.gov/reports/2001-11-20_700-01-001.PDF

measurements of any remaining amounts of pesticides in water, air, and on fresh produce. If unsafe levels are found, DPR requires changes in how pesticides are used, to reduce the possibility of harm. If this cannot be done - that is, if a pesticide cannot be used safely - use of the pesticide will be banned in California.[10]

Federal Agencies

Federal agencies have permit authority over activities on federal lands and certain resources, which have been the subject of congressional legislation, such as air, water quality, wildlife, and navigable waters. The U.S. Environmental Protection Agency generally oversees implementation of the federal Clean Air Act, and has broad authority for regulating certain activities such as mobile sources, air toxics sources, the disposal of toxic wastes, and the use of pesticides. The responsibility for implementing some federal regulatory programs such as those for air and water quality and toxics is delegated by management to specific state and local agencies. Although federal agencies are not subject to CEQA they must follow their own environmental process established under the National Environmental Policy Act (NEPA).

[10] For more information, the reader is encouraged to visit the Department of Pesticide Regulation web site at www.cdpr.ca.gov/docs/empm/pubs/tacmenu.htm.

SPECIAL PROCESSES THAT APPLY TO SCHOOL SITING

The California Education Code and the California Public Resources Code place primary authority for siting public schools with the local school district, which is the 'lead agency' for purposes of CEQA. The California Education Code requires public school districts to notify the local planning agency about siting a new public school or expanding an existing school. The planning agency then reports back to the school district regarding a project's conformity with the adopted General Plan. However, school districts can overrule local zoning and land use designations for schools if they follow specified procedures. In addition, all school districts must evaluate new school sites using site selection standards established in Section 14010 of Title 5 of the California Code of Regulations. Districts seeking state funding for school site acquisition must also obtain site approval from the California Department of Education.

Before making a final decision on a school site acquisition, a school district must comply with CEQA and evaluate the proposed site acquisition/new school project for air emissions and health risks by preparing and certifying an environmental impact report or negative declaration. Both the California Education Code section 17213 and the California Public Resources Code section 21151.8 require school districts to consult with administering agencies and local air districts when preparing the environmental assessment. Such consultation is required to identify both permitted and non-permitted "facilities" that might significantly affect health at the new site. These facilities include, but are not limited to, freeways and other busy traffic corridors, large agricultural operations, and rail yards that are within one-quarter mile of the proposed school site, and that might emit hazardous air emissions, or handle hazardous or acutely hazardous materials, substances, or waste.

As part of the CEQA process and before approving a school site, the school district must make a finding that either it found none of the facilities or significant air pollution sources, or alternatively, if the school district finds that there are such facilities or sources, it must determine either that they pose no significant health risks, or that corrective actions by another governmental entity would be taken so that there would be no actual or potential endangerment to students or school workers.

In addition, if the proposed school site boundary is within 500 feet of the edge of the closest traffic lane of a freeway or traffic corridor that has specified minimum average daily traffic counts, the school district is required to determine through specified risk assessment and air dispersion modeling that neither short-term nor long term exposure poses significant heath risks to pupils.

State law changes effective January 1, 2004 (SB352, Escutia 2003, amending Education Code section 17213 and Public Resources Code section 21151.8) also provides for cases in which the school district cannot make either of those two findings and cannot find a suitable alternative site. When this occurs, the school district must adopt a statement of over-riding considerations, as part of an environmental impact

report, that the project should be approved based on the ultimate balancing of the merits.

Some school districts use a standardized assessment process to determine the environmental impacts of a proposed school site. In the assessment process, school districts can use maps and other available information to evaluate risk, including a local air district's database of permitted source emissions. School districts can also perform field surveys and record searches to identify and calculate emissions from non-permitted sources within one-quarter mile radius of a proposed site. Traffic count data and vehicular emissions data can also be obtained from Caltrans for major roadways and freeways in proximity to the proposed site to model potential emissions impacts to students and school employees. This information is available from the local COG, Caltrans, or local cities and counties for non-state maintained roads.

GENERAL PROCESSES USED BY LAND USE AGENCIES TO ADDRESS AIR POLLUTION IMPACTS

There are several separate but related processes for addressing the air pollution impacts of land use projects. One takes place as part of the planning and zoning function. This consists of preparing and implementing goals and policies contained in county or city General Plans, community or area plans, and specific plans governing land uses such as residential, educational, commercial, industrial, and recreational activities. It also includes recommending locations for thoroughfares, parks and other public improvements.

Land use agencies also have a permitting function that includes performing environmental reviews and mitigation when projects may pose a significant environmental impact. They conduct inspections for zoning permits issued, enforce the zoning regulations and issue violations as necessary, issue zoning certificates of compliance, and check compliance when approving certificates of occupancy.

Planning

- **General Plan**[1]

The General Plan is a local government "blueprint" of existing and future anticipated land uses for long-term future development. It is composed of the goals, policies, and general elements upon which land use decisions are based. Because the General Plan is the foundation for all local planning and development, it is an important tool for implementing policies and programs beneficial to air quality. Local governments may choose to adopt a separate air quality element into their General Plan or to integrate air quality-beneficial objectives, policies, and strategies in other elements of the Plan, such as the land use, circulation, conservation, and community design elements.

More information on General Plan elements is contained in Appendix D.

- **Community Plans**

Community or area plans are terms for plans that focus on a particular region or community within the overall general plan area. It refines the policies of the general plan as they apply to a smaller geographic area and is implemented by ordinances and other discretionary actions, such as zoning.

[1] In October 2003, OPR revised its General Plan Guidelines. An entire chapter is now devoted to a discussion of how sustainable development and environmental justice goals can be incorporated into the land use planning process. For further information, the reader is encouraged to obtain a copy of OPR's General Plan Guidelines, or refer to their website at: http://www.opr.ca.gov/planning/PDFs/General_Plan_Guidelines_2003.pdf

- **Specific Plan**

A specific plan is a hybrid that can combine policies with development regulations or zoning requirements. It is often used to address the development requirements for a single project such as urban infill or a planned community. As a result, its emphasis is on concrete standards and development criteria.

- **Zoning**

Zoning is the public regulation of the use of land. It involves the adoption of ordinances that divide a community into various districts or zones. For instance, zoning ordinances designate what projects and activities can be sited in particular locations. Each zone designates allowable uses of land within that zone, such as residential, commercial, or industrial. Zoning ordinances can address building development standards, e.g., minimum lot size, maximum building height, minimum building setback, parking, signage, density, and other allowable uses.

Land Use Permitting

In addition to the planning and zoning function, land use agencies issue building and business permits, and evaluate the potential environmental impacts of projects. To be approved, projects must be located in a designated zone and comply with applicable ordinances and zoning requirements.

Even if a project is sited properly in a designated zone, a land use agency may require a new source to mitigate potential localized environmental impacts to the surrounding community below what would be required by the local air district. In this case, the land use agency could condition the permit by limiting or prescribing allowable uses including operating hour restrictions, building standards and codes, property setbacks between the business property and the street or other structures, vehicle idling restrictions, or traffic diversion.

Land use agencies also evaluate the environmental impacts of proposed land use projects or activities. If a project or activity falls under CEQA, the land use agency requires an environmental review before issuing a permit to determine if there is the potential for a significant impact, and if so, to mitigate the impact or possibly deny the project.

- **Land Use Permitting Process**

In California, the authority to regulate land use is delegated to city and county governments. The local land use planning agency is the local government administrative body that typically provides information and coordinates the review of development project applications. Conditional Use Permits (CUP) typically fall within a land use agency's discretionary authority and therefore are subject to CEQA. CUPs are

intended to provide an opportunity to review the location, design, and manner of development of land uses prior to project approval. A traditional purpose of the CUP is to enable a municipality to control certain uses that could have detrimental environmental effects on the community.

The process for permitting new discretionary projects is quite elaborate, but can be broken down into five fundamental components:

- Project application
- Environmental assessment
- Consultation
- Public comment
- Public hearing and decision

Project Application

The permit process begins when the land use agency receives a project application, with a detailed project description, and support documentation. During this phase, the agency reviews the submitted application for completeness. When the agency deems the application to be complete, the permit process moves into the environmental review phase.

Environmental Assessment

If the project is discretionary and the application is accepted as complete, the project proposal or activity must undergo an environmental clearance process under CEQA and the CEQA Guidelines adopted by the California Resources Agency.[2] The purpose of the CEQA process is to inform decision-makers and the public of the potential significant environmental impacts of a project or activity, to identify measures to minimize or eliminate those impacts to the point they are no longer significant, and to discuss alternatives that will accomplish the project goals and objectives in a less environmentally harmful manner.

What is a "Lead Agency"?

A lead agency is the public agency that has the principal responsibility for carrying out or approving a project that is subject to CEQA. In general, the land use agency is the preferred public agency serving as lead agency because it has jurisdiction over general land uses. The lead agency is responsible for determining the appropriate environmental document, as well as its preparation.

What is a "Responsible Agency"?

A responsible agency is a public agency with discretionary approval authority over a portion of a CEQA project (e.g., projects requiring a permit). As a responsible agency, the agency is available to the lead agency and project proponent for early consultation on a project to apprise them of applicable rules and regulations, potential adverse impacts, alternatives, and mitigation measures, and provide guidance as needed on applicable methodologies or other related issues.

What is a "Commenting Agency"?

A commenting agency is any public agency that comments on a CEQA document, but is neither a lead agency nor a responsible agency. For example, a local air district, as the agency with the responsibility for comprehensive air pollution control, could review and comment on an air quality analysis in a CEQA document for a proposed distribution center, even though the project was not subject to a permit or other pollution control requirements.

[2] Projects and activities that may have a significant adverse impact on the environment are evaluated under CEQA Guidelines set forth in title 14 of the California Code of Regulations, sections 15000 et seq.

To assist the lead agency in determining whether the project or activity may have a significant effect that would require the preparation of an EIR, the land use agency may consider criteria, or thresholds of significance, to assess the potential impacts of the project, including its air quality impacts. The land use agency must consider any credible evidence in addition to the thresholds, however, in determining whether the project or activity may have a significant effect that would trigger the preparation of an EIR.

The screening criteria to determine significance is based on a variety of factors, including local, state, and federal regulations, administrative practices of other public agencies, and commonly accepted professional standards. However, the final determination of significance for individual projects is the responsibility of the lead agency. In the case of land use projects, the lead agency would be the City Council or County Board of Supervisors.

A new land use plan or project can also trigger an environmental assessment under CEQA if, among other things, it will expose sensitive sites such as schools, day care centers, hospitals, retirement homes, convalescence facilities, and residences to substantial pollutant concentrations.[3]

CEQA only applies to "discretionary projects." Discretionary means the public agency must exercise judgment and deliberation when deciding to approve or disapprove a particular project or activity, and may append specific conditions to its approval. Examples of discretionary projects include the issuance of a CUP, re-zoning a property, or widening of a public road. Projects that are not subject to the exercise of agency discretion, and can therefore be approved administratively through the application of set standards are referred to as ministerial projects. CEQA does not apply to ministerial projects.[4] Examples of typical ministerial projects include the issuance of most building permits or a business license.

Once a potential environmental impact associated with a project is identified through an environmental assessment, mitigation must be considered. A land use agency should incorporate mitigation measures that are suggested by the local air district as part of the project review process.

Consultation

Application materials are provided to various departments and agencies that may have an interest in the project (e.g., air pollution, building, police, fire, water agency, Fish and Game, etc.) for consultation and input.

[3] Readers interested in learning more about CEQA should contact OPR or visit their website at http://www.opr.ca.gov/.

[4] See California Public Resources Code section 21080(b)(1).

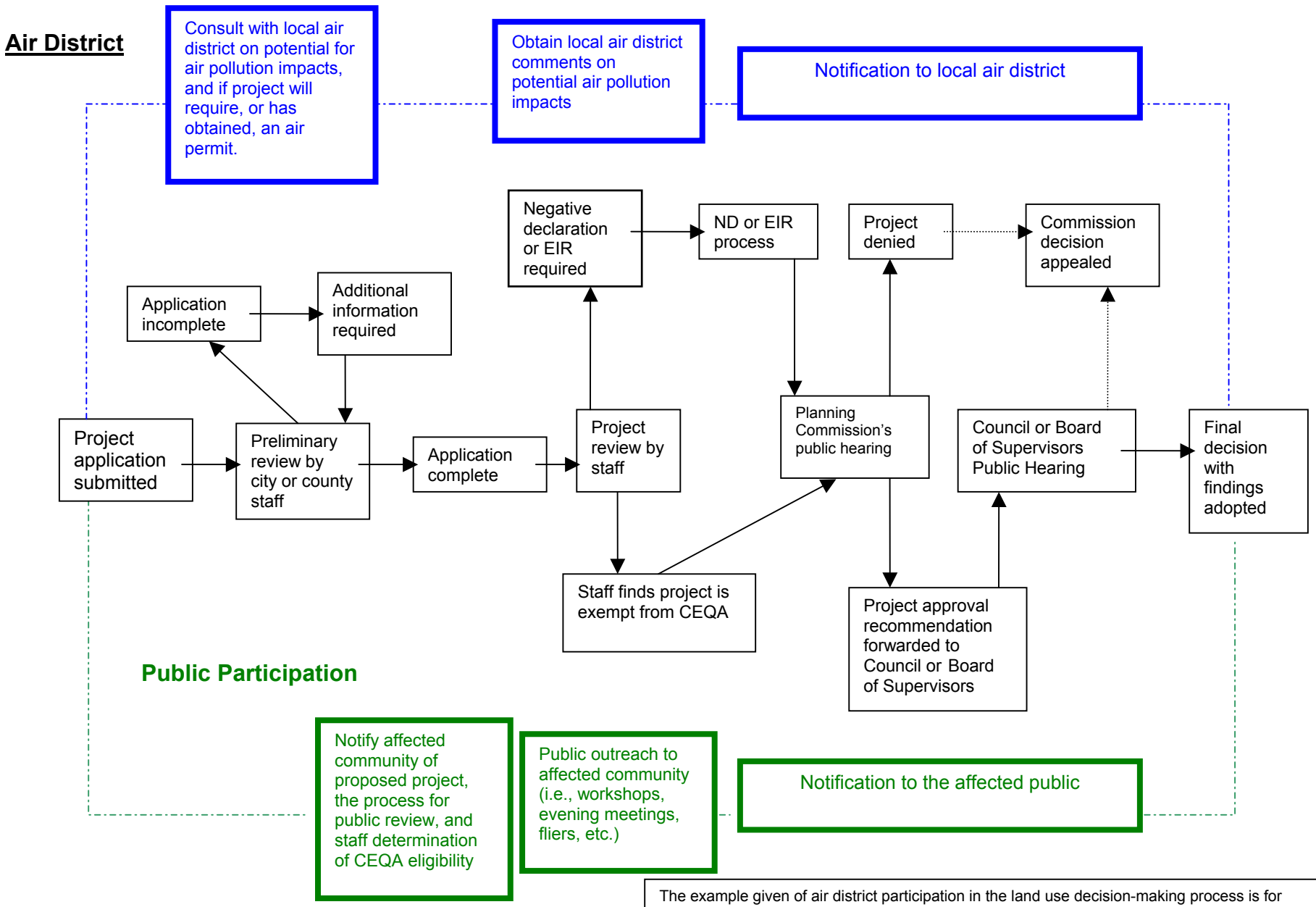
Public Comment

Following the environmental review process, the Planning Commission reviews application along with the staff's report on the project assessment and a public comment period is set and input is solicited.

Public Hearing and Decision

Permit rules vary depending on the particular permit authority in question, but the process generally involves comparing the proposed project with the land use agency standards or policies. The procedure usually leads to a public hearing, which is followed by a written decision by the agency or its designated officer. Typically, a project is approved, denied, or approved subject to specified conditions.

USE PERMIT (DISCRETIONARY ACTION) REVIEW PROCESS*



The example given of air district participation in the land use decision-making process is for illustrative purposes only. In reality, the land use siting process involves the ongoing participation of multiple affected agencies and stakeholders throughout the process.

GLOSSARY OF KEY AIR POLLUTION TERMS

Air Pollution Control Board or Air Quality Management Board: Serves as the governing board for local air districts. It consists of appointed or elected members from the public or private sector. It conducts public hearings to adopt local air pollution regulations.

Air Pollution Control Districts or Air Quality Management Districts (local air district): A county or regional agency with authority to regulate stationary and area sources of air pollution within a given county or region. Governed by a district air pollution control board.

Air Pollution Control Officer (APCO): Head of a local air pollution control or air quality management district.

Air Toxic Control Measures (ATCM): A control measure adopted by the ARB (Health and Safety Code section 39666 et seq.), which reduces emissions of toxic air contaminants.

Ambient Air Quality Standards: An air quality standard defines the maximum amount of a pollutant that can be present in the outdoor air during a specific time period without harming the public's health. Only U.S. EPA and the ARB may establish air quality standards. No other state has this authority. Air quality standards are a measure of clean air. More specifically, an air quality standard establishes the concentration at which a pollutant is known to cause adverse health effects to sensitive groups within the population, such as children and the elderly. Federal standards are referred to as National Ambient Air Quality Standards (NAAQS); state standards are referred to as California ambient air quality standards (CAAQS).

Area-wide Sources: Sources of air pollution that individually emit small amounts of pollution, but together add up to significant quantities of pollution. Examples include consumer products, fireplaces, road dust, and farming operations.

Attainment vs. Nonattainment Area: An attainment area is a geographic area that meets the National Ambient Air Quality Standards for the criteria pollutants and a non-attainment area is a geographic area that doesn't meet the NAAQS for criteria pollutants.

Attainment Plan: Attainment plans lay out measures and strategies to attain one or more air quality standards by a specified date.

California Clean Air Act (CCAA): A California law passed in 1988, which provides the basis for air quality planning and regulation independent of federal regulations. A major element of the Act is the requirement that local air districts in violation of the CAAQS

must prepare attainment plans which identify air quality problems, causes, trends, and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date.

California Environmental Quality Act (CEQA): A California law that sets forth a process for public agencies to make informed decisions on discretionary project approvals. The process helps decision-makers determine whether any potential, significant, adverse environmental impacts are associated with a proposed project and to identify alternatives and mitigation measures that will eliminate or reduce such adverse impacts.[1]

California Health and Safety Code: A compilation of California laws, including state air pollution laws, enacted by the Legislature to protect the health and safety of people in California. Government agencies adopt regulations to implement specific provisions of the California Health and Safety Code.

Clean Air Act (CAA): The federal Clean Air Act was adopted by the United States Congress and sets forth standards, procedures, and requirements to be implemented by the U.S. Environmental Protection Agency (U.S. EPA) to protect air quality in the United States.

Councils of Government (COGs): There are 25 COGs in California made up of city and county elected officials. COGs are regional agencies concerned primarily with transportation planning and housing; they do not directly regulate land use.

Criteria Air Pollutant: An air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM10 and PM2.5. The term "criteria air pollutants" derives from the requirement that the U.S. EPA and ARB must describe the characteristics and potential health and welfare effects of these pollutants. The U.S. EPA and ARB periodically review new scientific data and may propose revisions to the standards as a result.

District Hearing Board: Hears local air district permit appeals and issues variances and abatement orders. The local air district board appoints the members of the hearing board.

Emission Inventory: An estimate of the amount of pollutants emitted into the atmosphere from mobile, stationary, area-wide, and natural source categories over a specific period of time such as a day or a year.

Environmental Impact Report (EIR): The public document used by a governmental agency to analyze the significant environmental effects of a proposed project, to identify

[1] To track the submittal of CEQA documents to the State Clearinghouse within the Office of Planning and Research, the reader can refer to CEQAnet at http://www.ceqanet.ca.gov.

alternatives, and to disclose possible ways to reduce or avoid the possible negative environmental impacts.

Environmental Justice: California law defines environmental justice as the fair treatment of people of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (California Government Code sec.65040.12(c)).

General Plans: A statement of policies developed by local governments, including text and diagrams setting forth objectives, principles, standards, and plan proposals for the future physical development of the city or county.

Hazardous Air Pollutants (HAPs): An air pollutant listed under section 112 (b) of the federal Clean Air Act as particularly hazardous to health. U.S. EPA identifies emission sources of hazardous air pollutants, and emission standards are set accordingly. In California, HAPs are referred to as toxic air contaminants.

Land Use Agency: Local government agency that performs functions associated with the review, approval, and enforcement of general plans and plan elements, zoning, and land use permitting. For purposes of this Handbook, a land use agency is typically a local planning department.

Mobile Source: Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes.

National Ambient Air Quality Standard (NAAQS): A limit on the level of an outdoor air pollutant established by the US EPA pursuant to the Clean Air Act. There are two types of NAAQS. Primary standards set limits to protect public health and secondary standards set limits to protect public welfare.

Negative Declaration (ND): When the lead agency (the agency responsible for preparing the EIR or ND) under CEQA, finds that there is no substantial evidence that a project may have a significant environmental effect, the agency will prepare a "negative declaration" instead of an EIR.

New Source Review (NSR): A federal Clean Air Act requirement that state implementation plans must include a permit review process, which applies to the construction and operation of new or modified stationary sources in nonattainment areas. Two major elements of NSR to reduce emissions are best available control technology requirements and emission offsets.

Office of Planning and Research (OPR): OPR is part of the Governor's office. OPR has a variety of functions related to local land-use planning and environmental programs. It provides General Plan Guidelines for city and county planners, and coordinates the state clearinghouse for Environmental Impact Reports.

Ordinance: A law adopted by a City Council or County Board of Supervisors. Ordinances usually amend, repeal or supplement the municipal code; provide zoning specifications; or appropriate money for specific purposes.

Overriding Considerations: A ruling made by the lead agency in the CEQA process when the lead agency finds the importance of the project to the community outweighs potential adverse environmental impacts.

Public Comment: An opportunity for the general public to comment on regulations and other proposals made by government agencies. You can submit written or oral comments at the public meeting or send your written comments to the agency.

Public Hearing: A public hearing is an opportunity to testify on a proposed action by a governing board at a public meeting. The public and the media are welcome to attend the hearing and listen to, or participate in, the proceedings.

Public Notice: A public notice identifies the person, business, or local government seeking approval of a specific course of action (such as a regulation). It describes the activity for which approval is being sought, and describes the location where the proposed activity or public meeting will take place.

Public Nuisance: A public nuisance, for the purposes of air pollution regulations, is defined as a discharge from any source whatsoever of such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. (Health and Safety Code section 41700).

Property Setback: In zoning parlance, a setback is the minimum amount of space required between a lot line and a building line.

Risk: For cancer health effects, risk is expressed as an estimate of the increased chances of getting cancer due to facility emissions over a 70-year lifetime. This increase in risk is expressed as chances in a million (e.g.,10 chances in a million).

Sensitive Individuals: Refers to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality).

Sensitive Sites or Sensitive Land Uses: Land uses where sensitive individuals are most likely to spend time, including schools and schoolyards, parks and playgrounds, day care centers, nursing homes, hospitals, and residential communities.

Setback: An area of land separating one parcel of land from another that acts to soften or mitigate the effects of one land use on the other.

State Implementation Plan (SIP): A plan prepared by state and local agencies and submitted to U.S. EPA describing how each area will attain and maintain national ambient air quality standards. SIPs include the technical information about emission inventories, air quality monitoring, control measures and strategies, and enforcement mechanisms. A SIP is composed of local air quality management plans and state air quality regulations.

Stationary Sources: Non-mobile sources such as power plants, refineries, and manufacturing facilities.

Toxic Air Contaminant (TAC): An air pollutant, identified in regulation by the ARB, which may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code section 39650 et seq.) than pollutants subject to State Ambient Air Quality Standards. Health effects associated with TACs may occur at extremely low levels. It is often difficult to identify safe levels of exposure, which produce no adverse health effects.

Urban Background: The term is used in this Handbook to represent the ubiquitous, elevated, regional air pollution levels observed in large urban areas in California.

Zoning ordinances: City councils and county boards of supervisors adopts zoning ordinances that set forth land use classifications, divides the county or city into land use zones as delineated on the official zoning, maps, and set enforceable standards for future develop

BIOS

Find address or place

108.10 mi

Gabilan Range
Gonzales
Soledad
Coastal Range
Diablo Range
5252 ft
4149 ft
Greenfield
Salinas River
King City
5864 ft
Santa Lucia Range
198
Coalinga
Huron
145
San Joaquin Valley
Hanford
California
Visalia
99
180
Tulare
Kings River
Friant-Kern Canal
Porterville
Sequoia National Park
Sierra Nevada Mountains
Tule River Reservation
9988
Avenal
3498 ft
4335 ft
Tule River
Delano
Wasco
Greenhorn Mountains
8448 ft
Oildale
Bakersfield
East Side Canal
Temblor Range
2920 ft
Coastal Range
Taft
166
Tehachapi
Tehachapi Mountains
Los Angeles Aq
Cuyama River
5108 ft
Santa Maria
Sierra Madre
Arroyo Grande
Atascadero
Hearst San Simeon State Park
Constantine Rock
3752 ft

9 | 1: 1,155,581 | 20 km | 20 mi

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query | Results | Occurrence Details | Reports | BIOS | Export/Import | Help

Elements

Change visible columns | Print View | Clear Search Boxes | 15 elements (108 total occurrences) returned from a total of 4,026 elements in the CNDDB

Image Search	Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank
	Case sensitive filter...										
g+ / Ca	Actinemys marmorata	northwestern pond turtle	Reptiles	ARAAD02031	1160	1	Proposed Th	None	G2	SNR	
g+ / Ca	Ambystoma californiense pop. 1	California tiger salamander - centra	Amphibians	AAAAA01181	1329	13	Threatened	Threatened	G2G3T3	S3	
g+ / Ca	Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	804	19	Threatened	None	G3	S3	
g+ / Ca	Caulanthus californicus	California jewelflower	Dicots	PDBRA31010	67	1	Endangered	Endangered	G1	S1	1B.1
g+ / Ca	Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	1	Threatened	Endangered	G5T2T3	S1	
g+ / Ca	Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	IICOL48011	271	1	Threatened	None	G3T3	S3	
g+ / Ca	Dipodomys nitratoides nitratoides	Tipton kangaroo rat	Mammals	AMAFD03152	81	1	Endangered	Endangered	G2T1T2	S2	
g+ / Ca	Euphorbia hooveri	Hoover's spurge	Dicots	PDEUP0D150	29	5	Threatened	None	G1	S1	1B.2

Occurrences by Selected Element

Change visible columns | 1 occurrence returned from a total of 1160 occurrences for ACTINEMYS MARMORATA

Occ Number	EOndx	Date Element Last Seen	Date Site Last Seen	Presence	Accuracy	County	Quad
419	8143	1879-XX-XX	1879-XX-XX	Presumed Extant	Circular feature with a 1600 meter radius (1 mile)	Tulare	Visalia (3611933)

Find your Fire Hazard Severity Zone (FHSZ) and local public contacts

CLICK TO COMPARE OLD & NEW FHSZ IN LRA

28700-28950 N Farmersville Blvd, Visalia, California, 93292

Results:3

Your Responsibility Area

This property is in Local Responsibility Area (LRA), meaning the financial responsibility of preventing and suppressing wildfires is primarily the responsibility of a Local agency (city, county, city and county, or district).

View additional information about your local jurisdiction below.

Your Recommended Fire Hazard Severity Zone

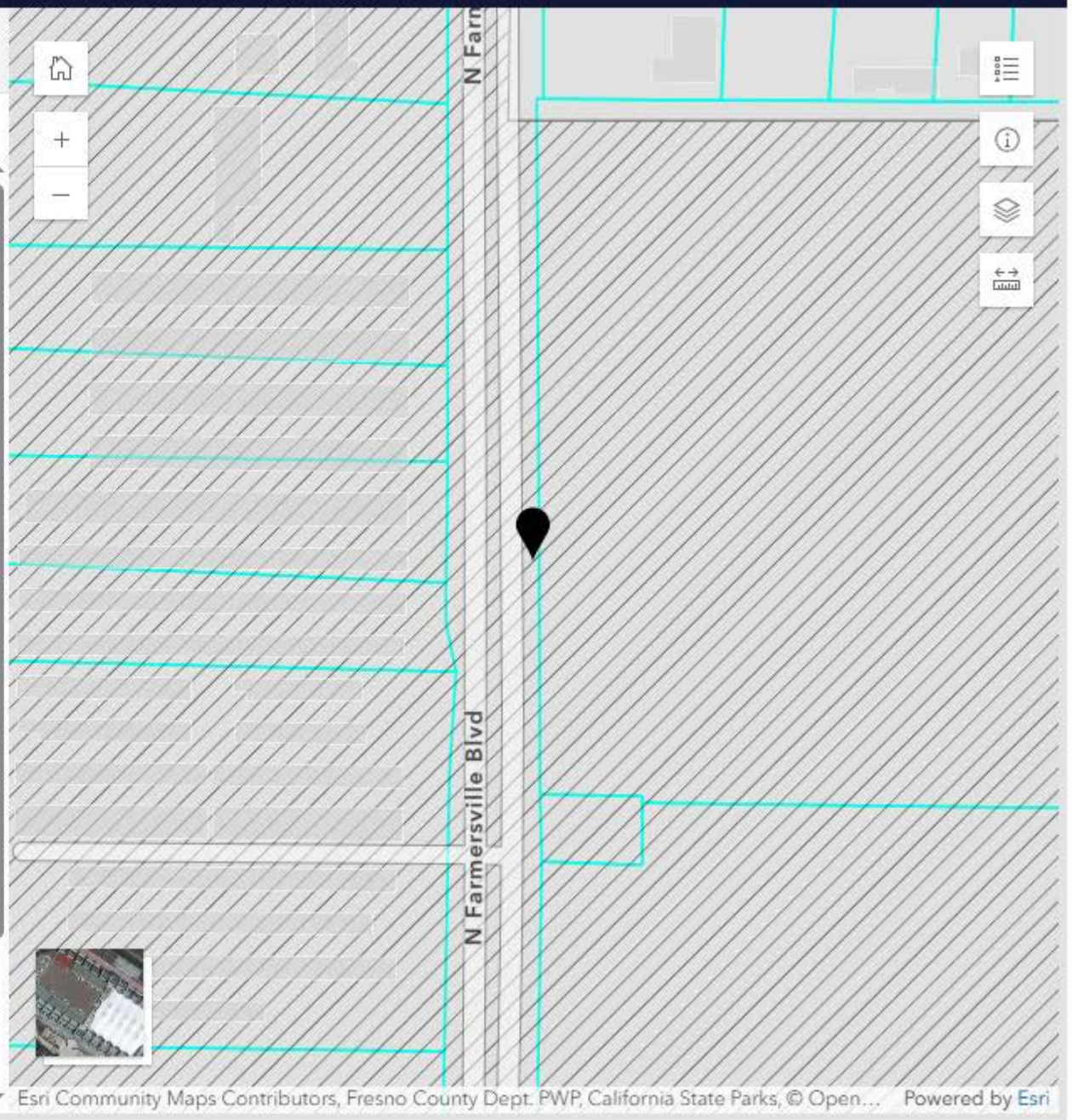
The geographic center of this parcel is located in an area that the State Fire Marshal has identified as having no Fire Hazard Severity Zone in Local Responsibility Area, per Government Code section 51178. Please inspect the map visually to determine if other zone recommendations exist in your parcel.

Local jurisdictions are currently reviewing the recommended FHSZs in LRA prior to adoption; the final adopted zones may differ from what is currently shown on this map.

See how FHSZ in LRA has changed (link opens in new window).

Your Jurisdiction

Based on CAL FIRE's statewide jurisdictional layer, your local jurisdiction is Farmersville in Tulare County.*



Official website of the State of California

LEA Central
Program Meeting and Stakeholder Workshops
Index
Communications
SWIS Database
Events Calendar
Training
Legislation and Regulation
Tools & Services

SWIS Facility/Site Activity Details

Visalia Disposal Site (54-AA-0009)

Summary | Details | Activities 1 | Inspections 402 | Enforcement Actions 7 | Documents 264

Activity
Solid Waste Landfill

Classification
Solid Waste Facility

Category
Disposal

Operational Status
Active

Regulatory Status
Permitted

Ceased Operation Date
1/1/2045

Closure Type
Estimate

Inspection Frequency
Monthly

Max. Permitted Throughput
2,000

Volume Unit Type
Tons per day

Remaining Capacity
11,717,479

Remaining Capacity Date
6/24/2024

Max. Permit Capacity
18,630,666

Capacity Unit Type
Cubic Yards

Total Acreage
631.00

Disposal Acreage
247.00

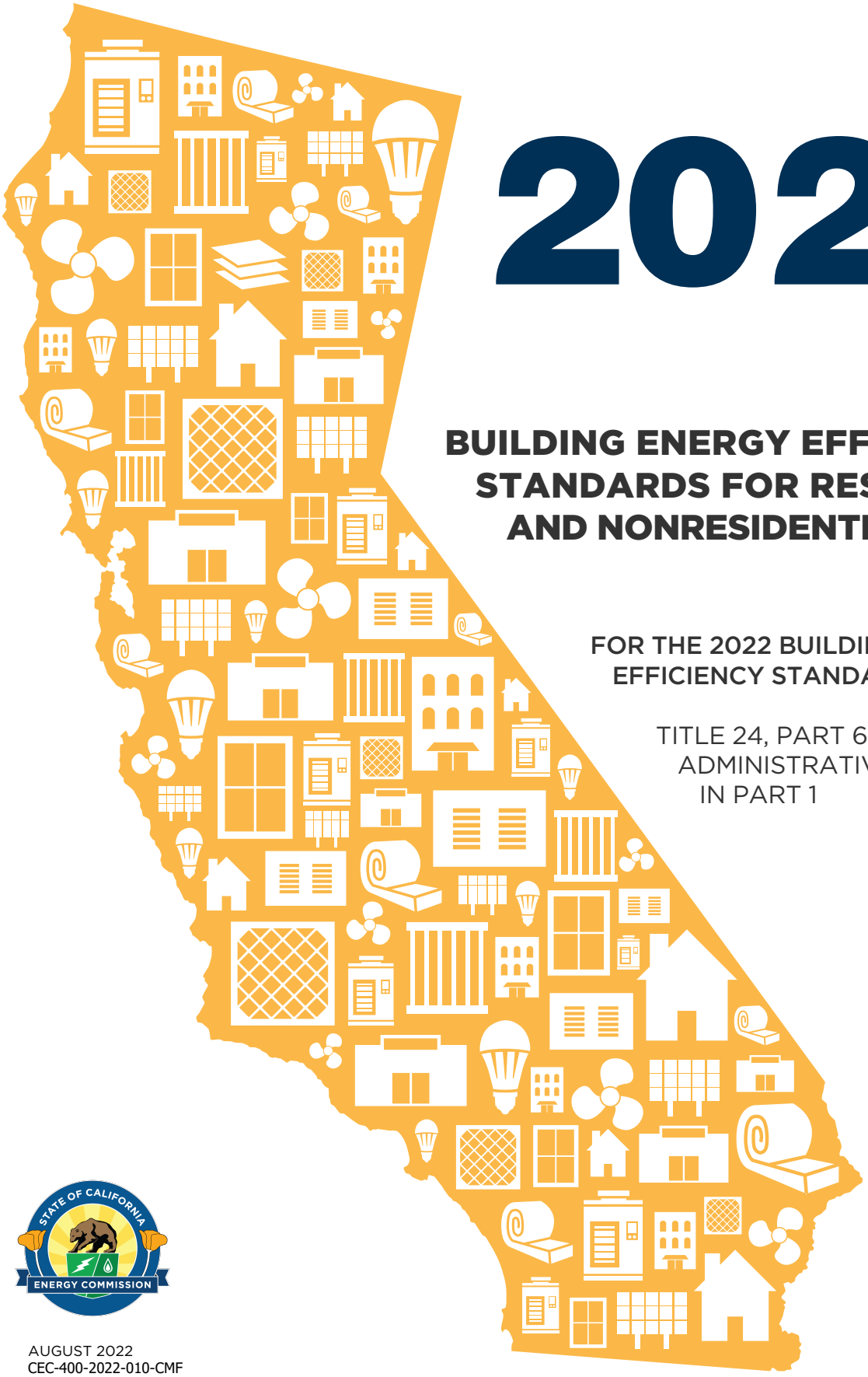
Permitted Elevation
505

Elevation Type
MSL

Permitted Depth
18

Depth Type
MSL

WDR Landfill Class
III



2022

BUILDING ENERGY EFFICIENCY STANDARDS FOR RESIDENTIAL AND NONRESIDENTIAL BUILDINGS

FOR THE 2022 BUILDING ENERGY EFFICIENCY STANDARDS

TITLE 24, PART 6, AND ASSOCIATED ADMINISTRATIVE REGULATIONS IN PART 1

AUGUST 2022
CEC-400-2022-010-CMF

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ABSTRACT

Serving as a precursor to the first generation of building standards, the Department of Housing and Community Development adopted rudimentary energy conservation standards under their State Housing Law authority in 1975. However, the Warren-Alquist Act was passed one year earlier with explicit direction to the California Energy Commission (CEC, formally titled the State Energy Resources Conservation and Development Commission) to adopt and implement standards.

The Building Energy Efficiency Standards (Energy Code) were first adopted in 1976 by the CEC and have been updated periodically since then, as directed by statute. The CEC's statute created separate authority and specific direction regarding what the standards are to address, development criteria, and provided implementation tools, aids, and technical assistance.

The Energy Code contains energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the CEC to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Energy Code includes both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Energy Code that contain data and other information that helps builders comply.

The 2022 Energy Code development and adoption process continues a long-standing practice of combining technical rigor, challenging but achievable design and construction practices, public engagement, and full consideration of the views of stakeholders.

The 2022 Energy Code builds on California's technology innovations, encouraging energy efficient approaches to encourage building decarbonization, emphasizing in particular on heat pumps for space heating and water heating. This set of Energy Codes also extends the benefits of photovoltaic and battery storage systems and other demand flexible technology to work in combinations with heat pumps to enable California buildings to be responsive to climate change. This Energy code also strengthens ventilation standards to improve indoor air quality. This update provides crucial steps in the state's progress toward 100 percent clean carbon neutrality by midcentury.

Public Resources Code Section 25402.1 also requires the CEC to support the performance standards with compliance tools for builders and building designers. The Alternative Calculation Method (ACM) Approval Manual adopted by regulation as an appendix of the Energy Code establishes requirements for input, output, and calculational uniformity in the computer programs used to demonstrate compliance. From this, the CEC develops and makes publicly available free, public domain building modeling software in order to enable compliance based on modeling of building efficiency and performance. The ACM Approval Manual also includes provisions for private entities seeking to develop compliance software for approval by the CEC, which further encourages flexibility and innovation.

The Energy Code is conceptually divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus the Energy Code are tailored to local conditions, and provide flexibility in how energy efficiency in buildings can be achieved. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that provide a recipe or a checklist compliance approach.

Keywords:

California Energy Commission	Performance	HVAC
California Building Code	Time Dependent	Building Commissioning
California Building Energy Efficiency Standards	Valuation	Process Load
Title 24, Part 6	TDV	Refrigeration
Building Energy Efficiency Standards	Ducts in Conditioned Spaces	Data Center
Residential	High Performance Attics	Exhaust
Nonresidential	High Performance Walls	Compressed Air
Newly Constructed	High Efficacy Lighting	Acceptance Testing
Additions and Alterations to Existing Buildings	Water Heating	Data Collection
Mandatory	Windows	Cool Roof
Prescriptive	Envelope Insulation	On-site Renewable
Source Energy	Controlled Environment Horticulture (CEH)	Fan Energy Index (FEI)

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ADMINISTRACTIVE REGULATIONS

CALIFORNIA CODE OF REGULATIONS
TITLE 24, PART1

ARTICLE 1 – ENERGY BUILDING REGULATIONS

10-101 – SCOPE

(a) This article contains administrative regulations relating to the energy building regulations in Title 24, Part 6. This article applies to all residential and nonresidential buildings.

(b) Nothing in this article lessens any necessary qualifications or responsibilities of licensed or registered building professionals or other designers or builders, or the duties of enforcement agencies that exist under state or local law.

(c) If any provision of the regulations in this article or the Building Energy Efficiency Standards, Title 24, Part 6, of the California Code of Regulations is found invalid by a court of competent jurisdiction, the remainder of these regulations shall remain in effect.

NOTE: Authority: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25402 and 25402.1, Public Resources Code.

10-102 – DEFINITIONS

In this article the following definitions apply:

ACCEPTANCE REQUIREMENTS are "acceptance requirements for code compliance" as defined in Section 100.1(b) of Part 6.

ACCEPTANCE TEST TECHNICIAN (ATT) is a Field Technician as defined in Section 10-102 who is certified by an authorized Acceptance Test Technician Certification Provider to perform acceptance testing of either lighting controls or mechanical systems pursuant to the requirements of Sections 10-103.1 or 10-103.2, respectively. ATTs are authorized to perform only those acceptance tests for which they are certified by an ATTCP; ATTs certified to perform acceptance testing of lighting controls are sometimes referred to as “lighting control ATTs”, and ATTs certified to perform acceptance testing of mechanical systems are sometimes referred to as “mechanical ATTs”. (See “Field Technician” and “Acceptance Test Technician Certification Provider”.)

ACCEPTANCE TEST EMPLOYER (ATE) is a person or entity who employs an Acceptance Test Technician and is certified by an authorized Acceptance Test Technician Certification Provider pursuant to the requirements of Sections 10-103.1 or 10-103.2. ATEs are authorized to employ only those ATTs for which they are certified by an ATTCP; ATEs certified to employ ATTs that perform acceptance testing of lighting controls are sometimes referred to as “lighting control ATEs”, and ATEs certified to employ ATTs that perform acceptance testing of mechanical systems are sometimes referred to as “mechanical ATEs”. (See “Acceptance Test Technician” and “Acceptance Test Technician Certification Provider”.)

ACCEPTANCE TEST TECHNICIAN CERTIFICATION PROVIDER (ATTCP) is an agency, organization or entity approved by the Energy Commission to train, certify and oversee ATTs and ATEs relating to either lighting controls or mechanical systems according to the requirements of Sections 10-103.1 or 10-103.2, respectively. ATTCPs are authorized to certify only those ATTs and ATEs for which they are approved by the Energy Commission; ATTCPs approved to certify ATTs and ATEs relating to the acceptance testing of lighting controls are sometimes referred to as “lighting control ATTCPs”, and ATTCPs approved to certify ATTs and ATEs relating to the acceptance testing of mechanical systems are sometimes referred to as “mechanical ATTCPs”. (See “Acceptance Test Technician” and “Acceptance Test Employer”.)

ACM means **ALTERNATIVE CALCULATION METHOD** are compliance software, or alternative component packages, or exceptional methods approved by the Commission under Section 10-109. ACMs are also referred to as Compliance Software.

ACM APPROVAL MANUALS are the documents establishing the requirements for Energy Commission approval of Compliance Software used to demonstrate compliance with the Building Energy Efficiency Standards for Residential and Nonresidential Buildings currently adopted by the Energy Commission.

ACM REFERENCE MANUAL is the document establishing the procedures required to implement Sections 140.1 and 150.1 of Title 24, Part 6 of the California Code of Regulations in Compliance Software.

ADDITIONALITY is a property of solar offsets whereby the offset causes additional benefits beyond what would occur as a result of all other actions, and which would exclusively benefit the building or property for which the offset substitutes for compliance obligations that would otherwise be required for that building or property, and those benefits would not ever be transferred to other buildings or property.

ALTERNATIVE COMPONENT PACKAGE is a set of building measures whose aggregate calculated energy use is less than or equal to the maximum allowed Energy Budget.

APPLIANCE EFFICIENCY REGULATIONS are the regulations in Title 20, Section 1601 et. seq. of the California Code of Regulations.

APPROVED CALCULATION METHOD is compliance software, or alternative component packages, or exceptional methods approved under Section 10-109.

BUILDING ENERGY EFFICIENCY STANDARDS are those regulations contained in Title 24, Part 6 of the California Code of Regulations.

BUILDING PERMIT is an electrical, plumbing, mechanical, building, or other permit or approval, that is issued by an enforcement agency, and that authorizes any construction that is subject to Part 6.

CALIFORNIA ENERGY COMMISSION is the California State Energy Resources Conservation and Development Commission.

COMMISSION is the California State Energy Resources Conservation and Development Commission.

COMPLEX MECHANICAL SYSTEM is defined here for the purposes of complying with the Design Phase Review component of Section 10-103(a)1. Complex Mechanical Systems are systems that include 1) fan systems each serving multiple thermostatically controlled zones, or 2) built-up air handler systems (non-unitary or nonpackaged HVAC equipment), or 3) hydronic or steam heating systems, or 4) hydronic cooling systems. Complex systems are NOT the following: unitary or packaged equipment listed in Tables 110.2-A, 110.2-B, 110.2-C, and 110.2-E, that each serve one zone, or two-pipe, heating only systems serving one or more zones.

COMPLIANCE APPROACH is any one of the allowable methods by which the design and construction of a building may be demonstrated to be in compliance with Part 6. The compliance approaches are the performance compliance approach and the prescriptive compliance approach. The requirements for each compliance approach are set forth in Section 100.0(e)2 of Part 6.

COMPLIANCE DATA EXCHANGE FILE is an Extensible Markup Language (XML) file that contains compliance data used to populate a Compliance Document. The Compliance Data Exchange File is part of the Compliance Registration Package.

COMPLIANCE DOCUMENT is any of the documents specified in Section 10-103(a) utilized to demonstrate compliance with Part 6 (i.e., Certificate of Compliance, Certificate of Installation, Certificate of Acceptance, and Certificate of Verification).

COMPLIANCE REGISTRATION PACKAGE means digitally signed or encrypted digital data that is transmitted to or from a Data Registry that contains the data required for registering a Compliance Document with a Data Registry, including the Compliance Data Exchange File. A commonly used method is the Zip file format, a data compression and archiving specification that is in the public domain. Files transmitted to or from a Data Registry using the Zip file format shall be password protected as described in JA7.6.3.2.7.

COMPLIANCE SOFTWARE is software that has been approved pursuant to Section 10-109 of Part 1.

CONDITIONED FLOOR AREA is the "conditioned floor area" as defined in Section 100.1(b) of Part 6.

CRRC-1 is the Cool Roof Rating Council document titled "Product Rating Program".

DATA REGISTRY is a web service with a user interface and database maintained by a Registration Provider that complies with the applicable requirements in Reference Joint Appendix JA7, with guidance from the Data Registry Requirements Manual, and provides for registration of residential or nonresidential compliance documentation used for demonstrating compliance with Part 6.

RESIDENTIAL DATA REGISTRY is a data registry that is maintained by a HERS Provider that provides for registration, when required by Part 6 of all residential compliance documentation and the nonresidential Certificate of Verification, and complies with the Data Maintenance requirements of Title 20, Chapter 4, Article 8, Section 1670 et seq.

NONRESIDENTIAL DATA REGISTRY is a data registry that is maintained by a Registration Provider approved by the Commission that provides for registration, when required by Part 6 of all nonresidential compliance documentation, excluding all Certificates of Acceptance recorded by an acceptance test technician certification provider (10-103.1 and 10-103.2). However, nonresidential data registries may not provide for registration of nonresidential Certificates of Verification.

DATA REGISTRY REQUIREMENTS MANUAL is a document that provides additional detailed guidance regarding the functional and technical aspects of the data registry requirements given in Joint Appendix JA7.

DOCUMENTATION AUTHOR is a person who prepares a Title 24 Part 6 compliance document that must subsequently be reviewed and signed by a responsible person in order to certify compliance with Part 6.

ENERGY BUDGET is the "energy budget" as defined in Section 100.1(b) of Part 6.

ENERGY COMMISSION is the California State Energy Resources Conservation and Development Commission.

ENFORCEMENT AGENCY is the city, county, or state agency responsible for issuing a building permit.

EXCEPTIONAL METHOD is a method for estimating the energy performance of building features that cannot be adequately modeled using existing Compliance Software and that is approved by the Executive Director.

EXECUTIVE DIRECTOR is the executive director of the Commission.

FIELD TECHNICIAN is a person who performs acceptance tests in accordance with the specifications in Reference Nonresidential Appendix NA7, and reports the results of the acceptance tests on the Certificate of Acceptance in accordance with the requirements of Section 10-103(a)4.

HERS is the California Home Energy Rating System as described in Title 20, Chapter 4, Article 8, Section 1670.

HERS PROVIDER is an organization that administers a home energy rating system as described in Title 20, Chapter 4, Article 8, Section 1670.

HERS PROVIDER DATA REGISTRY is a data registry maintained by a HERS provider in compliance with requirements per Title 20, Chapter 4, Article 8, Section 1670 et seq.

HERS RATER is a person who has been trained, tested, and certified by a HERS Provider to perform the field verification and diagnostic testing required for demonstrating compliance with the Part 6 as described in Title 20, Chapter 4, Article 8, Section 1670(i).

HVAC SYSTEM is the "HVAC system" as defined in Section 100.1(b) of Part 6.

MANUFACTURED DEVICE is the "manufactured device" as defined in Section 100.1(b) of Part 6.

NFRC 100 is the National Fenestration Rating Council document titled "NFRC 100: Procedure for Determining Fenestration Product U-factors." (2017) NFRC 100 includes procedures for the Component Modeling Approach (CMA) and site-built fenestration formerly included in a separate document, NFRC 100-SB.

NFRC 200 is the National Fenestration Rating Council document titled "NFRC 200: Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence." (2017),

NFRC 202 is the National Fenestration Rating Council document titled "NFRC 202: Procedures for Determining Translucent Fenestration Product Visible Transmittance at Normal Incidence." (2017).

NFRC 203 is the National Fenestration Rating Council document titled "NFRC 203: Procedure for Determining Visible Transmittance of Tubular Daylighting Devices." (2017),

NFRC 400 is the National Fenestration Rating Council document titled "NFRC 400: Procedure for Determining Fenestration Product Air Leakage." (2017).

PART 6 is Title 24, Part 6 of the California Code of Regulations.

PUBLIC ADVISER is the Public Adviser of the Commission.

R-VALUE is the measure of the thermal resistance of insulation or any material or building component expressed in ft^2-hr-°F/Btu.

RECORD DRAWINGS are drawings that document the as installed location and performance data on all lighting and space conditioning system components, devices, appliances and equipment, including but not limited to wiring sequences, control sequences, duct and pipe distribution system layout and sizes, space conditioning system terminal device layout and airflow rates, hydronic system and flow rates, and connections for the space conditioning system. Record drawings are sometimes referred to as "as built" drawings.

REFERENCE APPENDICES are the support document for the Building Energy Efficiency Standards and the ACM Approval Manuals. The document consists of three sections: the Reference Joint Appendices (JA), the Reference Residential Appendices (RA), and the Reference Nonresidential Appendices (NA) currently adopted by the Energy Commission.

REFERENCE JOINT APPENDICES are the Reference Joint Appendices currently adopted by the Energy Commission.

REFERENCE NONRESIDENTIAL APPENDICES are the Reference Nonresidential Appendices currently adopted by the Energy Commission.

REFERENCE RESIDENTIAL APPENDICES are the Reference Residential Appendices currently adopted by the Energy Commission.

REGISTERED COMPLIANCE DOCUMENT is a compliance document that has been submitted to a residential or nonresidential Data Registry for retention, verified as valid with an XML schema approved by the Commission, and has gone through the registration process so that the Registered Document displays all applicable electronic signatures as well as the Registration Provider's digital certificate and the document's unique registration number. The image of the registered document is accessible for printing or viewing by authorized users of the Data Registry. The registered document's unique visible registration number is appended onto the document image by the Data Registry.

REGISTRATION PROVIDER is an organization that administers a data registry service that conforms to the requirements in Reference Joint Appendix JA7.

STANDARD DESIGN BUILDING is a "Standard Design Building" as defined in Section 100.1(b) of Part 6.

NOTE: Authority: Sections 25402 and 25402.1, and 25213, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402 and 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

10-103 – PERMIT, CERTIFICATE, INFORMATIONAL, AND ENFORCEMENT REQUIREMENTS FOR DESIGNERS, INSTALLERS, BUILDERS, MANUFACTURERS, AND SUPPLIERS

(a) **Documentation.** For all buildings other than healthcare facilities, the following documentation is required to demonstrate compliance with Part 6. This documentation shall meet the requirements of Section 10-103(a) or alternatives approved by the Executive Director. Healthcare facilities shall instead comply with the applicable provisions of Chapter 7.

1. **Certificate of Compliance.** For all buildings, the Certificate of Compliance described in Section 10-103 shall be signed by the person who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design (*responsible person*); and submitted in accordance with Sections 10-103(a)1 and 10-103(a)2 to certify conformance with Part 6. If more than one person has responsibility for the building design, each person shall sign the Certificate of Compliance document(s) applicable to that portion of the design for which the person is responsible. Alternatively, the person with chief responsibility for the building design shall prepare and sign the Certificate of Compliance document(s) for the entire building design. Subject to the requirements of Sections 10-103(a)1 and 10-103(a)2, persons who prepare Certificate of Compliance documents (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. In accordance with applicable requirements of 10-103(a)1, the signatures provided by *responsible persons* and *documentation authors* shall be original signatures on paper documents or electronic signatures on electronic documents conforming to the electronic signature specifications in Reference Joint Appendix JA7.

   For all Nonresidential buildings, the Design Review Kickoff Certificate(s) of Compliance and the Construction Document Design Review Checklist Certificate(s) of Compliance shall be reviewed and signed by a licensed professional engineer or licensed architect, or a licensed contractor representing services performed by or under the direct supervision of a licensed engineer or architect, as specified in the provisions of Division 3 of the Business and Professions Code. For buildings less than 10,000 square feet, this signer may be the engineer or architect of record. For buildings greater than 10,000 square feet but less than 50,000 square feet, this signer shall be a qualified in-house engineer or architect with no other project involvement or a third-party engineer, architect, or contractor. For buildings greater than 50,000 square feet and all buildings with complex mechanical systems serving more than 10,000 square feet, this signer shall be a third-party engineer, architect, or contractor.

   A. All Certificate of Compliance documentation shall conform to a format and informational order and content approved by the Energy Commission.

      These documents shall:

      i. Identify the energy features, performance specifications, materials, components, and manufactured devices required for compliance with Part 6.

      ii. Identify the building project name and location. The building project name and location identification on the Certificate of Compliance shall be consistent with the building project name and location identification given on the other applicable building design plans and specifications submitted to the enforcement agency for approval with the building permit application.

      iii. Display the unique registration number assigned by the data registry if Section 10-103(a)1 requires the document to be registered.

      iv. Include a declaration statement to the effect that the building energy features, performance specifications, materials, components, and manufactured devices for the building design identified on the Certificate of Compliance indicate the building is in compliance with the

requirements of Title 24, Parts 1 and 6, and the building design features identified on the Certificate of Compliance are consistent with the building design features identified on the other applicable compliance documents, worksheets, calculations, plans, and specifications submitted to the enforcement agency for approval with the building permit application.

v. Be signed by the *documentation author* to certify the documentation is accurate and complete. When document registration is required by Section 10-103(a)1, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

vi. Be signed by the *responsible person* eligible under Division 3 of the Business and Professions Code to accept responsibility for the design to certify conformance with Part 6. When document registration is required by Section 10-103(a)1, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

B. For all low-rise residential buildings for which compliance requires HERS field verification, the person(s) responsible for the Certificate(s) of Compliance shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to a HERS provider data registry in compliance with Title 20, Chapter 4, Article 8, Section 1670 et seq. The submittals to the HERS provider data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Compliance documents and their associated Compliance Registration Packages that are registered and retained by a HERS provider data registry shall also be automatically transmitted by the data registry in compliance with Title 20, Chapter 4, Article 8, Section 1670 et seq, to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

C. For alterations to existing residential buildings for which HERS field verification is not required, including but not limited to water heater and window replacements, and for additions to existing residential buildings that are less than 300 square feet for which HERS field verification is not required, the enforcement agencies may at their discretion not require any Certificate of Compliance documentation, or may develop simplified Certificate of Compliance documentation for demonstrating compliance with the Standards.

Exemptions from submitting compliance documentation shall not be deemed to grant authorization for any work to be done in any manner in violation of this code or other provisions of law.

D. Contingent upon approval of data registry(s) by the Commission, all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person(s) responsible for the Certificate(s) of Compliance shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to a data registry approved by the Commission. The submittals to the approved data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Compliance documents and their associated Compliance Registration Packages that are registered and retained by an approved data registry shall also be automatically transmitted by the data registry to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

2. **Application for a building permit.** Each application for a building permit subject to Part 6 shall contain at least one copy of the documents specified in Sections 10-103(a)2A, 10-103(a)2B, and 10-103(a)2C.

A. For all newly constructed buildings, additions, alterations, or repairs regulated by Part 6 the applicant shall submit the applicable Certificate(s) of Compliance to the enforcement agency for approval. The

certificate(s) shall conform to the requirements of Section 10-103(a)1, and shall be approved by the local enforcement agency, in accordance with all applicable requirements of Section 10-103(d), by stamp or authorized signature prior to issuance of a building permit. A copy of the Certificate(s) of Compliance shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

For alterations to existing residential buildings for which HERS field verification is required, and when the enforcement agency does not require building design plans to be submitted with the application for a building permit, the applicable Certificate of Compliance documentation specified in Section 10-103(a)1 is not required to be approved by the enforcement agency prior to issuance of a building permit, but shall be approved by the enforcement agency prior to final inspection of the dwelling unit, and shall be made available to the enforcement agency for all applicable inspections, or made available for viewing on an approved data registry.

When the enforcement agency requires building design plans to be submitted with the application for a building permit, the applicable Certificate of Compliance documents shall be incorporated into the building design plans. When Section 10-103(a)1 requires document registration, the certificate(s) that are incorporated into the building design plans shall be copies of the registered Certificate of Compliance documents from a HERS provider data registry, or a data registry approved by the Commission.

B. When the enforcement agency requires building design plans and specifications to be submitted with the application for a building permit, the plans shall conform to the specifications for the features, materials, components, and manufactured devices identified on the Certificate(s) of Compliance, and shall conform to all other applicable requirements of Part 6. Plans and specifications shall be submitted to the enforcement agency for any other feature, material, component, or manufactured device that Part 6 requires be indicated on the building design plans and specifications. Plans and specifications submitted with each application for a building permit for Nonresidential buildings, High-rise Residential buildings and Hotels and Motels shall provide acceptance requirements for code compliance of each feature, material, component or manufactured device when acceptance requirements are required under Part 6. Plans and specifications for Nonresidential buildings, High-rise Residential buildings and Hotels and Motels shall require, and indicate with a prominent note on the plans, that within 90 days after the Enforcement Agency issues a permanent final occupancy permit, record drawings be provided to the building owner.

   For all buildings, if the specification for a building design feature, material, component, or manufactured device is changed before final construction or installation, such that the building may no longer comply with Part 6 the building must be brought back into compliance, and so indicated on amended plans, specifications, and Certificate(s) of Compliance that shall be submitted to the enforcement agency for approval. Such characteristics shall include the efficiency (or other characteristic regulated by Part 6) of each building design feature, material, component, or device.

C. The enforcement agency shall have the authority to require submittal of any supportive documentation that was used to generate the Certificate(s) of Compliance, including but not limited to the electronic input file for the compliance software tool that was used to generate performance method Certificate(s) of Compliance; or any other supportive documentation that is necessary to demonstrate that the building design conforms to the requirements of Part 6.

3. **Certificate of Installation.** For all buildings, the person in charge of the construction or installation, who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the construction or installation of features, materials, components, or manufactured devices regulated by Part 6 or the Appliance Efficiency Regulations (*responsible person*) shall sign and submit Certificate of Installation documentation as specified in Section 10-103(a)3 to certify conformance with Part 6. If more than one person has responsibility for the construction or installation, each person shall sign and submit the Certificate of Installation documentation applicable to the portion of the construction or installation for which they are responsible; alternatively, the person with chief responsibility for the construction or

installation shall sign and submit the Certificate of Installation documentation for the entire construction or installation scope of work for the project. Subject to the requirements of Section 10-103(a)3, persons who prepare Certificate of Installation documentation (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. In accordance with applicable requirements of 10-103(a)3, the signatures provided by *responsible persons* and *documentation authors* shall be original signatures on paper documents or electronic signatures on electronic documents conforming to the electronic signature specifications in Reference Joint Appendix JA7.

A. **Delegation of Signature Authority.** Except where prohibited by law, including but not limited to any requirements under Division 3 of the Business and Professions Code, the *Responsible Person* may delegate signature authority to third parties (*Authorized Representatives*) provided that there is a written agreement:

   i. Between the *Responsible Person* and the person to be designated as the *Authorized Representative*.

   ii. Specifying that the *Authorized Representative* may sign Certificates of Installation on behalf of the *Responsible Person*.

   iii. Specifying that the legal responsibility for construction or installation in the applicable classification for the scope of work specified on the Certificate of Installation document(s) remains with the Responsible Person.

   iv. That is signed by both the *Responsible Person* and the *Authorized Representative*.

   v. That is retained by the HERS Provider to which all compliance documents are submitted for the building to which the Certificate of Installation documentation pertains.

   vi. That is maintained in the HERS Provider Data Registry such that it is accessible for verification by, included but not limited to, the Energy Commission and enforcement agencies.

B. **Format.** All Certificate of Installation documentation shall conform to a format and informational order and content approved by the Energy Commission.

   These documents shall:

   i. Identify the features, materials, components, manufactured devices, and system performance diagnostic results required to demonstrate compliance with Part 6 and the Appliance Efficiency Regulations.

   ii. State the number of the building permit under which the construction or installation was performed.

   iii. Display the unique registration number assigned by the data registry if Section 10-103(a)3 requires the document to be registered.

   iv. Include a declaration statement indicating that the constructed or installed features, materials, components or manufactured devices (the installation) identified on the Certificate of Installation conforms to all applicable codes and regulations, and the installation conforms to the requirements given on the plans and specifications approved by the enforcement agency.

   v. Be signed by the *documentation author* to certify the documentation is accurate and complete. When document registration is required by Section 10-103(a)3, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

   vi. Be signed by the *Responsible Person* eligible under Division 3 of the Business and Professions Code to accept responsibility for construction or installation in the applicable classification for the scope of work specified on the Certificate of Installation document(s), or shall be signed by their *Authorized Representative*. When document registration is required by Section 10-103(a)3, the

signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

C. For all low-rise residential buildings, the person(s) responsible for the Certificate(s) of Installation, or their *Authorized Representative(s)*, shall submit the following Certificate of Installation documentation and their associated Compliance Registration Packages that is applicable to the building to a HERS provider data registry for registration and retention in accordance with Title 20, Chapter 4, Article 8, Section 1670 et. seq. and procedures specified in Reference Residential Appendix RA2:

   i. All Certificates of Installation for which compliance requires HERS field verification.

   ii. All other Certificates of Installation, except those exempted by the Energy Commission.

   The submittals to the HERS provider data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

   Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Installation documents and their associated Compliance Registration Packages that are registered and retained by a HERS provider data registry in compliance with Title 20, Chapter 4, Article 8, Section 1670 et seq shall also be automatically transmitted by the data registry to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

D. For alterations to existing residential buildings for which HERS field verification is not required, including but not limited to water heater and window replacements, and for additions to existing residential buildings that are less than 300 square feet for which HERS field verification is not required, the enforcement agencies may, at their discretion, not require any Certificate of Installation documentation, or may develop simplified Certificate of Installation documentation for demonstrating compliance with the Standards.

   Exemptions from submitting compliance documentation shall not be deemed to grant authorization for any work to be done in any manner in violation of this code or other provisions of law.

E. Contingent upon approval of data registry(s) by the Commission, all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person(s) responsible for the Certificate(s) of Installation, except those documents exempted by the Energy Commission, shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to a data registry approved by the Commission. The submittals to the approved data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

   Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Installation documents and their associated Compliance Registration Packages that are registered and retained by an approved data registry shall also be automatically transmitted by the data registry to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

F. **Availability.** For all buildings, a copy of the Certificate(s) of Installation shall be posted, or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry, and shall be made available to the enforcement agency for all applicable inspections. When document registration is required by Section 10-103(a)3, registered copies of the Certificate(s) of Installation from a HERS provider data registry or a data registry approved by the Commission shall be posted or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Certificate(s) of Installation to be posted upon completion of that portion. A copy of the Certificate(s) of Installation shall be included with the

documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

4. **Certificate of Acceptance.** For all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person in charge of the acceptance testing, who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the applicable scope of system design, or construction, or installation of features, materials, components, or manufactured devices regulated by Part 6 or the Appliance Efficiency Regulations (*responsible person*), shall sign and submit all applicable Certificate of Acceptance documentation in accordance with Section 10-103(a)4 and Reference Nonresidential Appendix NA7 to certify conformance with Part 6. If more than one person has responsibility for the acceptance testing, each person shall sign and submit the Certificate of Acceptance documentation applicable to the portion of the construction or installation, for which they are responsible; alternatively, the person with chief responsibility for the system design, construction or installation, shall sign and submit the Certificate of Acceptance documentation for the entire construction or installation scope of work for the project. Subject to the requirements of Section 10-103(a)4, persons who prepare Certificate of Acceptance documentation (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. Persons who perform acceptance test procedures in accordance with the specifications in Reference Nonresidential Appendix NA7, and report the results of the acceptance tests on the Certificate of Acceptance (*field technicians*) shall sign a declaration statement on the documents they submit to certify the information provided on the documentation is true and correct. In accordance with applicable requirements of Section 10-103(a)4, the signatures provided by *responsible persons*, *field technicians*, and *documentation authors* shall be original signatures on paper documents or electronic signatures on electronic documents conforming to the electronic signature specifications in Reference Joint Appendix JA7.

   A. All Certificate of Acceptance documentation shall conform to a format and informational order and content approved by the Energy Commission.

      These documents shall:

      i. Identify the features, materials, components, manufactured devices, and system performance diagnostic results required to demonstrate compliance with the acceptance requirements to which the applicant must conform as indicated in the plans and specifications submitted under Section 10-103(a)2, and as specified in Reference Nonresidential Appendix NA7.

      ii. State the number of the building permit under which the construction or installation was performed.

      iii. Display the unique registration number assigned by the data registry if Section 10-103(a)4 requires the document to be registered.

      iv. Include a declaration statement indicating that the features, materials, components or manufactured devices identified on the Certificate of Acceptance conform to the applicable acceptance requirements as indicated in the plans and specifications submitted under Section 10-103(a), and with applicable acceptance requirements and procedures specified in the Reference Nonresidential Appendix NA7, and confirms that Certificate(s) of Installation described in Section 10-103(a)3 has been completed and is posted or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry.

      v. Be signed by the *documentation author* to certify the documentation is accurate and complete. When document registration is required by Section 10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

      vi. Be signed by the *field technician* who performed the acceptance test procedures and reported the results on the Certificate of Acceptance. When document registration is required by Section

10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

vii. Be signed by the *responsible person* in charge of the acceptance testing who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the system design, construction or installation in the applicable classification for the scope of work identified on the Certificate of Acceptance, or shall be signed by their authorized representative. When document registration is required by Section 10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

B. Contingent upon approval of data registry(s) by the Commission, for all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person(s) responsible for the Certificate(s) of Acceptance shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to a data registry approved by the Commission, excluding all Certificates of Acceptance recorded by an acceptance test technician certification provider (10-103.1 and 10-103.2). The submittals to the approved data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Acceptance documents and their associated Compliance Registration Packages that are registered and retained by an approved data registry shall also be automatically transmitted by the data registry, to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

C. A copy of the Certificate(s) of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Certificate(s) of Acceptance to be posted upon completion of that portion. A copy of the Certificate(s) of Acceptance shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

5. **Certificate of Field Verification and Diagnostic Testing (Certificate of Verification).** For all buildings for which compliance requires HERS field verification, a certified HERS Rater shall conduct all required HERS field verification and diagnostic testing in accordance with applicable procedures specified in Reference Appendices RA2, RA3, NA1, and NA2. All applicable Certificate of Verification documentation shall be completed, signed, and submitted by the certified HERS Rater who performed the field verification and diagnostic testing services (*responsible person*) in accordance with the requirements of Section 10-103(a)5, and Reference Appendices RA2, and NA1, to certify conformance with Part 6. If more than one rater has responsibility for the HERS verification for the building, each rater shall sign and submit the Certificate of Verification documentation applicable to the portion of the building for which they are responsible. Subject to the requirements of Section 10-103(a)5, persons who prepare Certificate of Verification documentation (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. The signatures provided by *responsible persons* and *documentation authors* shall be electronic signatures on electronic documents.

A. **Format.** All Certificate of Verification documentation shall conform to a format and informational order and content approved by the Energy Commission.

These documents shall:

i. Identify the installed features, materials, components, manufactured devices, or system performance diagnostic results that require HERS verification for compliance with Part 6 as specified on the Certificate(s) of Compliance for the building.

ii. State the number of the building permit under which the construction or installation was performed,

iii. Display the unique registration number assigned by the HERS provider data registry, and provide any additional information required by Reference Appendices RA2, RA3, NA1, and NA2.

iv. Include a declaration statement indicating that the installed features, materials, components or manufactured devices requiring HERS verification conform to the applicable requirements in Reference Appendices RA2, RA3, NA1, NA2, and the requirements specified on the Certificate(s) of Compliance approved by the local enforcement agency, and confirms the same features, materials, components or manufactured devices are identified on the applicable Certificate(s) of Installation signed and submitted by the person(s) responsible for the construction or installation as described in Section 10-103(a)3.

v. Be signed by the *documentation author* to certify the documentation is accurate and complete. The signatures shall be electronic signatures on electronic documents in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

vi. Be signed by the HERS Rater who performed the field verification and diagnostic testing services (*responsible person)*. The signatures shall be electronic signatures on electronic documents in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

B. For all buildings for which compliance requires HERS field verification, the certified HERS Rater responsible for the Certificate(s) of Verification shall submit the Certificates and their associated Compliance Registration Packages for registration and retention to a HERS provider data registry in accordance with the applicable procedures in Reference Appendices RA2 and NA1, and in compliance with Title 20, Chapter 4, Article 8, Section 1670 et seq.

The submittals to the HERS provider data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Verification documents and their associated Compliance Registration Packages that are registered and retained by a HERS provider data registry in accordance with Title 20, Chapter 4, Article 8, Section 1670 et. seq shall also be automatically transmitted by the data registry, to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

C. **Availability.** For all buildings, a copy of the registered Certificate(s) of Verification shall be posted, or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Certificate(s) of Verification to be posted upon completion of that portion. A copy of the registered Certificate(s) of Verification shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

EXCEPTION to Section 10-103(a): Enforcing agencies may exempt nonresidential buildings that have no more than 1,000 square feet of conditioned floor area in the entire building and an occupant load of 49 persons or less from the documentation requirements of Section 10-103(a), provided a statement of compliance with Part 6 is submitted and signed by a licensed engineer or the licensed architect with chief responsibility for the design.

(b) **Compliance, Operating, Maintenance, and Ventilation Information to be provided by Builder.**

1. **Compliance information.**

A. For low-rise residential buildings, at final inspection, the enforcement agency shall require the builder to leave in the building, copies of the completed, signed, and submitted compliance documents for

the building owner at occupancy. For low-rise residential buildings, such information shall, at a minimum, include copies of all Certificate of Compliance, Certificate of Installation, and Certificate of Verification documentation submitted. These documents shall be in paper or electronic format and shall conform to the applicable requirements of Section 10-103(a).

B. For nonresidential buildings, high-rise residential buildings and hotels and motels, at final inspection, the enforcement agency shall require the builder to leave in the building, copies of the completed, signed, and submitted compliance documents for the building owner at occupancy. For nonresidential buildings, high-rise residential buildings and hotels and motels, such information shall include copies of all Certificate of Compliance, Certificate of Installation, Certificate of Acceptance and Certificate of Verification documentation submitted. These documents shall be in paper or electronic format and shall conform to the applicable requirements of Section 10-103(a).

2. **Operating information.** At final inspection, the enforcement agency shall require the builder to leave in the building, for the building owner at occupancy, operating information for all applicable features, materials, components, and mechanical devices installed in the building. Operating information shall include instructions on how to operate the features, materials, components, and mechanical devices correctly and efficiently. The instructions shall be consistent with specifications set forth by the Executive Director. For low-rise residential buildings, such information shall be contained in a folder or manual which provides all information specified in Section 10-103(b). This operating information shall be in paper or electronic format.

   For dwelling units, buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for operating the feature, material, component or mechanical device installed in the building. This operating information shall be in paper or electronic format.

3. **Maintenance information.** At final inspection, the enforcement agency shall require the builder to leave in the building, for the building owner at occupancy, maintenance information for all features, materials, components, and manufactured devices that require routine maintenance for efficient operation. Required routine maintenance actions shall be clearly stated and incorporated on a readily accessible label. The label may be limited to identifying, by title and/or publication number, the operation and maintenance manual for that particular model and type of feature, material, component or manufactured device. For low-rise residential buildings, this information shall include a schedule of all interior luminaires and lamps installed to comply with Section 150.0(k).

   For dwelling units, buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for maintaining the feature, material, component or mechanical device installed in the building. This information shall be in paper or electronic format.

4. **Ventilation information.**

   A. For low-rise and high-rise residential buildings, the enforcement agency shall require the builder to leave the following information in the building, for the building owner at occupancy:

      i. A description of the quantities of outdoor air that the whole-dwelling unit ventilation system(s) are designed to provide to the building's conditioned space, and instructions for proper operation and maintenance of the ventilation system.

      ii. Instructions for proper operation and maintenance of local exhaust systems, including instructions for conditions for which any occupant-controlled systems such as kitchen range hoods and bathroom exhaust fans should be used.

      iii. For systems in buildings or tenant spaces that are not individually owned and operated by the dwelling unit occupants, the building's owner or their representative shall provide a copy of the ventilation system information to dwelling occupants at the beginning of their occupancy. For systems in buildings or tenant spaces that are centrally operated, all applicable ventilation system

information shall be provided to the person(s) responsible for operating and maintaining the feature, material, component or mechanical ventilation device installed in the building. This information shall be in paper or electronic format.

B. For nonresidential buildings, hotels, and motels, the enforcement agency shall require the builder to provide the building owner at occupancy a description of the quantities of outdoor and recirculated air that the ventilation systems are designed to provide to each area. For buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for operating and maintaining the feature, material, component or mechanical device installed in the building. This information shall be in paper or electronic format.

(c) **Equipment Information to be Provided by Manufacturer or Supplier.** The manufacturer or supplier of any manufactured device shall, upon request, provide to building designers and installers information about the device. The information shall include the efficiency (and other characteristics regulated by Part 6). This information shall be in paper or electronic format.

(d) **Enforcement Agency Requirements.**

1. **Permits.** An enforcement agency shall not issue a building permit for any construction unless the enforcement agency determines in writing that the construction is designed to comply with the requirements of Part 6 that are in effect on the date the building permit was applied for. The enforcement agency determination shall confirm that the documentation requirements of Sections 10-103(a)1 and 10-103(a)2 have been met.

   If a building permit has been previously issued, there has been no construction under the permit, and the permit has expired, the enforcement agency shall not issue a new permit unless the enforcement agency determines in writing that the construction is designed to comply with the requirements of Part 6 in effect on the date the new permit is applied for. The enforcement agency determination shall confirm that the documentation requirements of Sections 10-103(a)1 and 10-103(a)2 have been met.

   "Determines in writing" includes, but is not limited to, approval of a building permit with a stamp normally used by the enforcement agency.

2. **Inspection.** The enforcement agency shall inspect newly constructed buildings and additions, and alterations to existing buildings to determine whether the construction or installation is consistent with the agency's approved plans and specifications, and complies with Part 6. Final certificate of occupancy shall not be issued until such consistency and compliance is verified. For Occupancy Group R-3, final inspection shall not be complete until such consistency and compliance is verified.

   Such verification shall include determination that:

   A. All installed features, materials, components or manufactured devices, regulated by the Appliance Efficiency Regulations or Part 6 are indicated, when applicable, on the Certificate(s) of Installation, Certificate(s) of Acceptance and Certificate(s) of Verification, and are consistent with such features, materials, components or manufactured devices given in the plans and specifications and the Certificate(s) of Compliance approved by the local enforcement agency.

   B. All required Certificates of Installation are posted, or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry, and are made available to the enforcement agency for all applicable inspections, and that all required Certificates of Installation conform to the specifications of Section 10-103(a)3.

   C. All required Certificates of Acceptance are posted, or made available with the building permit(s) issued for the building, and are made available to the enforcement agency for all applicable inspections, and that all required Certificates of Acceptance conform to the specifications of Section 10-103(a)4.

   D. All required Certificates of Verification are posted, or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry, and are made

available to the enforcement agency for all applicable inspections, and that all required Certificates of Verification conform to the specifications of Section 10-103(a)5.

NOTE: Authority: Section 25402, 25402.1, Public Resources Code. Reference: Section 25402, Public Resources Code.

10-103.1 – NONRESIDENTIAL LIGHTING CONTROLS ACCEPTANCE TEST TRAINING AND CERTIFICATION

(a) **Scope.** The requirements of this section apply to Acceptance Test Technicians (ATTs), Acceptance Test Employers (ATEs), and Acceptance Test Technician Certification Providers (ATTCPs) that perform work relating to the acceptance testing of nonresidential lighting systems and controls.

(b) **Industry Certification Threshold.** ATT and ATE certification requirements shall take effect when the Energy Commission finds that each of the following conditions are met. Until such time that Sections 10-103.1(b)1 and 10-103.1(b)2 are met, or if, subsequent to being met, they cease to be maintained, Field Technicians may complete acceptance testing as specified in Part 6, Section 130.4 and 160.5(e) without meeting the certification requirements specified in Part 1, Section 10-103.1.

1. **Number of Certified ATTs.** There shall be no less than 300 ATTs certified to perform the lighting acceptance tests in Building Energy Efficiency Standards, Section 130.4 and 160.5(e). The number of certified ATTs shall be submitted to the Energy Commission in the annual reports prepared by ATTCPs, as specified in Section 10-103.1(d)1.

2. **Industry Coverage by ATTCPs.** ATTCPs approved by the Energy Commission, in their entirety, shall provide reasonable access to certification to the following industry groups: electrical contractors, certified general electricians, licensed architects, professional engineers, controls installation and startup contractors and certified commissioning professionals who have verifiable training, experience and expertise in lighting controls and electrical systems. The Energy Commission will determine whether reasonable access to certification is provided by considering factors such as certification costs commensurate with the complexity of the training being provided, certification marketing materials, prequalification criteria, class location and availability, and curriculum.

(c) **Qualifications and Approval of ATTCPs.** ATTCPs shall submit a written application to the Energy Commission with a summary and the related background documents to explain how the following criteria and procedures have been met:

1. **Organizational Structure.** ATTCPs shall provide written explanations of the organization type, by-laws, and ownership structure. ATTCPs shall explain in writing how their certification program meets the qualification requirements of Title 24, Part 1, Section 10-103.1(c). ATTCPs shall explain in their application to the Energy Commission their organizational structure and their procedures for independent oversight, quality assurance, supervision and support of the acceptance test training and certification processes.

2. **Certification of ATEs.** The ATTCPs shall provide written explanations of their certification and oversight of ATEs. This explanation shall document how the ATTCP ensures that ATEs are providing quality control and appropriate supervision and support for their ATTs.

   A. **Recertification.** The ATTCP shall recertify all ATEs prior to the implementation of each adopted update to the Building Energy Efficiency Standards as these updates affect the acceptance test requirements. Recertification requirements and procedures shall only apply to those specific elements that are new or modified in future updates to Building Energy Efficiency Standards.

3. **Training and Certification Procedures.** ATTCPs shall include with their application a complete copy of all training and testing procedures, manuals, handbooks and materials. ATTCPs shall explain in writing how their training and certification procedures include, but are not limited to, the following:

A. **Training Scope.** The scope of the training shall include both hands-on experience and theoretical training to certify competency in the technologies and skills necessary to perform the acceptance tests.

B. **ATT Training.**

i. **Curricula.** ATTCP training curricula for ATTs shall include, but not be limited to, the analysis, theory, and practical application of the following:

a. Lamp and ballast systems;

b. Line voltage switching controls;

c. Low voltage switching controls;

d. Dimming controls;

e. Occupancy sensors;

f. Photosensors;

g. Demand responsive signal inputs to lighting control systems;

h. Building Energy Efficiency Standards required lighting control systems;

i. Building Energy Efficiency Standards required lighting control system-specific analytical/problem solving skills;

j. Integration of mechanical and electrical systems for Building Energy Efficiency Standards required lighting control installation and commissioning;

k. Safety procedures for low-voltage retrofits (<50 volts) to control line voltage systems (120 to 480 volts);

l. Accurate and effective tuning, calibration, and programming of Building Energy Efficiency Standards required lighting control systems;

m. Measurement of illuminance according to the Illuminating Engineering Society's measurement procedures as provided in the IES Lighting Handbook, 10th Edition, 2011;

n. Building Energy Efficiency Standards lighting controls acceptance testing procedures; and

o. Building Energy Efficiency Standard**s** acceptance testing compliance documentation for lighting controls.

ii. **Hands-on training.** The ATTCP shall describe in its application the design and technical specifications of the laboratory boards, equipment and other elements that will be used to meet the hands-on requirements of the training and certification.

iii. **Prequalification.** Participation in the certification program shall be limited to persons who have at least three years of professional experience and expertise in lighting controls and electrical systems as determined by the Lighting Controls ATTCPs.

NOTE: ATTCPs may specify additional qualifications for participation in their programs, such as limiting participation to persons that are not currently listed as "decertified" by another ATTCP.

iv. **Instructor to Trainee Ratio.** The ATTCP shall document in its application to the Energy Commission why its instructor to trainee ratio is sufficient to ensure the integrity and efficacy of the curriculum and program based on industry standards and other relevant information.

v. **Tests.** The ATTCP shall describe the written and practical tests used to demonstrate each certification applicant's competence in all specified subjects. The ATTCPs shall retain all results of these tests for five years from the date of the test.

vi. **Recertification.** The ATTCP shall recertify all ATTs prior to the implementation of each adopted update to the Building Energy Efficiency Standards when these updates affect the acceptance test requirements. Recertification requirements and procedures shall only apply to those specific elements that are new or modified in future updates to Building Energy Efficiency Standards. The ATTCP shall develop recertification training curricula for ATTs consistent with training requirements in Sections 10-103.1(c)3A and 10-103.1(c)3B, and shall submit the proposed recertification training curricula to the Energy Commission for review and approval in the update report required under Section 10-103.1(d)2.

C. **ATE Training.** Training for ATEs shall consist of a single class or webinar consisting of at least four hours of instruction that covers the scope and process of the acceptance tests in Building Energy Efficiency Standards, Section 130.4 and 160.5(e).

D. **Complaint Procedures.** The ATTCP shall describe in its applications to the Energy Commission procedures for accepting and addressing complaints regarding the performance of any ATT or ATE certified by the ATTCP, and explain how building departments and the public will be notified of these proceedings.

E. **Decertification Procedures.** The ATTCP shall describe in its applications to the Energy Commission procedures for revoking their certification of ATTs and ATEs based upon poor quality or ineffective work, failure to perform acceptance tests, falsification of documents, failure to comply with the documentation requirements of these regulations or other specified actions that justify decertification. The ATTCP shall also describe its general procedures for decertified ATTs or ATEs seeking to regain their certification status, including eligibility requirements for recertification (if any).

F. **Quality Assurance and Accountability.** The ATTCP shall describe in its application to the Energy Commission its procedures for conducting quality assurance and accountability activities, including but not limited to the following:

i. The ATTCP shall include quality assurance and accountability measures, including but not limited to independent oversight of the certification materials, processes and procedures, visits to building sites where certified technicians are completing acceptance tests, certification process evaluations, building department surveys to determine acceptance testing effectiveness, and expert review of the training curricula developed for Building Energy Efficiency Standards, Section 130.4 and 160.5(e).

ii. The ATTCP shall review a random sample of no less than 1 percent of each ATT's completed compliance forms, and shall perform randomly selected on-site audits of no less than 1 percent of each ATT's completed acceptance tests. Independent oversight may be demonstrated by accreditation under the ISO/IEC 17024 standard.

G. **Certification Identification Number and Verification of ATT and ATE Certification Status.** The ATTCP shall describe in its application to the Energy Commission its procedures for recording, tracking, and communicating certification status, including but not limited to the following:

i. Upon certification of an ATT or ATE, the ATTCP shall issue a unique certification identification number to the ATT or ATE.

ii. The ATTCP shall maintain an accurate public record of the certification status for all ATTs and ATEs that the ATTCP has certified, including any ATTs or ATEs who have been decertified as specified in Section 10-103.1(c)3E.

iii. The ATTCP shall provide verification of current ATT certification status upon request to authorized document Registration Provider personnel or enforcement agency personnel to determine the ATT's eligibility to sign Certificate of Acceptance documentation according to all applicable requirements in Sections 10-103.1, 10-102, 10-103(a)4, and the Reference Joint Appendix JA7.

H. **Electronic Database System**. The ATTCP shall maintain, or by suitable contractual requirements cause to be maintained, an electronic database system approved by the Energy Commission. The electronic database system shall be capable of all the following:

i. Support all activities for the ATTCP to comply with its quality assurance program as required by Section 10-103.1(c)3F.

ii. For no less than five years, record and preserve all certificates of acceptance offered for certification by the ATTCP and as performed by its own certified ATTs.

iii. Allow the transmission of electronic copies of each completed certificate of acceptance to the ATT that performed the test, the ATE associated with that ATT, or both.

a. Each page of each certificate of acceptance shall bear the logo of the ATTCP or other identifying insignia as approved by the Energy Commission.

b. The electronic copy shall be capable of being printed.

c. The ATTCP may apply to the Energy Commission for approval to use alternative compliance documents that differ from those approved for use by the Energy Commission but must demonstrate that these alternative compliance documents do not differ in format, informational order, or content from approved compliance documents.

iv. Provide a means of verifying any certificate of acceptance to the enforcement agency having jurisdiction as identified on the certificate of acceptance.

v. Provide the Energy Commission with any of the following project data or documents upon request: project address, permit numbers, acceptance test technician and acceptance test employee certification numbers, certificates of acceptance, compliance forms, installation forms, and record of quality assurance review. The Energy Commission may adopt an Application Programming Interface (API) for providing data electronically. Within one year of development of an API, the ATTCP's electronic database system shall have the ability to transfer project data to the Energy Commission through the API upon completion of the project or at established intervals no longer than monthly.

I. Compliance Document Recording and Repository Reporting Requirement:

i. The ATTCP shall record all certificates of compliance (Section 10-103(a)1), certificates of installation (Section 10-103(a)3), and certificates of acceptance (Section 10-103(a)4) associated with any acceptance test specified in Part 6, Section 130.4 and 160.5(e).

ii. Contingent upon Energy Commission approval of the threshold (Section 10-103.1(b)) and upon availability and approval of an electronic document repository by the Executive Director, the ATTCP shall submit monthly data transfer packets to the Energy Commission to an electronic document repository for retention consistent with Energy Commission instructions.

(d) **Requirements for ATTCPs to Provide Regular Reports.** The ATTCP shall provide the following regular reports to the Energy Commission:

1. **Annual Report.** The ATTCP shall provide an annual report to the Energy Commission that includes the following:

A. A summary of the certification services provided over the reporting period, including the total number of Acceptance Test Technicians and Employers certified by the ATTCP during the reporting period and to date.

B. A summary of all actions taken against any ATT or ATE as a result of the complaint or quality assurance procedures described by the ATTCP as required under Section 10-103.1(c)3D and 10-103.1(c)3F.

C. A summary of the quality assurance and accountability activities conducted over the reporting period, including the compliance forms reviewed and the on-site audits performed as required under Section 10-103.1(c)3Fii during the reporting period and to date.

D. A summary of the number and type of acceptance tests performed in each local jurisdiction over the reporting period and to date.

E. A signed certification to the Energy Commission that the ATTCP continues to meet the requirements of Section 10-103.1.

2. **Update Report**. The ATTCP shall have no less than six months following the adoption of an update to the Building Energy Efficiency Standards to prepare an Update Report. The ATTCP shall submit an Update Report to the Energy Commission no less than six months prior to the effective date of any newly adopted update to the Building Energy Efficiency Standards. The ATTCP shall report to the Energy Commission what application amendments are proposed, to address changes to the Building Energy Efficiency Standards or to ensure training is reflective of the variety of lighting controls that are currently encountered in the field. All required update reports shall contain a signed certification that the ATTCP continues to meet the requirements of Section 10-103.1. Update reports shall be approved through the Amendment Process provided under Section 10-103.1(f).

All required reports shall contain a signed certification that the ATTCP has met all requirements for this program.

(e) **Application Review and Determination.** The Energy Commission shall review ATTCP applications according to the criteria and procedures in Section 10-103.1(c) to determine if such providers meet the specified requirements for providing acceptance testing certification services.

1. Energy Commission staff will review and validate all information received on ATTCP applications, and determine whether the application is complete and contains sufficient information to be evaluated by staff. Complete applications shall be evaluated by staff based on their contents.

2. The Executive Director may require that the applicant provide additional information as required by staff to fully evaluate the ATTCP application.

3. The Executive Director shall provide a copy of the staff evaluation to interested persons and provide a reasonable opportunity for public comment.

4. The Executive Director shall issue a written recommendation that the Energy Commission designate the applicant as an authorized ATTCP or deny the application.

5. The Energy Commission shall make a final decision on the application at a publicly noticed hearing.

(f) **Amendment Process.**

The ATTCP may amend a submitted or approved application, as follows:

1. **Amendment Scope.**

A. **Nonsubstantive Changes.** A nonsubstantive change is a change that does not substantively alter the requirements of the application materials for the ATTCP, ATT, or ATE. For amendments making only nonsubstantive changes, the ATTCP shall submit the following:

i. A letter describing the change to the Energy Commission as an addendum to the application;

ii. A replacement copy of the affected sections of the ATTCP application with the changes incorporated; and

iii. A copy of the affected sections of the ATTCP application showing the changes in underline and strikeout format.

B. **Substantive Changes.** A substantive change is a change that substantively alters the requirements of the application materials for the ATTCP, ATT, or ATE. For amendments making any substantive changes, the ATTCP shall submit the following:

i. A document describing the scope of the change to the application, the reason for the change and the potential impact to the ATTCP, ATT, and ATE as an addendum to the application;

ii. A replacement copy of the affected sections of the ATTCP application with the changes incorporated; and

iii. A copy of the affected sections of the ATTCP application showing the changes in underline and strikeout format.

2. **Amendment Review.** Amendments submitted prior to approval of an ATTCP application shall be included in the application's Application Review and Determination process specified in Section 10-103.1(e).

Amendments submitted after approval of an ATTCP's application that contain only nonsubstantive changes shall be reviewed by the Executive Director for consistency with Section 10-103.1. Amendments determined to be consistent with this Section shall be incorporated into the approval as errata.

Amendments submitted after approval of an ATTCP's application that contain any substantive changes shall be subject to the Application Review and Determination process specified in Section 10-103.1(e). If the Energy Commission finds that the amended application does not meet the requirements of Section 10-103.1, then the ATTCP shall either abide by the terms of their previously approved application or have their approval suspended.

(g) **Review by the Energy Commission.**

If the Energy Commission determines there is a violation of these regulations or that an ATTCP is no longer providing adequate certification services, the Energy Commission may revoke the authorization of the ATTCP pursuant to Section 1230 et seq. of Title 20 of the California Code of Regulations.

NOTE: Authority: Sections 25402, 25402.1, 25213, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

10-103.2 – NONRESIDENTIAL MECHANICAL ACCEPTANCE TEST TRAINING AND CERTIFICATION

(a) **Scope.** The requirements of this section apply to Acceptance Test Technicians (ATTs), Acceptance Test Employers (ATEs), and Acceptance Test Technician Certification Providers (ATTCPs) that perform work relating to the acceptance testing of nonresidential mechanical systems and controls.

(b) **Industry Certification Threshold.** ATT and ATE certification requirements shall take effect when the Energy Commission finds that each of the following conditions are met. Until such time that Sections 10-103.2(b)1 and 10-103.2(b)2 are met, or if, subsequent to being met, they cease to be maintained, Field Technicians may complete acceptance testing as specified in Section 120.5 and 160.3(d) without completing certification requirements specified in Part 1, Section 10-103.2.

1. **Number of Certified ATTs.**

   A. There shall be no less than 300 ATTs certified to perform the complete set of mechanical acceptance tests in Building Energy Efficiency Standards, Section 120.5 and 160.3(d), except as provided in Subsection 10-103.2(b)1B. The number of certified ATTs shall be submitted to the Energy Commission in the annual reports prepared by ATTCPs, as specified in Section 10-103.2(d)1.

   B. If there are less than 300 ATTs certified to perform all of the acceptance tests in Building Energy Efficiency Standards, Section 120.5 and 160.3(d), then there shall be at least 300 ATTs certified to complete the following tests:

      i. NA7.5.1 Outdoor Air Ventilation Systems
      ii. NA7.5.2 Constant Volume, Single Zone Unitary Air Conditioners and Heat Pumps
      iii. NA7.5.4 Air Economizer Controls
      iv. NA7.5.5 Demand Control Ventilation Systems
      v. NA 7.5.6 Supply Fan Variable Flow Controls
      vi. NA7.5.7, NA7.5.9 Hydronic System Variable Flow Controls
      vii. NA7.5.10 Automatic Demand Shed Controls

2. **Industry Coverage by ATTCPs.** ATTCPs approved by the Energy Commission, in their entirety, provide reasonable access to certification to the following industry groups: Professional engineers, licensed architects, HVAC installers, mechanical contractors, Testing and Balancing (TAB) certified technicians, controls installation and startup contractors and certified commissioning professionals who have verifiable training, experience and expertise in HVAC systems. The Energy Commission will determine reasonable access by considering factors such as certification costs commensurate with the complexity of the training being provided, certification marketing materials, prequalification criteria, class availability and curriculum.

(c) **Qualifications and Approval of ATTCPs.** ATTCPs shall submit a written application to the Energy Commission with a summary and the necessary background documents to explain how the following criteria and procedures have been met:

1. **Organizational Structure.** ATTCPs shall provide written explanations of the organization type, by-laws, and ownership structure. ATTCPs shall explain in writing how their certification program meets the qualifications of Building Energy Efficiency Standards, Section 10-103.2(c). ATTCPs shall explain in their application to the Energy Commission their organizational structure and their procedures for independent oversight, quality assurance, supervision and support of the acceptance test training and certification processes.

2. **Certification of ATEs.** The ATTCPs shall provide written explanations of their certification and oversight of ATEs. This explanation shall document how the ATTCP ensures that ATEs are providing quality control and appropriate supervision and support for their ATTs.

A. **Recertification.** The ATTCP shall recertify all ATEs prior to the implementation of each adopted update to the Building Energy Efficiency Standards as these updates affect the acceptance test requirements. Recertification requirements and procedures shall only apply to those specific elements that are new or modified in future updates to Building Energy Efficiency Standards.

3. **Requirements for Applicant ATTCPs to Document Training and Certification Procedures.** ATTCPs shall include with their application a complete copy of all training and testing procedures, manuals, handbooks and materials. ATTCPs shall explain in writing how their training and certification procedures include, but are not limited to, the following:

   A. **Training Scope.** The scope of the training shall include both hands-on experience and theoretical training to certify competency in the technologies and skills necessary to perform the acceptance tests.

   B. **ATT Training.**

      i. **Curricula**. ATTCP training curricula for ATTs shall include, but not be limited to, the analysis, theory, and practical application of the following:

         a. Constant volume system controls;

         b. Variable volume system controls;

         c. Air-side economizers;

         d. Air distribution system leakage;

         e. Demand controlled ventilation with CO_2 sensors;

         f. Demand controlled ventilation with occupancy sensors;

         g. Automatic demand shed controls;

         h. Hydronic valve leakage;

         i. Hydronic system variable flow controls;

         j. Supply air temperature reset controls;

         k. Condenser water temperature reset controls;

         l. Outdoor air ventilation systems;

         m. Supply fan variable flow controls;

         n. Boiler and chiller isolation controls;

         o. Fault detection and diagnostics for packaged direct-expansion units;

         p. Automatic fault detection and diagnostics for air handling units and zone terminal units;

         q. Distributed energy storage direct-expansion air conditioning systems;

         r. Thermal energy storage systems;

         s. Building Energy Efficiency Standards mechanical acceptance testing procedures; and

         t. Building Energy Efficiency Standards acceptance testing compliance documentation for mechanical systems.

      ii. **Hands-on training.** The ATTCP shall describe in its application the design and technical specifications of the laboratory boards, equipment and other elements that will be used to meet the hands-on requirements of the training and certification.

      iii. **Prequalification.** Participation in the certification program shall be limited to persons who have at least three years of professional experience and expertise in mechanical controls and systems as determined by the Mechanical ATTCPs.

NOTE: ATTCPs may specify additional qualifications for participation in their programs, such as limiting participation to persons that are not currently listed as "decertified" by another ATTCP.

iv. **Instructor to Trainee Ratio.** The ATTCP shall document in its application to the Energy Commission why its instructor to trainee ratio is sufficient to ensure the integrity and efficacy of the curriculum and program based on industry standards and other relevant information.

v. **Tests.** The ATTCP shall describe the written and practical tests used to demonstrate each certification applicant's competence in all specified subjects. The ATTCPs shall retain all results of these tests for five years from the date of the test.

vi. **Recertification.** The ATTCP shall recertify all ATTs prior to the implementation of each adopted update to the Building Energy Efficiency Standards as these updates affect the acceptance test requirements. Recertification requirements and procedures shall only apply to those specific elements that are new or modified in future updates to Building Energy Efficiency Standards.

C. **ATE Training.** Training for ATEs shall consist of a single class or webinar consisting of at least four hours of instruction that covers the scope and process of the acceptance tests in Building Energy Efficiency Standards, Section 120.5 and 160.3(d).

D. **Complaint Procedures.** Procedures described in writing for notifying building departments and the public that the ATTCP will accept complaints regarding the performance of any certified ATT or ATE, and procedures for how the ATTCP will address these complaints.

E**. Decertification Procedures.** The ATTCP shall describe in its application to the Energy Commission procedures for revoking their certification of ATTs and ATEs based upon poor quality or ineffective work, failure to perform acceptance tests, falsification of documents, failure to comply with the documentation requirements of these regulations or other specified actions that justify decertification. The ATTCP shall also describe its general procedures for decertified ATTs or ATEs seeking to regain their certification status, including eligibility requirements for recertification (if any).

F. **Quality Assurance and Accountability.** The ATTCP shall describe in its applications to the Energy Commission procedures for conducting quality assurance and accountability activities, including but not limited to the following:

i. The ATTCPs shall include quality assurance and accountability measures, including but not limited to independent oversight of the certification materials, processes and procedures, visits to building sites where certified technicians are completing acceptance tests, certification process evaluations, building department surveys to determine acceptance testing effectiveness, and expert review of the training curricula developed for Building Energy Efficiency Standards, Section 120.5 and 160.3(d).

ii. The ATTCP shall review a random sample of no less than 1 percent of each ATT's completed compliance forms. The ATTCP shall also randomly select and shadow audit no less than 1 percent of each ATE's overseen projects, following the assigned ATT and observing their performance on the job site. Independent oversight may be demonstrated by accreditation under the ISO/IEC 17024 standard.

G. **Certification Identification Number and Verification of ATT and ATE Certification Status.** The ATTCP shall describe in its applications to the Energy Commission procedures for recording, tracking, and communicating certification status, including but not limited to the following:

i. Upon certification of an ATT or ATE, the ATTCP shall issue a unique certification identification number to the ATT or ATE.

ii. The ATTCP shall maintain an accurate public record of the certification status for all ATTs and ATEs that the ATTCP has certified, including any ATTs or ATEs who have been decertified as specified in 10-103.2(c)3E.

iii. The ATTCP shall provide verification of current ATT certification status upon request to authorized document Registration Provider personnel or enforcement agency personnel to determine the ATT's eligibility to sign Certificate of Acceptance documentation according to all applicable requirements in Sections 10-103.2, 10-102, 10-103(a)4, and Reference Joint Appendix JA7.

H. **Electronic Database System**. The ATTCP shall maintain, or by suitable contractual requirements cause to be maintained, an electronic database system approved by the Energy Commission. The electronic database system shall be capable of all the following:

i. Support all activities for the ATTCP to comply with its quality assurance program as required by Section 10-103.2(c)3F.

ii. For no less than five years, record and preserve all certificates of acceptance offered for certification by the ATTCP and as performed by its own certified ATTs.

iii. Allow the transmission of electronic copies of each completed certificate of acceptance to the ATT that performed the test, the ATE associated with that ATT, or both.

a. Each page of each certificate of acceptance shall bear the logo of the ATTCP or other identifying insignia as approved by the Energy Commission.

b. The electronic copy shall be capable of being printed.

c. The ATTCP may apply to the Energy Commission for approval to use alternative compliance documents that differ from those approved for use by the Energy Commission but must demonstrate that these alternative compliance documents do not differ in format, informational order, or content from approved compliance documents.

iv. Provide a means of verifying any certificate of acceptance to the enforcement agency having jurisdiction as identified on the certificate of acceptance.

v. Provide the Energy Commission with any of the following project data or documents upon request: project address, permit numbers, acceptance test technician and acceptance test employee certification numbers, certificates of acceptance, compliance forms, installation forms, and record of quality assurance review. The Energy Commission may adopt an Application Programming Interface (API) for providing data electronically. Within one year of development of an API, the ATTCP's electronic database system shall have the ability to transfer project data to the Energy Commission through the API upon completion of the project or at established intervals no longer than monthly.

I. Compliance Document Recording and Repository Reporting Requirement:

i. The ATTCP shall record all certificates of compliance (Section 10-103(a)1), certificates of installation (Section 10-103(a)3), and certificates of acceptance (Section 10-103(a)4) associated with any acceptance test specified in Part 6, Section 120.5 and 160.3(d).

ii. Contingent upon Energy Commission approval of the threshold (Section 10-103.2(b)) and upon availability and approval of an electronic document repository by the Executive Director, the ATTCP shall submit monthly data transfer packets to the Energy Commission to an electronic document repository for retention consistent with Energy Commission instructions.

(d) **Requirements for ATTCPs to Provide Regular Reports.** The ATTCP shall provide the following regular reports to the Energy Commission:

1. **Annual Report.** The ATTCP shall provide an annual report to the Energy Commission that includes the following:

   A. A summary of the certification services provided over the reporting period, including the total number of Acceptance Test Technicians and Employers certified by the agency during the reporting period and to date.

   B. A summary of all actions taken against any ATT or ATE as a result of the complaint or quality assurance procedures described by the ATTCP as required under Section 10-103.2(c)3D and 10-103.2(c)3F.

   C. A summary of the quality assurance and accountability activities conducted over the reporting period, including the compliance forms reviewed and the on-site audits performed as required under Section 10-103.2(c)3Fii during the reporting period and to date.

   D. A summary of the number and type of acceptance tests performed in each local jurisdiction over the reporting period and to date.

   E. A signed certification to the Energy Commission that the ATTCP continues to meet the requirements of Section 10-103.2.

2. **Update Report.** The ATTCP shall have no less than six months following the adoption of an update to the Building Energy Efficiency Standards to prepare an Update Report. The ATTCP shall submit an Update Report to the Energy Commission no less than six months prior to the effective date of any newly adopted update to the Building Energy Efficiency Standards, The ATTCP shall report to the Energy Commission what application amendments are proposed to address changes to the Building Energy Efficiency Standards or to ensure training is reflective of the variety of mechanical equipment and systems currently encountered in the field. All required update reports shall contain a signed certification that the ATTCP continues to meet all the requirements of Section 10-103.2(c). Update reports shall be approved through the Amendment Process provided under Section 10-103.2(f).

All required reports shall contain a signed certification that the ATTCP has met all requirements for this program.

(e) **Application Review and Determination.** The Energy Commission shall review ATTCP applications according to the criteria and procedures in Section 10-103.2(c) to determine if such providers meet the specified requirements for providing acceptance testing certification services.

1. Energy Commission staff will review and validate all information received on ATTCP applications, and determine whether the application is complete and contains sufficient information to be evaluated by staff. Complete applications shall be evaluated by staff based on their contents.

2. The Executive Director may require that the applicant provide additional information as required by staff to fully evaluate the ATTCP application.

3. The Executive Director shall provide a copy of the staff evaluation to interested persons and provide an opportunity for public comment.

4. The Executive Director shall issue a written recommendation that the Energy Commission designate the applicant as an authorized ATTCP or deny the Provider application.

5. The Energy Commission shall make a final decision on the application at a publicly noticed hearing.

(f) **Amendment Process.**

The ATTCP may amend a submitted or approved application, as follows:

1. **Amendment Scope.**

   A. **Nonsubstantive Changes.** A nonsubstantive change is a change that does not substantively alter the requirements of the application materials for the ATTCP, ATT, or ATE. For amendments making only nonsubstantive changes, the ATTCP shall submit the following:

      i. a letter describing the change to the Energy Commission as an addendum to the application;

      ii. A replacement copy of the affected sections of the ATTCP application with the changes incorporated; and

      iii. A copy of the affected sections of the ATTCP application showing the changes in underline and strikeout format.

   B. **Substantive Changes.** A substantive change is a change that substantively alters the requirements of the application materials for the ATTCP, ATT, or ATE. For amendments making any substantive changes, the ATTCP shall submit the following:

      i. A document describing the scope of the change to the application, the reason for the change and the potential impact to the ATTCP, ATT, and ATE as an addendum to the application;

      ii. A replacement copy of the affected sections of the ATTCP application with the changes incorporated; and

      iii. A copy of the affected sections of the ATTCP application showing the changes in underline and strikeout format.

2. **Amendment Review.** Amendments submitted prior to approval of an ATTCP application shall be included in the application's Application Review and Determination process specified in Section 10-103.2(e).

   Amendments submitted after approval of an ATTCP's application that contain only nonsubstantive changes shall be reviewed by the Executive Director for consistency with Section 10-103.2. Amendments determined to be consistent with this Section shall be incorporated into the approval as errata.

   Amendments submitted after approval of an ATTCP's application that contain any substantive changes shall be subject to the Application Review and Determination process specified in Section 10-103.2(e). If the Energy Commission finds that the amended application does not meet the requirements of Section 10-103.2, then the ATTCP shall either abide by the terms of their previously approved application or have their approval suspended.

(g) **Review by the Energy Commission.**

If the Energy Commission determines there is a violation of these regulations or that an ATTCP is no longer providing adequate certification services, the Energy Commission may revoke the authorization of the ATTCP pursuant to Section 1230 et. seq. of Title 20 of the California Code of Regulations.

NOTE: Authority: Sections 25402, 25402.1, 25213, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

10-104 – EXCEPTIONAL DESIGNS

NOTE: See Section 10-109 for approval of calculation methods and Alternative Component Packages.

(a) **Requirements.** If a building permit applicant proposes to use a performance compliance approach, and the building designs cannot be adequately modeled by an approved calculation method, an applicant shall be granted a building permit if the Commission finds:

1. That the design cannot be adequately modeled with an approved calculation method;
2. Using an alternative evaluation technique, that the design complies with Part 6; and
3. That the enforcement agency has determined that the design complies with all other legal requirements.

(b) **Applications.** The applicant shall submit four copies of a signed application with the following materials to the Executive Director:

1. A copy of the plans and documentation required by Section 10-103(a)2;
2. A statement explaining why meeting the energy budget cannot be demonstrated using an approved calculation method;
3. Documentation from the enforcement agency stating that:
   A. Meeting the energy budget requirements cannot be demonstrated using an approved calculation method; and
   B. The design complies with all other legal requirements; and
4. A detailed evaluation of the energy consumption of the proposed building and the building's materials, components, and manufactured devices proposed to be installed to meet the requirements of Part 6 using an alternative evaluation technique. The evaluation shall include a copy of the technique, instructions for its use, a list of all input data, and all other information required to replicate the results.

NOTE: Authority: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

10-105 – ENFORCEMENT BY THE COMMISSION

(a) **Where there is No Local Enforcement Agency.** Before new construction may begin in an area where there is no local enforcement agency, the Executive Director shall determine in writing that the building design conforms to the requirements of Part 6. The person proposing to construct the building shall submit the information described in Sections 10-103(a)1 and 10-103(a)2 to the Executive Director when such a determination is sought.

(b) **Where building construction is under the jurisdiction of a State agency.** Pursuant to Public Resources Code Section 25402.1(g)(5), no construction of any State building shall commence until the Department of General Services or the State agency that otherwise has jurisdiction over the property determines that the construction is designed to comply with the requirements of Part 6, and confirms that the documentation requirements of Sections 10-103(a)1 and 10-103(a)2 have been met and that the plans indicate the features and performance specifications needed to comply with Part 6. The responsible state agency shall notify the Commission's Executive Director of its determination.

(c) **Where the Enforcement Agency Fails to Enforce.** If an enforcement agency fails to enforce the requirements of this article or of Part 6 the Commission, after furnishing 10 days written notice, may condition building permit issuance on submission of the information described in Sections 10-103(a)1 and 10-103(a)2 to the Executive Director and on his or her written determination that proposed construction conforms to the requirements of Part 6.

NOTE: Authority: Code Section 25402.1, Public Resources Code. Reference: Section 25402.1, Public Resources Code.

10-106 – LOCALLY ADOPTED ENERGY STANDARDS

(a) **Requirements.** Local governmental agencies may adopt and enforce energy standards for newly constructed buildings, additions, alterations, and repairs to existing buildings provided the following two requirements are met prior to any enforcement of the standards:

1. A determination that the standards are cost effective is adopted by the local agency at a public meeting and subsequently filed with the Energy Commission; and
2. The Energy Commission finds that the standards will require buildings to be designed to consume less energy than permitted by Title 24, Part 6.

(b) **Documentation Application.** Local governmental agencies wishing to enforce energy standards subject to Section10-106(a) shall submit an application with the following materials to the Executive Director:

1. The proposed energy standards;
2. The local governmental agency's findings and supporting analyses on the energy savings and cost effectiveness of the proposed energy standards;
3. A statement or finding by the local governmental agency that the proposed energy standards will require buildings to be designed to consume less energy than permitted by Part 6; and
4. Any findings, determinations, declarations or reports, including any negative declaration or environmental impact report, required pursuant to the California Environmental Quality Act, Pub. Resources Code Section 21000 et seq.

NOTE: Authority: Section 25402.1, Public Resources Code. Reference: Sections 25402.1, 21080.4, 21153, Public Resources Code.

10-107 – INTERPRETATIONS

(a) The Commission may make a written determination as to the applicability or interpretation of any provision of this article or of Part 6 upon written application, if a dispute concerning a provision arises between an applicant for a building permit and the enforcement agency, and the dispute has been heard by the local board of permit appeals or other highest local review body. Notice of any such appeal, including a summary of the dispute and the section of the regulations involved, shall if possible be sent to the Commission by the enforcing agency 15 days before the appeal is heard, and the result of the appeal shall be sent to the Commission within 15 days after the decision is made. Either party to the dispute may apply for a determination but shall concurrently deliver a copy of the application to the other party. The determinations are binding on the parties.

(b) The Executive Director may, upon request, give written advice concerning the meaning of any provision of this article or of Part 6. Such advice is not binding on any person.

NOTE: Authority: Section 25402.1, Public Resources Code. Reference: Section 25218.5 and 25402.1, Public Resources Code.

10-108 – EXEMPTION

(a) **Requirements.** The Commission may exempt any building from any provision of Part 6 if it finds that:

1. Substantial funds had been expended in good faith on planning, designing, architecture, or engineering of the building before the adoption date of the provision; and
2. Compliance with the requirements of the provision would be impossible without both substantial delays and substantial increases in costs of construction above the reasonable costs of the measures required to comply with the provision.

(b) **Application.** The applicant shall submit four copies of a signed application with the following materials to the Executive Director:

1. A summary of the claimant's contracts for the project;
2. A summary of internal financial reports on the project;
3. Dated schedules of design activities; and
4. A progress report on project completion.

NOTE: Authority: Section 25402.1, Public Resources Code. Reference: Section 25402.1, Public Resources Code.

10-109 – COMPLIANCE SOFTWARE, ALTERNATIVE COMPONENT PACKAGES, EXCEPTIONAL METHODS, DATA REGISTRIES AND RELATED EXTERNAL DIGITAL DATA SOURCES, ALTERNATIVE RESIDENTIAL FIELD VERIFICATION PROTOCOLS, ELECTRONIC DOCUMENT REPOSITORIES, PHOTOVOLTAIC, AND BATTERY STORAGE SYSTEM REQUIREMENT DETERMINATIONS

(a) **Compliance software, alternative component packages, exceptional methods, data registries and related data input software, alternative residential field verification protocols or electronic document repositories** must be approved by the Commission in order to be used to demonstrate compliance with Part 6.

(b) **Application.** Applications for approval of compliance software, alternative component packages, exceptional methods, data registries and related data input software, and alternative field verification protocols must be made as follows:

1. An applicant shall submit four copies of a signed application form specified by the Executive Director.
2. The application shall include the following materials:
   A. A description of the functional or analytical capabilities of the compliance software, alternative component package, calculation method, exceptional method, data registry or related data input software, and alternative field verification protocol; and
   B. A demonstration that the criteria in Section 10-109 are met; and
   C. An initial fee of one thousand dollars ($1,000). The total fee shall cover the Commission's cost of reviewing and analyzing the application. Within 75 days of receipt of an application, the Commission will provide an estimate of the total maximum cost to review and analyze the application and make a determination as to the completeness of the application. Consideration of the application will be delayed until the applicant submits requested additional information. After the Commission determines the total cost, if the cost exceeds the initial fee, the Commission shall assess an additional fee to cover the total cost. If the actual cost is less than the initial, or any estimated maximum, fee the Commission shall refund the difference to the applicant.

(c) **Compliance Software.**

1. **Public Domain Computer Programs.** In addition to the public domain computer programs that are approved pursuant to Public Resources Code Section 25402.1, the Commission may, upon written application or its own motion, approve additional public domain computer programs that may be used to demonstrate that proposed building designs meet energy budgets.
   A. The Commission shall ensure that users' manuals or guides for each approved program are available.
   B. The Commission shall approve a program only if it predicts energy consumption substantially equivalent to that predicted by the above-referenced public domain computer program, when it models building designs or features.

2. **Alternative Calculation Methods (All Occupancies)**. The Commission may approve non-public domain computer programs as an alternative calculation method that building permit applicants may then use to demonstrate compliance with the performance standards (energy budgets) in Part 6. In addition to the application requirements of subdivision (b) above, an application for approval of compliance software must include documentation demonstrating that the compliance software meets the requirements, specifications, and criteria set forth in the Residential or Nonresidential ACM Approval Manual, as appropriate.

   NOTE: Copies of the ACM Approval Manuals may be obtained from the Commission's website at: www.energy.ca.gov/title24.

(d) **Alternative Component Packages.** In addition to the application requirements of subdivision (b) above, an application for approval of an alternative component package must include documentation that demonstrates that the package:

1. Will meet the applicable energy budgets; and
2. Is likely to apply to a significant percentage of newly constructed buildings or to a significant segment of the building construction and design community.

(e) **Exceptional Methods.** The Commission may approve an exceptional method that analyzes a design, material, or device that cannot be adequately modeled using the public domain computer programs. Applications for approval of exceptional methods shall include all information needed to verify the method's accuracy.

(f) **Commission Action.** The Commission may take the following actions on an application submitted pursuant to this section:

1. Approve the application unconditionally;
2. Restrict approval to specified occupancies, designs, materials, or devices; or
3. Reject the application.

(g) **Resubmittal.** An applicant may resubmit a rejected application or may request modification of a restricted approval. Such application shall include the information required pursuant to this section, and, if applicable, shall indicate how the proposed compliance software, alternative component package, exceptional method, data registry or related data input software has been changed to enhance its accuracy or capabilities.

1. Modification. Whenever an approved compliance software, alternative component package, exceptional method, data registry or related data input software is changed in any way, it must be resubmitted under this section for approval.
2. The Commission may modify or withdraw approval of compliance software, an alternative component package, an exceptional method, or a data registry or related data input software based on its approval of other programs, methods, registries or data input software that are more suitable.

(h) **In addition to** the procedures and protocols identified in the Alternative Calculation Method Approval Manuals and the Reference Appendices, the Commission may authorize alternative procedures or protocols that demonstrate compliance with Part 6.

(i) **Data Registries And Related External Digital Data Sources, And Electronic Document Repositories.**

1. **Data Registries and Related External Digital Data Sources.**

   Data registries and related external digital data sources shall conform to the requirements specified in Reference Joint Appendix JA7.

   A. The Commission may approve residential data registries that provide for compliance document and their associated Compliance Registration Packages registration and retention, when required by Part 6 of all residential compliance documentation and the nonresidential Certificates of Verification.

B. **Nonresidential Data Registry Approval Thresholds.**

i. The Commission may approve nonresidential data registries that provide for compliance document and their associated Compliance Registration Packages registration, when required by Part 6 of all nonresidential compliance documentation, excluding all Certificates of Acceptance recorded by an acceptance test technician certification provider (10-103.1 and 10-103.2). However, nonresidential data registries may not provide for registration of nonresidential Certificates of Verification.

ii. As a prerequisite to reviewing and/or approving nonresidential data registries for use, on or after January 1, 2023, the Commission shall first make all of the following findings:

a. The Commission has approved data schema capable of utilization in the development of any nonresidential data registry.

b. The Commission will not lose access to information necessary to support the enforcement and development of current and future building code cycles.

iii. The procedures for consideration and approval of applications enumerated in 10-110 shall not apply to applications for nonresidential data registries until the Commission makes the findings specified in 10-109(i)1Bii.

iv. Nothing in this or any other section, including 10-110, shall be construed as requiring the Commission to make the findings specified in 10-109(i)1Biia by any set date, regardless of pending applications.

v. The Registration Provider shall only use data schema approved by the Commission in a nonresidential data registry.

C. The Commission may approve external digital data sources used for data input to various data registries for registering, when required by Part 6 residential or nonresidential compliance documentation.

2. **Electronic Document Repositories.**

A. The Commission may approve electronic document repositories that retain for the Commission electronic compliance documentation and their associated Compliance Registration Packages generated by residential and nonresidential data registries when registration is required by Part 6.

(j) **Alternative Residential Field Verification Protocols.**

Alternative residential field verification protocols shall comply with the application requirements of Section 10-109(b) and any applicable requirements of Reference Residential Appendices RA1.

(k) **Photovoltaic System and Battery Storage System Requirement Determinations.**

The Commission may, upon written application or its own motion, determine that the photovoltaic or battery storage requirements in Section 150.1(a)3, Section 140.0(c), Section 170.0(a)3 shall not apply, if the Commission finds that the implementation of public agency rules regarding utility system costs and revenue requirements, compensation for customer-owned generation, interconnection fees, or other factors, causes the Commission's cost effectiveness conclusions, made pursuant to Public Resources Code 25402(b)(3), to not hold for particular buildings.

Applications shall include full information regarding the differences between public agency rules and Energy Commission cost effectiveness determinations, including all information requested by the Commission to enable full review of the application. Applications shall also include specific recommended limitations to the scope of the determination that is requested, and specific eligibility criteria to determine what buildings would qualify for the determination. Applications from public agencies shall be submitted to the Energy Commission only after public review within the jurisdiction of the public entity or service area of the utility.

NOTE: Authority: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8,25605, 25910, and 25943, Public Resources Code.

10-110 – PROCEDURES FOR CONSIDERATION OF APPLICATIONS UNDER SECTIONS 10-104, 10-106, 10-108, AND 10-109

(a) Within 75 days of receipt of an application, the Executive Director shall determine if the application is complete with all the supporting information required pursuant to Sections 10-104, 10-106, 10-108, or 10-109 (the complete application package).

(b) Once the application is determined to be complete, the Executive Director shall make the complete application package available to interested parties for review and comment. Comments from interested parties must be submitted within a time period set by the Executive Director, which shall be no less than 15 and no greater than 60 days after the complete application package is made available.

(c) Within 75 days of the date the application is determined to be complete, the Executive Director may request any additional information needed to evaluate the application. Consideration of the application will be delayed until the applicant submits the requested additional information.

(d) Within 75 days of the date the application is determined to be complete, the Executive Director may convene a workshop to gather additional information from the applicant and other interested parties. Interested parties will have 15 days after the workshop to submit additional comments or information regarding the application.

(e) Within 90 days of the date the application is determined to be complete, or within 30 days after receipt of complete additional information requested under Section 10-110(c), or within 60 days after the receipt of additional information submitted by interested parties under Section 10-110(d), whichever is later, the Executive Director shall submit to the Commission a written recommendation on the application.

(f) The complete application package, any additional information considered by the Executive Director, and the Executive Director's recommendation shall be placed on the consent calendar and considered at the next business meeting after submission of the recommendation. The matter may be removed from the consent calendar at the request of any person.

(g) The Executive Director may charge a fee to recover the costs of processing and reviewing applications, with the exception of Section 10-106 applications.

(h) All applicants have the burden of proof to establish that their applications should be granted.

NOTE: Authority: Section 25402.1, Public Resources Code. Reference: Section 25402.1, Public Resources Code.

10-111 – CERTIFICATION AND LABELING OF FENESTRATION PRODUCT AND EXTERIOR DOOR U-FACTORS, SOLAR HEAT GAIN COEFFICIENTS, VISIBLE TRANSMITTANCE AND AIR LEAKAGE

This section establishes rules for implementing labeling and certification requirements relating to U-factors, solar heat gain coefficients (SHGCs), visible transmittance (VT) and air leakage for fenestration products and exterior doors under Section 110.6(a) of Part 6. This section also provides for designation of the National Fenestration Rating Council (NFRC) as the supervisory entity responsible for administering the state's certification program for fenestration products and exterior doors, provided NFRC meets specified criteria.

(a) **Labeling Requirements.**

1. **Temporary labels.**

   A. Every manufactured fenestration product and exterior door shall have attached to it a clearly visible temporary label that lists the U-factor, the solar heat gain coefficient (SHGC) and Visible Transmittance (VT) and that certifies compliance with the air leakage requirements of Section 110.6(a)1. Temporary labels for manufactured fenestration products and exterior doors are to incorporate the values determined by Section 10-111(a)1B and shall comply with the labeling requirements of NFRC 700. No other values for U-factor, SHGC, VT and Air Leakage are allowed on the temporary label attached to the manufactured fenestration product or exterior door. Component Modeling Approach (CMA) and site-built fenestration products shall have an NFRC label certificate that lists the U-factor, the Solar Heat Gain Coefficient (SHGC), and the Visible Transmittance (VT) and shall comply with the labeling requirements of NFRC 705 for the Computer Modeling Approach or NFRC 700 for site-built fenestration products.

   B. U-factor, SHGC, VT and Air Leakage shall be determined by either:

      i. Fenestration products and exterior doors rated and certified using NFRC 100, NFRC 200, NFRC 202 NFRC 203 or NFRC 400 Rating Procedures. The manufacturer shall stipulate that the ratings were determined in accordance with applicable NFRC procedures. For manufactured fenestration products and exterior doors, a temporary label certificate approved by the supervisory entity (NFRC) meets the requirements of this section. For component modeling and site-built fenestration products, a label certificate approved by the supervisory entity (NFRC) meets the requirements of this section.

      ii. For manufactured or site-built fenestration products and exterior doors not rated by NFRC, a temporary label with the words “CEC Default U-factor,” followed by the appropriate default U-factor specified in Section 110.6(a)2 and with the words “CEC Default SHGC,” followed by the appropriate default SHGC specified in Section 110.6(a)3 and with the words "CEC Default VT," followed by the appropriate VT as specified in Section 110.6(a)4, meets the requirements of this Subsection B.

   C. Temporary labels shall also certify that the manufactured fenestration product or exterior door complies with the air leakage requirements of Section 110.6(a)1 of the Standards.

2. **Permanent labels.** Rated products shall have a permanent label consistent with their rating and certification that is either a stand-alone label, an extension or tab of an existing permanent certification label being used by the manufacturer/responsible party, or a series of marks or etchings on the product. The permanent label coupled with observable product characteristics, shall be usable to trace the product to certification information on file with the supervisory entity or to a directory of certified products, published by the supervisory entity. For CMA and site-built fenestration products, a label certificate approved by the supervisory entity meets the requirements of this section.

EXCEPTION to Section 10-111(a): Field-fabricated fenestration products.

(b) **Certification Requirements.**

1. **Certification to default ratings.** The manufacturer shall certify on the Default Label that the product's U-factor, SHGC and VT meets the default criteria in Sections 110.6(a)2, 110.6(a)3 and 110.6(a)4; and

   A. A temporary label, affixed to the product, that meets the requirements of Section 10-111(a)1B meets this requirement.

   B. If the product claims the default U-factor for a thermal break product, the manufacturer shall also certify on the label that the product meets the thermal break product criteria, specified on the default table, on which the default value is based. Placing the terms “Meets Thermal Break Default Criteria” on the default temporary label or default label certificate meets this requirement.

2. **Certification to NFRC rating procedure.** If a product's U-factor, SHGC or VT is based on the NFRC Rating Procedure, the U-factor, SHGC or VT shall be certified by the manufacturer according to the procedures of an independent certifying organization approved by the Commission.

   A. A temporary label, affixed to the product or label certificate for CMA and site-built fenestration, meeting the requirements of Section 10-111(a) certified by the independent certifying organization complies with this requirement.

   B. An “independent certifying organization approved by the Commission” means any organization authorized by the supervisory entity to certify U-factor ratings, Solar Heat Gain Coefficient and Visible Transmittance ratings in accordance with the NFRC Rating Procedure. If the Commission designates the NFRC as the supervisory entity, any independent certification and inspection agency (IA) licensed by NFRC shall be deemed to be an “independent certifying organization approved by the Commission.”

   C. The “supervisory entity” means the NFRC, except as provided in Section 10-111(c)1.

EXCEPTION to Section 10-111(b): Field-fabricated fenestration products.

(c) **Designation of Supervisory Entity.** The NFRC shall be the supervisory entity to administer the certification program relating to U-factors, SHGC, and VT ratings for fenestration products and exterior doors, provided the Commission determines that the NFRC meets the criteria in Section 10-111(d).

1. The Commission may consider designating a supervisory entity other than NFRC only if the Commission determines that the NFRC cannot meet the criteria in Section 10-111(d). Such other supervisory entity shall meet the criteria in Section 10-111(d) prior to being designated.

2. The Commission shall periodically review, at least annually, the structure and operations of the supervisory entity to ensure continuing compliance with the criteria in Section 10-111(d).

(d) **Criteria for Supervisory Entity.**

1. Membership in the entity shall be open on a nondiscriminatory basis to any person or organization that has an interest in uniform thermal performance ratings for fenestration products and exterior doors, including, but not limited to, members of the fenestration industry, glazing infill industry, building industry, design professionals, specifiers, utilities, government agencies, and public interest organizations. The membership shall be composed of a broad cross section of those interested in uniform thermal performance ratings for fenestration products.

2. The governing body of the entity shall reflect a reasonable cross section of the interests represented by the membership.

3. The entity shall maintain a program of oversight of product manufacturers, laboratories, and independent certifying organizations that ensures uniform application of the NFRC Rating Procedures, labeling and certification, and such other rating procedures for other factors affecting energy performance as the NFRC and the Commission may adopt.

4. The entity shall require manufacturers and independent certifying organizations within its program to use laboratories accredited by the supervisory entity to perform simulations and tests under the NFRC Rating Procedure or by an NFRC Approved Calculation Entity (ACE) under the Component Modeling Approach (CMA) Product Certification Program (PCP).
5. The entity shall maintain appropriate guidelines for testing and simulation laboratories, manufacturers, and certifying agencies, including requirements for adequate:
   A. Possession and calibration of equipment;
   B. Education, competence, and training of personnel;
   C. Quality control;
   D. Record keeping and reporting;
   E. Periodic review (including, but not limited to, blind testing by laboratories; inspections of products; and inspections of laboratories, manufacturing facilities, and certifying agencies);
   F. Challenges to certified ratings; and
   G. Guidelines to maintain the integrity of the program, including, but not limited to, provisions to avoid conflicts of interest within the rating and certification process.
6. The entity shall be a nonprofit organization and shall maintain reasonable, nondiscriminatory fee schedules for the services it provides and shall make its fee schedules, the financial information on which fees are based, and financial statements available to its members for inspection.
7. The entity shall provide hearing processes that give laboratories, manufacturers, and certifying agencies a fair review of decisions that adversely affect them.
8. The entity shall maintain a certification policy committee whose procedures are designed to avoid conflicts of interest in deciding appeals, resolving disputes, and setting policy for the certifying organizations within its program.
9. The entity shall publish at least annually a directory of products certified and decertified within its program.
10. The entity itself shall be free from conflict-of-interest ties or to undue influence from any particular manufacturing interest(s), testing or simulation lab(s), or independent certifying organization(s).
11. The entity shall provide or authorize the use of labels and label certificates for Component Modeling Approach and site-built fenestration products that can be used to meet the requirements of Sections 110.6(a)2, 110.6(a)3 and 110.6(a)4, and this section.
12. The entity's certification program shall allow for multiple participants in each aspect of the program to provide for competition between manufacturers, testing labs, simulation labs, and independent certifying organizations.

(e) **Certification for Other Factors.** Nothing in this section shall preclude any entity, whether associated with a U-factor, SHGC or VT certification program or not, from providing certification services relating to factors other than U-factors, SHGCs and VTs for fenestration products and exterior doors.

NOTE: Authority: Section 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

10-112 – CRITERIA FOR DEFAULT TABLES

(a) The Commission shall maintain tables of default U-factors and SHGCs for use as an alternative to U-factors and SHGCs derived based on the NFRC Rating Procedure. The default values shall meet the following criteria:

1. The values shall be derived from simulations of products using the same computer simulation program(s) used in the NFRC Rating Procedure.
2. The default values shall be set so that they do not provide to any significant number of products a lower U-factor or SHGC than those products would obtain if they were rated using the full NFRC Rating Procedure.

(b) The Commission shall periodically review and revise the default tables as necessary to ensure that the criteria are met.

NOTE: Authority: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, 25910 and 25943, Public Resources Code.

10-113 – RATING AND LABELING OF ROOFING PRODUCT REFLECTANCE AND EMITTANCE

This section establishes rules for implementing labeling and rating requirements relating to reflectance and emittance for roofing products for showing compliance with Sections 140.1, 140.2, 140.3(a)1, 141.0(b)2B, 150.1(c)11, 150.2(b)1H, and 150.2(b)2 of Title 24, California Code of Regulations, Part 6. This section also provides for designation of the Cool Roof Rating Council (CRRC) as the supervisory entity responsible for administering the state's rating program for roofing products, provided CRRC meets specified criteria.

(a) **Labeling Requirements.**

Every roofing product installed in construction to take compliance credit or meet the prescriptive requirements for reflectance and emittance under Sections 140.1, 140.2, 140.3(a)1, 141.0(b)2B, 150.1(c)11, 150.2(b)1I or 150.2(b)2 shall have a clearly visible packaging label that lists the emittance and the initial and aged solar reflectance, or a CRRC Rapid Rating for solar reflectance, tested in accordance with CRRC-1.

Packaging for liquid-applied roof coatings shall state the product meets the requirements specified in Section 110.8(i)4.

(b) **Certification Requirements.**

Every roofing product installed in construction to take compliance credit or meet the prescriptive requirements for reflectance and emittance under Sections 140.1, 140.2, 140.3(a)1, 141.0(b)2B, 150.1(c)11, 150.2(b)1I or 150.2(b)2 shall be rated by CRRC or another supervisory entity approved by the Commission pursuant to Section 10-113(c).

(c) **Designation of Supervisory Entity.** The CRRC shall be the supervisory entity to administer the rating program relating to reflectance and emittance ratings for roofing products, provided the Commission determines that the CRRC meets the criteria in Section 10-113(d).

1. The Commission may consider designating a supervisory entity other than CRRC if the Commission determines that the CRRC is not meeting the criteria in Section 10-113(d). Such other supervisory entity shall meet the criteria in Section 10-113(d) prior to being designated.
2. The Commission shall periodically review, at least annually, the structure and operations of the supervisory entity to ensure continuing compliance with the criteria in Section 10-113(d). The supervisory entity shall provide an annual report to the Commission explaining all of the measures it has taken to comply with the criteria in Section 10-113(d).

(d) **Criteria for Supervisory Entity.**

1. Membership in the entity shall be open on a nondiscriminatory basis to any person or organization that has an interest in uniform performance ratings for roofing products, including, but not limited to, members of the roofing industry, building industry, design professionals, specifiers, utilities, government agencies, and public interest organizations. The membership shall be composed of a broad cross section of those interested in uniform thermal performance ratings for roofing products.
2. The governing body of the entity shall reflect a reasonable cross-section of the interests represented by the membership.
3. The entity shall maintain a program of oversight of product manufacturers, laboratories, and independent certifying organizations that ensures uniform application of the CRRC testing and rating procedures, labeling and rating, and such other rating procedures for other factors that improves the accuracy of properties of roofing products affecting energy performance as the CRRC and the Commission may adopt.
4. The entity shall require manufacturers and independent certifying organizations within its program to use only laboratories accredited by the supervisory entity to perform tests in accordance with CRRC-1.

5. The entity shall maintain appropriate guidelines for testing laboratories and manufacturers, including requirements for adequate:
   A. Possession and calibration of equipment;
   B. Education, competence, and training of personnel;
   C. Quality control;
   D. Record keeping and reporting;
   E. Periodic review including but not limited to, blind testing by laboratories; inspections of products; and inspections of laboratories and manufacturing facilities;
   F. Challenges to ratings; and
   G. Guidelines to maintain the integrity of the program, including, but not limited to, provisions to avoid conflicts of interest within the rating process.
6. The entity shall be a nonprofit organization and shall maintain reasonable, nondiscriminatory fee schedules for the services it provides, and shall make its fee schedules, the financial information on which fees are based, and financial statements available to its members for inspection.
7. The entity shall provide hearing processes that give laboratories, manufacturers and certifying agencies a fair review of decisions that adversely affect them.
8. The entity shall maintain a policy committee or similar body whose procedures are designed to avoid conflicts of interest in deciding appeals, resolving disputes and setting policy for the certifying organizations in its program.
9. The entity shall publish at least annually a directory of rated products and products that are no longer rated by the CRRC.
10. The entity itself shall be free from conflict-of-interest ties or to undue influence from any particular roofing product manufacturing interest(s), testing or independent certifying organization(s).
11. The entity shall provide or authorize the use of labels that can be used to meet the requirements for showing compliance with the requirements of Sections 140.1, 140.2, 140.3(a)1, 141.0(b)2B, 150.1(c)11, 150.2(b)1I and 150.2(b)2, and this section.
12. The entity's rating program shall allow for multiple participants in each aspect of the program to provide for competition between manufacturers and between testing labs.

NOTE: Authority: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, 25910 and 25943, Public Resources Code.

10-114 – DETERMINATION OF OUTDOOR LIGHTING ZONES AND ADMINISTRATIVE RULES FOR USE

This section establishes rules for implementing outdoor lighting zones to show compliance with Section 140.7 of Title 24, California Code of Regulations, Part 6.

(a) **Lighting Zones.** Exterior lighting allowances in California vary by Lighting Zones (LZ).

(b) **Lighting Zone Characteristics.** TABLE 10-114-A specifies the relative ambient illumination level and the statewide default location for each lighting zone.

(c) **Amending the Lighting Zone Designation.** A local jurisdiction may officially adopt changes to the lighting zone designation of an area by following a public process that allows for formal public notification, review, and comment about the proposed change. The local jurisdiction may determine areas where Lighting Zone 4 is applicable and may increase or decrease the lighting zones for areas that are in State Default Lighting Zones 1, 2 and 3, as specified in TABLE 10-114-A.

TABLE 10-114-A LIGHTING ZONE CHARACTERISTICS AND RULES FOR AMENDMENTS BY LOCAL JURISDICTIONS

Zone	Ambient Illumination	State wide Default Location	Moving Up to Higher Zones	Moving Down to Lower Zones
LZ0	Very Low	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves.	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves can be designated as LZ1 or LZ2 if they are contained within such a zone.	Not applicable
LZ1	Low	Rural areas, as defined by the 2010 U.S. Census. These areas include: single or dual family residential areas, parks, and agricultural zone districts, developed portion of government designated parks, recreation areas, and wildlife preserves. Those that are wholly contained within a higher lighting zone may be considered by the local government as part of that lighting zone.	Developed portion of a government designated park, recreation area, or wildlife preserve, can be designated as LZ2 or LZ3 if they are contained within such a zone. Retail stores, located in a residential neighborhood, and rural town centers, as defined by the 2010 U.S. Census, can be designated as LZ2 if the business operates during hours of darkness.	Not applicable.
LZ2	Moderate	Urban clusters, as defined by the 2010 U.S. Census. The following building types may occur here: multifamily housing, mixed use residential neighborhoods, religious facilities, schools, and light commercial business districts or industrial zoning districts.	Special districts within a default LZ2 zone may be designated as LZ3 or LZ4 by a local jurisdiction. Examples include special commercial districts or areas with special security considerations located within a mixed-use residential area or city center.	Special districts may be designated as LZ1 by the local jurisdiction, without any size limits.
LZ3	Moderately High	Urban areas, as defined by the 2010 U.S. Census. The following building types may occur here: high intensity commercial corridors, entertainment centers, and heavy industrial or manufacturing zone districts.	Special districts within a default LZ3 may be designated as a LZ4 by local jurisdiction for high intensity nighttime use, such as entertainment or commercial districts or areas with special security considerations requiring very high light levels.	Special districts may be designated as LZ1 or LZ2 by the local jurisdiction, without any size limits.
LZ4	High	None.	Not applicable.	Not applicable.

NOTE: Authority: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

10-115 – COMMUNITY SHARED SOLAR ELECTRIC GENERATION SYSTEM OR COMMUNITY SHARED BATTERY STORAGE SYSTEM COMPLIANCE OPTION FOR ON-SITE SOLAR ELECTRIC GENERATION OR BATTERY STORAGE REQUIREMENTS

(a) **Community Shared Solar Electric Generation System or Battery Storage System Offset**. If approved by the commission, a community shared solar system, other community shared renewable system, community shared battery storage system, or combination of the aforementioned systems (hereinafter referred to as a community shared solar or battery storage system) may be used as a compliance option to partially or totally meet the on-site solar electric generation system and/or battery storage system that is otherwise required by Section 140.0(c), 150.1(a)3, or 170.0(a)3 of Title 24, California Code of Regulations, Part 6. To be approved, the community shared solar electric generation or community shared battery storage system must demonstrate, to the Commission's satisfaction, that all the following requirements will be met:

1. **Enforcement Agency.** The community shared solar electric generation system and/or community shared battery storage system shall be installed and available for enforcement agency site inspection~~,~~ no later than the point in time the enforcement agency must physically verify compliance of the building~~,~~ which would otherwise be required to have an on-site solar electric generation and/or battery storage system, and shall not cause delay in the process of enforcement agency review and approval of that building. The enforcement agency shall have jurisdiction and facilitated access to make site inspections. All documentation for the community solar electric generation system and/or community solar battery storage system that is required to demonstrate compliance for the building shall be completed prior to building permit application.

2. **Energy Performance.** The community shared solar electric generation system and/or community shared battery storage system shall be demonstrated to provide the same or better energy performance equal to the partial or total compliance with the energy performance of the on-site solar electric generation and/or battery storage system that would otherwise have been required for the building, computed by compliance software certified for use by the Commission.

3. **Participating Building Energy Savings Benefits.** The community shared solar electric generation system and/or community shared battery storage system shall provide energy saving benefits directly to the building. The energy savings benefits allocated to the building shall be in the form of:

   A. actual reductions in the energy consumption of the participating building;

   B. energy reduction credits that will result in virtual reductions in the building's energy consumption that is subject to energy bill payments; or

   C. payments to the building that will have an equivalent effect as energy bill reductions.

   The reduction in the building's energy bill resulting from A, B, or C above shall be greater than the added cost to the building resulting from the building's share in the community shared solar and/or battery storage system.

4. **Durability, Participation, and Building Opt-out.**

   A**. Durability**. The community shared solar electric generation system and/or community shared battery storage system shall be designed and installed to provide the energy savings benefits to the participating building(s) specified in Section 10-115(a)3 for a period of no less than 20 years.

   B. **Participation.** The Administrator(s) approved by the Energy Commission pursuant to Section 10-115(b)1 shall ensure that all participating buildings, which use the community shared solar and/or community shared battery storage system to comply with Section 140.0(c), 150.1(a)3, or 170.0(a)3, remain participating buildings for no less than a 20-year period ("Participation Period"), regardless of who owns or occupies the participating building, unless the building owner discontinues participation after causing the on-site solar electric generation system to be installed and interconnected pursuant

to the Opt-Out Requirements. For purposes of this Section, "Opt-Out Requirements" shall mean installation and interconnection of an on-site solar electric generation system that meets or exceeds. the requirements of Section 140.0(c), 150.1(a)3, or 170.0(a)3 in effect at the time the builder applied for the original building permit for the participating building. To demonstrate compliance, the Administrator shall require either:

i. **Equitable Servitude.** As a condition for a building to participate, participating builders shall impose an equitable servitude through a properly recorded declaration of covenants, conditions and restrictions ("CC&Rs") or other properly recorded covenant, deed restriction or other legally binding method referenced in each deed transferring title for each participating building. This equitable servitude shall run with the land and obligate the original owner(s)/tenant(s) and all subsequent owner(s)/tenant(s) of the participating building to maintain the building's participation in the community shared solar and/or community shared battery storage system for the Participation Period, or ensure installation and interconnection of an on-site solar electric generation system that satisfies the Opt-Out Requirements. The equitable servitude shall specify that in order to discontinue participation in the community shared solar and/or battery system, the building owner must satisfy the Opt-Out Requirements. The builder shall ensure that the equitable servitude provides the Administrator approved by the Commission the right to enforce the above provisions. The equitable servitude shall remain in force for a period of 20 years from the date of first participation of the building in the community shared solar and/or battery system. The equitable servitude shall not be revocable. The equitable servitude shall be delivered to all responsible parties through transfer disclosure statements.

ii. **Other system**. The Commission may approve another program, structure, or system by which an Administrator (or other entity approved by the Commission) ensures the requirements of this Section 10-115(a)4B will be satisfied for a Participation Period of no less than 20 years.

C. **Compliance Documentation.** The Administrator shall maintain record(s) of the compliance documentation that determined the requirements for the on-site solar electric generation system and/or battery storage system to comply with the standards in effect at the time the builder applied for the original building permit, and which establishes participants' obligations to meet the Opt-Out Requirements. The Administrator shall provide a copy of this compliance documentation upon a participating building owner's request, to every new owner of a participating building when the Administrator is notified that title has transferred, and to any participating building owner who requests to Opt-Out.

D. **Building Opt-Out.** At any time during the Participation Period, a participating building owner shall have the option to discontinue the participation of the building in the community shared solar and/or battery storage system ("Opt-Out") if the building satisfies the Opt-Out Requirement.

i. Prior to Opt-Out, the building owner shall demonstrate that they have installed such an on-site solar electric generation system and met the Opt-Out Requirements by providing documentation from the installer of the on-site solar system or an attestation of the building owner with supporting documentation. The building owner shall be responsible for all costs associated with documenting that the on-site solar generation system satisfies the Opt-Out Requirements.

ii. Upon receiving documentation regarding Opt-Out from a building owner, the Administrator shall compare the documentation to the compliance documentation specified in Section 10-115(a)4C and confirm whether, based on the documentation, the installed solar system meets or exceeds the Opt-Out Requirements. Within 30 days of a building owner providing documentation, the Administrator shall provide written confirmation to the building owner whether, based on the Administrator's review of that documentation, the on-site solar generation system satisfies the Opt-Out Requirements. The Administrator may, at its discretion, verify the documentation through a physical inspection. The Administrator shall maintain record of the documentation that demonstrates and confirms the on-site solar generation system met the Opt-Out requirements for the remainder of the Participation Period.

iii. Upon a building owner's exercise of the Opt-Out, all costs and benefits associated with participation in the community shared solar and/or battery storage system shall cease. If any balance of costs or benefits is owed to either party at the time of Opt-Out, such balance shall be paid to that party.

iv. The Administrator (or other entity approved by the Commission pursuant to Section 10-115(a)4Bii) shall not impose any penalty related to a participating building's Opt-Out, or charge participants for recuperation of unrealized revenue that would have been expected to accrue beyond the end of participation. If the Administrator (or other entity approved by the Commission) plans to charge any other fees at the time of building Opt-Out, the Application for Commission Approval shall explain the purpose of those fees.

5. **Additionality.** The community shared solar electric generation system and/or community shared battery storage system shall provide the energy savings benefits specified in Section 10-115(a)3 exclusively to the participating building(s). Those energy savings benefits shall in no way be attributed to other purposes or transferred to other buildings or property.

A. The participating building(s) shall be served primarily by renewable resources developed specifically for the community solar electric generation system.

B. Other renewable resources may be used when participating buildings are permitted before the renewable resources developed for the program start operating or after they cease operating. During these times, other renewable resources may be used to meet the requirements of Section 10-115(a)4 for each participating building.

C. The renewable resources, including those developed primarily to serve participating buildings and those utilized to serve participating buildings during the time periods described in Section 10-115(a)5B for the purpose of meeting the requirements of Section 10-115(a)4, shall meet the following requirement:

i. For each renewable resource used to serve participating buildings, bundled Renewable Energy Credits (RECs), which satisfy the criteria of Portfolio Content Category 1, shall be retired and tracked in the Western Renewable Energy Generation Information System (WREGIS) on the behalf of program participants, to ensure that they will not be allocated to or used for any other purpose, including Renewable Performance Standard (RPS) compliance, resale of RECs or renewable generation to any other person or entity, or any other mandatory or voluntary renewable electricity program requirement or claim.

D. Renewable resources developed to serve participating buildings may also be used to serve other loads when there is excess generation beyond what is needed to serve participating buildings. Any excess generation used for such other loads shall be isolated from the generation serving participating buildings and shall not result in violation of Section 10-115(a)5C.

6. **Location.** The community shared solar electric generation system and/or community shared battery storage system shall be located on a distribution system of the load serving entity providing service to the participating buildings.

7. **Size.** The community shared solar electric generation system and/or community shared battery storage system shall not be served by any individual source larger than 20 MW.

8. **Accountability and Recordkeeping.** Applicants for Commission approval of community shared solar electric generation systems and/or community shared battery storage systems shall be accountable to all parties who relied on these systems for partial or total compliance with the on-site solar electric generation and/or battery storage system that would otherwise be required, including but not limited to builders of the buildings, owners of the buildings, enforcement agencies, and the Commission.

A. Each year beginning twelve months after initial approval, the Administrator shall provide to the Commission a report demonstrating the previous year's compliance with each requirement of Section 10-115.

B. Recordkeeping regarding compliance with the requirements in Sections 10-115(a) shall be maintained over the period of time specified in Section 10-115(a)4 for each building for which the community shared solar electric generation or battery storage system is used to demonstrate partial or total compliance. Access to these records shall be provided to any entity approved by the Commission for auditing compliance with these requirements.

(b) **Application for Commission Approval.** Any entity may apply to the Commission for approval to administer a community shared solar electric generation or community shared battery storage system to provide partial or total compliance with the on-site solar electric generation system and/or battery storage system required by Section 150.1 of Title 24, California Code of Regulations, Part 6. Once approved, the entity shall be the Administrator of the community shared solar electric generation or community shared battery storage system.

1. The application shall demonstrate to the Commission's satisfaction that each of the requirements specified in Section 10-115(a) will be met and shall include detailed explanation of the actions that will be taken by the applicant to ensure that each requirement is met over the period of time specified in Section 10-115(a)4 for each building for which a partial or total offset is used to demonstrate compliance.
2. All applicants have the burden of proof to establish that their application should be granted.
3. Applications from public agencies shall be submitted to the Energy Commission only after public review through at least one public meeting within the jurisdiction of the public entity or service area of the load-serving entity and adoption by the public agency. The Commission shall have the authority to not approve any application that the Commission determines to be inconsistent with the requirements of Section 10-115.

(c) **Executive Director Approval of Revised Applications.** The Administrator of an approved community shared solar electric generation system and/or community shared battery storage system shall submit a revised application demonstrating compliance with the Section 10-115 requirements to the Executive Director for approval, when:

1. A new renewable resource is proposed to be added to a community shared solar electric generation system and/or community shared battery storage system, and/or
2. The Commission modifies the requirements of Section 10-115 in a building standards rulemaking. Such modified requirements would not apply retroactively to the buildings for which building permit applications are submitted prior to the effective date of the modified standards or to the continued use of previously approved renewable resources developed to serve a community shared solar electric generation system and/or community shared battery storage system.

Within 60 days of receiving a revised application, the Executive Director may either: approve the revised application by letter if the Executive Director concludes that the requirements of Section 10-115 will be met, request the Administrator to resubmit their revised application with changes, or disapprove the application. If the Executive Director disapproves the application, the applicant may request that the Commission review the Executive Director's determination. The petition must be filed in writing in accordance with Title 20, California Code of Regulations, Section 1208 within 15 days of the date of the filing of the Executive Director's determination and must state the basis for requesting review of the Executive Director's determination. Within 45 days of receiving a request for review, the Commission shall issue a written decision affirming or modifying the Executive Director's determination. If the Commission does not issue a written decision within 45 days, the request for review shall be deemed denied. The Administrator shall have the burden of proof to establish that its revised application should be approved.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402, 25402.1, and 25605, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, 25605, and 25943, Public Resources Code.

BUILDING ENERGY EFFICIENCY STANDARDS

CALIFORNIA CODE OF REGULATIONS
TITLE 24, PART 6

SUBCHAPTER 1
ALL OCCUPANCIES—GENERAL PROVISIONS

SECTION 100.0 – SCOPE

(a) **Buildings Covered.** The provisions of Part 6 apply to all buildings:

1. That are of Occupancy Group A, B, E, F, H, I, M, R, S, or U; and
2. For which an application for a building permit or renewal of an existing permit is filed (or is required by law to be filed) on or after the effective date of the provisions, or which are constructed by a governmental agency; and
3. That are:
   A. Unconditioned; or
   B. Indirectly or directly conditioned, or process spaces.

Exception 1 to Section 100.0(a): Qualified historic buildings, as regulated by the California Historic Building Code (Title 24, Part 8). Lighting in qualified historic buildings shall comply with the applicable requirements in Section 140.6(a)3Q.

Exception 2 to Section 100.0(a): Building departments, at their discretion, may exempt temporary buildings, temporary outdoor lighting or temporary lighting in an unconditioned building, or structures erected in response to a natural disaster. Temporary buildings or structures shall be completely removed upon the expiration of the time limit stated in the permit.

Exception 3 to Section 100.0(a): Buildings in Occupancy Group I-3 and I-4.

(b) **Parts of Buildings Regulated.** The provisions of Part 6 apply to the building envelope, space-conditioning systems, water-heating systems, pool and spas, solar ready buildings, indoor lighting systems of buildings, outdoor lighting systems, electrical power distribution systems, and signs located either indoors or outdoors, in buildings that are:

1. Covered by Section 100.0(a); and
2. Set forth in TABLE 100.0-A.

(c) **Habitable stories.**

1. All conditioned space in a story shall comply with Part 6 whether or not the story is a habitable space.
2. All unconditioned space in a story shall comply with the lighting requirements of Part 6 whether or not the story is a habitable space.

(d) **Outdoor lighting and indoor and outdoor signs.** The provisions of Part 6 apply to outdoor lighting systems and to signs located either indoors or outdoors as set forth in TABLE 100.0-A.

(e) **Sections applicable to particular buildings.** TABLE 100.0-A and this subsection list the provisions of Part 6 that are applicable to different types of buildings covered by Section 100.0(a).

1. **All buildings.** Sections 100.0 through 110.12 apply to all buildings.

   Exception to Section 100.0(e)1: Spaces or requirements not listed in TABLE 100.0-A.

2. **Newly constructed buildings.**

A. **All newly constructed buildings.** Sections 110.0 through 110.12 apply to all newly constructed buildings within the scope of Section 100.0(a). In addition, newly constructed buildings shall meet the requirements of Subsections B, C, D or E, as applicable.

B. **Nonresidential and hotel/motel buildings** that are mechanically heated or mechanically cooled.

i. Sections applicable. Sections 120.0 through 140.8 apply to newly constructed nonresidential buildings and hotels/motels that are mechanically heated or mechanically cooled.

ii. Compliance approaches. In order to comply with Part 6, newly constructed nonresidential buildings and hotels/motels that are mechanically heated or mechanically cooled must meet the requirements of:

a. Mandatory measures: The applicable provisions of Sections 120.0 through 130.5; and

b. Either:

(i) Performance approach: Section 140.1; or

(ii) Prescriptive approach: Sections 140.2 through 140.10.

C. **Unconditioned nonresidential buildings and process space.** Sections 110.9, 110.10, 120.6, 130.0 through 130.5, 140.3(c), 140.6, 140.7, and 140.8 apply to all newly constructed unconditioned buildings and 140.1, and 140.3(c), for process spaces within the scope of Section 100.0(a).

D. **Single-family buildings.**

i. Sections applicable. Sections 150.0 through 150.1 apply to newly constructed single-family buildings.

ii. Compliance approaches. In order to comply with Part 6 newly constructed single-family buildings must meet the requirements of:

a. Mandatory measures: The applicable provisions of Sections 110.0 through 110.10, and 150.0; and

b. Either:

(i) Performance approach: Sections 150.1(a) and (b); or

(ii) Prescriptive approach: Sections 150.1(a) and (c).

Exception to Section 100.0(e)2Diib: Seasonally occupied agricultural housing limited by state or federal agency contract to occupancy not more than 180 days in any calendar year.

E. **Multifamily Buildings**.

i. Sections applicable. Sections 160.0 through 170.2 apply to newly constructed multifamily buildings.

ii. Compliance approaches. In order to comply with Part 6 newly constructed multifamily buildings must meet the requirements of:

a. Mandatory measures: The applicable provisions of Sections 110.0 through 110.10, and 160.0; and

b. Either:

(i) Performance approach: Section 170.1; or

(ii) Prescriptive approach: Section 170.2(a) through (f).

F. **Covered processes.**

i. Sections applicable. Sections 110.2, 120.6 and 140.9 apply to covered processes.

ii. Compliance approaches. In order to comply with Part 6, covered processes must meet the requirements of:

a. The applicable mandatory measures in Section 120.6; and

b. Either:

(i) The performance approach requirements of Section 140.1; or

(ii) The prescriptive approach requirements of Section 140.9.

Note: If covered processes do not have prescriptive requirements, then only the applicable mandatory measures in Section 120.6 must be met.

3. **New construction in existing buildings (additions, alterations and repairs).**

A. **Nonresidential and hotel/motel buildings.** Section 141.0 applies to new construction in existing nonresidential, high-rise residential, and hotel/motel buildings. New construction in existing buildings includes additions, alterations and repairs. Section 141.0 specifies requirements that uniquely apply to additions, alterations or repairs to existing buildings, and specify which requirements in other sections also apply. For alterations that change the occupancy classification of the building, the requirements specified in Section 141.0 apply to the occupancy after the alterations.

B. **Single-family buildings.** Section 150.2 applies to new construction in existing single-family buildings. New construction in existing buildings includes additions, alterations and repairs. Section 150.2 specifies requirements that uniquely apply to additions, alterations or repairs to existing buildings, and specifies which requirements in other sections also apply. For alterations that change the occupancy classification of the building, the requirements specified in Section 150.2 apply to the occupancy after the alterations.

C. **Multifamily buildings.** Section 180.0 applies to new construction in existing multifamily buildings. New construction in existing buildings includes additions, alterations and repairs. Section 180.0 specifies requirements that uniquely apply to additions, alterations or repairs to existing buildings, and specifies which requirements in other sections also apply. For alterations that change the occupancy classification of the building, the requirements specified in Section 180.0 apply to the occupancy after the alterations.

4. **Installation of insulation in existing buildings.** Section 110.8(d) applies to buildings in which insulation is being installed in existing attics, or on existing water heaters, or existing space conditioning ducts.

5. **Outdoor lighting.** Sections 110.9, 130.0, 130.2, 130.4, 140.7, and 150.0 apply to newly constructed outdoor lighting systems, and Section 141.0 applies to outdoor lighting that is either added or altered.

6. **Signs.** Sections 130.0, 130.3 and 140.8 apply to newly constructed signs located either indoors or outdoors and Section 141.0 applies to sign alterations located either indoors or outdoors.

(f) **Mixed occupancy.** When a building is designed and constructed for more than one type of occupancy (residential and nonresidential), the space for each occupancy shall meet the provisions of Part 6 applicable to that occupancy.

Exception 1 to Section 100.0(f): If one occupancy constitutes at least 80 percent of the conditioned floor area of the building, the entire building envelope, HVAC, and water heating may be designed to comply with the provisions of Part 6 applicable to that occupancy, provided that the applicable lighting requirements in Sections 140.6 through 140.8, 150.0(k), or 160.5 and 170.2(e) are met for each occupancy and space, and mandatory measures in Sections 110.0 through 130.5, 150.0, and 160.0 through 160.9 are met for each occupancy and space.

Exception 2 to Section 100.0(f): If one occupancy constitutes at least 90 percent of the combined conditioned plus unconditioned floor area of the building, the entire building indoor lighting may be designed to comply with only the lighting provisions of Part 6 applicable to that occupancy.

(g) **Administrative requirements.** Administrative requirements relating to permit requirements, enforcement by the Commission, locally adopted energy standards, interpretations, claims of exemption, approved calculation methods, rights of appeal, and certification and labeling requirements of fenestration products and roofing products are specified in California Code of Regulations, Title 24, Part 1, Sections 10-101 to 10-114.

(h) **Certification Requirements for Manufactured Equipment, Products, and Devices.** Part 6 limits the installation of manufactured equipment, products, and devices to those that have been certified as specified by sections 110.0 and 110.1. Requirements for manufactured equipment, products, and devices, when not specified in Title 24 Part 6, are specified in California Code of Regulations, Title 20, Sections 1601-1609.

TABLE 100.0-A APPLICATION OF STANDARDS

Occupancies	Application	Mandatory	Prescriptive	Performance	Additions/Alterations
All Buildings	General	100.0, 100.1, 100.2, 110.0	100.0, 100.1, 100.2, 110.0	100.0, 100.1, 100.2, 110.0	100.0, 100.1, 100.2, 110.0
Nonresidential, And Hotels/Motels	General	120.0	140.0, 140.2	140.0, 140.1	141.0
Nonresidential, And Hotels/Motels	Envelope (conditioned)	110.6, 110.7, 110.8,120.7	140.3	140.0, 140.1	141.0
Nonresidential, And Hotels/Motels	Envelope (unconditioned process spaces)	N.A.	140.3(c)	140.0, 140.1	141.0
Nonresidential, And Hotels/Motels	HVAC (conditioned)	110.2, 110.5, 120.1, 120.2, 120.3, 120.4, 120.5, 120.8	140.4	140.0, 140.1	141.0
Nonresidential, And Hotels/Motels	Water Heating	110.3, 120.3, 120.8, 120.9	140.5	140.0, 140.1	141.0
Nonresidential, And Hotels/Motels	Indoor Lighting (conditioned, process spaces)	110.9, 120.8, 130.0, 130.1, 130.4	140.3(c), 140.6	140.0, 140.1	141.0
Nonresidential, And Hotels/Motels	Indoor Lighting (unconditioned and parking garages)	110.9, 120.8, 130.0, 130.1, 130.4	140.3(c), 140.6	N.A.	141.0
Nonresidential, And Hotels/Motels	Outdoor Lighting	110.9, 130.0, 130.2, 130.4	140.7	N.A.	141.0
Nonresidential, And Hotels/Motels	Electrical Power Distribution	110.11, 130.5	N.A.	N.A.	141.0
Nonresidential, And Hotels/Motels	Pool and Spa Systems	110.4, 110.5, 150.0(p)	N. A.	N.A.	141.0
Nonresidential, And Hotels/Motels	Solar Ready Buildings	110.10	N.A.	N.A.	141.0(a)
Nonresidential, And Hotels/Motels	Solar PV and Battery Storage Systems	N.A.	140.10	140.0, 140.1	N.A.
Covered Processes[1]	Envelope, Ventilation, Process Loads	110.2, 120.6	140.9	140.1	120.6, 140.9, 141.1
Signs	Indoor and Outdoor	110.9, 130.0, 130.3	140.8	N.A.	141.0, 141.0(b)2H
Single-Family	General	150.0	150.1(a, c)	150.1(a), 150.1(b)	150.2(a), 150.2(b)
Single-Family	Envelope (conditioned)	110.6, 110.7, 110.8, 150(a), 150.0(b), 150.0(c), 150.0(d), 150.0(e), 150.0(g), 150.0(q)	150.1(a, c)	150.1(a), 150.1(b)	150.2(a), 150.2(b)

Occupancies	Application	Mandatory	Prescriptive	Performance	Additions/Alterations
Single-Family	HVAC (conditioned)	110.2, 110.5, 150.0(h), 150.0(i), 150.0(j), 150.0(m), 150.0(o)	150.1(a, c)	150.1(a), 150.1(b)	150.2(a), 150.2(b)
Single-Family	Water Heating	110.3, 150.0(j, n)	150.1(a, c)	150.1(a), 150.1(b)	150.2(a), 150.2(b)
Single-Family	Indoor Lighting (conditioned, unconditioned and parking garages)	110.9, 130.0, 150.0(k)	150.1(a, c)	150.1(a), 150.1(b)	150.2(a), 150.2(b)
Single-Family	Outdoor Lighting	110.9, 130.0,150.0(k)	150.1(a, c)	150.1(a), 150.1(b)	150.2(a), 150.2(b)
Single-Family	Pool and Spa Systems	110.4, 150.0(p)	N. A.	N.A.	150.2(a), 150.2(b)
Single-Family	Solar Ready Buildings	110.10	N. A.	N.A.	N.A.
Single-Family	Electric Ready	150.0(s), 150.0(t), 150.0(u), 150.0(v)	N.A.	N.A.	N.A.
Single-Family	Solar PV Systems	N.A.	150.1(c)14	150.1(a), 150.1(b)	N.A.
Multifamily	General	160.0	170.2	170.1	180.0
Multifamily	Envelope (conditioned)	110.6, 110.7, 110.8, 160.1	170.1(a)	170.1	180.0
Multifamily	Ventilation and Indoor Air Quality	160.2	N.A.	170.1	180.0
Multifamily	HVAC (conditioned)	110.2, 110.5, 160.3	170.2(c)	170.1	180.0
Multifamily	Water Heating	110.3, 160.4	170.2(d)	170.1	180.0
Multifamily	Indoor Lighting	110.9, 160.5	170.2(e)	170.1	180.0
Multifamily	Outdoor Lighting	110.9, 160.5	170.2(e)	170.1	180.0
Multifamily	Electrical Power Distribution	110.11, 160.6	N.A.	N.A.	180.0
Multifamily	Pool and Spa Systems	110.4, 110.5, 160.7	N.A.	N.A.	180.0
Multifamily	Solar Ready Buildings	110.10, 160.8	N.A.	N.A.	180.0
Multifamily	Electric Ready	160.9	N.A.	N.A.	N.A.
Multifamily	Solar PV and Battery Storage Systems	N.A.	170.2(f), (g), (h)	170.1	N.A.

[1] Nonresidential and hotel/motel buildings that contain covered processes may conform to the applicable requirements of both occupancy types listed in this table.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, *Public Resources Code*. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, *Public Resources Code*.

SECTION 100.1 – DEFINITIONS AND RULES OF CONSTRUCTION

(a) **Rules of Construction.**

1. Where the context requires, the singular includes the plural and the plural includes the singular.
2. The use of "and" in a conjunctive provision means that all elements in the provision must be complied with, or must exist to make the provision applicable. Where compliance with one or more elements suffices, or where existence of one or more elements makes the provision applicable, "or" (rather than "and/or") is used.
3. "Shall" is mandatory and "may" is permissive.

(b) **Definitions.** Terms, phrases, words and their derivatives in Part 6 shall be defined as specified in Section 100.1. Terms, phrases, words and their derivatives not found in Section 100.1 shall be defined as specified in the "Definitions" chapters of Title 24, Parts 1 through 5 of the California Code of Regulations. Where terms, phrases, words and their derivatives are not defined in any of the references above, they shall be defined as specified in *Webster's Third New International Dictionary of the English Language, Unabridged* (1961 edition, through the 2002 addenda), unless the context requires otherwise.

AAMA/WDMA/CSA 101/ I.S.2/A440-17 are the American Architectural Manufacturers Association/ Window and Door Manufacturers Association/ Canadian Standards Association document titled "North American Fenestration Standard/Specification for windows, doors, and skylights" (2017).

ACCA is the Air Conditioning Contractors of America.

ACCA MANUAL J is the Air Conditioning Contractors of America document titled "Manual J - Residential Load Calculation" (ANSI/ACCA 2 Manual J – 2016).

ACCEPTANCE REQUIREMENTS FOR CODE COMPLIANCE is a description of test procedures in the Reference Nonresidential Appendices that includes equipment and systems to be tested, functions to be tested, conditions under which the test shall be performed, the scope of the tests, results to be obtained, and measurable criteria for acceptable performance.

ACCESSIBLE is having access thereto, but which first may require removal or opening of access panels, doors, or similar obstructions.

ADDITION is any change to a building that increases conditioned floor area and conditioned volume. See also "newly conditioned space." Addition is also any change that increases the floor area and volume of an unconditioned building of an occupancy group or type regulated by Part 6. Addition is also any change that increases the illuminated area of an outdoor lighting application regulated by Part 6.

ADIABATIC PAD is a material located before the heat transfer surface of an adiabatic condenser, which precools the ambient air by becoming fully wetted during precool mode operation.

AGRICULTURAL BUILDING is a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products. It is not a structure that is a place of human habitation, a place of employment where agricultural products are processed, treated or packaged, or a place used by the public.

AHAM is the Association of Home Appliance Manufacturers.

AHAM HRH-2 is the Association of Home Appliance Manufacturers document titled "Residential Kitchen Range Hood Performance Test Procedures," 2020 (AHAM HRH-2).

AHAM RKRH-CPPG is the Association of Home Appliance Manufacturers document titled "Residential Kitchen Range Hood Certification Program Procedural Guide" 2020 (version 3).

AHRI is the Air-Conditioning, Heating, and Refrigeration Institute.

AHRI 210/240 is the Air-Conditioning, Heating, and Refrigeration Institute document titled "Performance Rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment," 2017 (AHRI Standard 210/240-2017 with Addenda 1).

AHRI 310/380 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Packaged Terminal Air-Conditioners and Heat Pumps (CSA-C744-17),” 2004 (AHRI 310/380-2017).

AHRI 340/360 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment,” 2019 (AHRI Standard 340/360-(I-P)-2019).

AHRI 365 is the Air-Conditioning, Heating, and Refrigeration Institute document titled " Performance Rating of Commercial and Industrial Unitary Air-Conditioning Condensing Units," 2009 (ANSI/AHRI Standard 365 (I-P)-2009).

ANSI/AHRI 390 is the Air-Conditioning, Heating, and Refrigeration Institute document titled "Performance Rating of Single Package Vertical Air-Conditioners and Heat Pumps," 2003 (ANSI/AHRI Standard 390 (I-P)-2003).

AHRI 400 is the Air-Conditioning, Heating, and Refrigeration Institute document titled " Performance Rating of Liquid to Liquid Heat Exchangers," 2015 (ANSI/AHRI Standard 400 (I-P)-2015).

AHRI 430 is the Air-Conditioning, Heating and Refrigeration Institute document titled “Performance Rating of Central Station Air-handling Unit Supply Fans”. 2020 (AHRI Standard 430 (I-P)-2020)

AHRI 440 is the Air-Conditioning, Heating and Refrigeration Institute document titled “Performance Rating of Fan-coil Units”. 2019 (AHRI Standard 440 (I-P)-2019)

AHRI 460 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Performance Rating of Remote Mechanical-Draft Air-Cooled Refrigerant Condensers,” 2005 (ANSI/AHRI Standard 460-2005).

AHRI 550/590 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Performance Rating of Water Chilling and Heat Pump Water-heating Packages Using the Vapor Compression Cycle,” 2020 (AHRI Standard 550/590 (I-P)-2020).

AHRI 560 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Absorption Water Chilling and Water Heating Packages,” 2000 (AHRI Standard 560-2000).

AHRI 680 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Performance Rating of Residential Air Filter Equipment,” 2017 (AHRI Standard 680 2017).

AHRI 920 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Performance Rating of Direct Expansion-Dedicated Outdoor Air System Units” 2020 (AHRI Standard 920 (I-P)-2020).

AHRI 1060 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment,” 2018 (AHRI Standard 1060 (I-P)-2018).

AHRI 1230 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment,” 2014 (AHRI Standard 1230-2014) with Addendum 1.

AHRI 1360 is the Air-Conditioning, Heating, and Refrigeration Institute document titled “Performance Rating of Computer and Data Processing Room Air Conditioners,” 2017 (AHRI Standard 1360 (I-P)-2017).

AIR, AVAILABLE TRANSFER is that portion of total outdoor ventilation air that is not required to satisfy other exhaust needs or to maintain pressurization of other spaces and that is transferable according to Section 120.1(g).

AIR, INFILTRATION is outdoor air that enters a building or space through openings in the building or space envelope due to negative pressure in the space or building relative to the exterior of the building envelope.

AIR, MAKEUP, or COMPENSATING OUTDOOR AIR is outdoor air that is intentionally conveyed by openings or ducts into the building from the outside; is supplied to the vicinity of an exhaust hood; and replaces air, vapor and contaminants being exhausted by the exhaust hood. Makeup air is generally filtered and fan-forced, and it may be heated or cooled. Makeup air may be delivered through openings or ducts integral to the exhaust hood.

AIR, REPLACEMENT is air that is used to replace air removed from a building through an exhaust system. Replacement air may be derived from one or more of the following: makeup air, portions of supply air, transfer air, or infiltration air.

AIR, SUPPLY is air entering a space from an air-conditioning, heating, or ventilating system for the purpose of comfort conditioning. Supply air is generally filtered, fan-forced, and heated, cooled, humidified or dehumidified as necessary to maintain specified temperature and humidity conditions.

AIR, TRANSFER is air transferred, whether actively by fans or passively by pressure differentials, from one room to another within a building through openings in the room envelope.

AIR BARRIER is a combination of interconnected materials and assemblies joined and sealed together to provide a continuous barrier to air leakage through the building envelope that separates conditioned from unconditioned space, or that separates adjoining conditioned spaces of different occupancies or uses.

AIR CONDITIONER is an appliance that supplies cooled and dehumidified air to a space for the purpose of cooling objects within the space.

AIR-COOLED AIR CONDITIONER is an air conditioner using an air-cooled condenser.

AIR CURTAIN UNIT means equipment providing a directionally-controlled stream of air moving across the entire height and width of an opening that reduces the infiltration or transfer of air from one side of the opening.

AIR FILTER, AIR FILTER EQUIPMENT, or AIR FILTER DEVICE is air-cleaning equipment used for removing particulate matter from the air.

AIR FILTER MEDIA is the part of the air filter equipment which is the actual particulate removing agent.

AIR-HANDLING UNIT or AIR HANDLER is a blower or fan that distributes supply air to a room, space, or area.

AIR-SOURCE HEAT PUMP is an appliance that consists of one or more factory-made assemblies, that includes an indoor conditioning coil, a compressor, and a refrigerant-to-air heat exchanger, and that provides heating and cooling functions.

AIR-TO-AIR HEAT EXCHANGER is a device which will reduce the heat losses or gains that occur when a building is mechanically ventilated, by transferring heat between the conditioned air being exhausted and outside air being supplied.

ALTERATION is any change to a building's water-heating system, space-conditioning system, lighting system, electrical power distribution system, or envelope that is not an addition. Alteration is also any change that is regulated by Part 6 to an outdoor lighting system that is not an addition. Alteration is also any change that is regulated by Part 6 to signs located either indoors or outdoors. Alteration is also any change that is regulated by Part 6 to a covered process that is not an addition. (See also “fenestration alteration”.)

ALTERED COMPONENT is a component that has undergone an alteration.

ALTERNATING CURRENT-OUTPUT UNINTERRUPTIBLE POWER SUPPLY (AC-OUTPUT UPS) is a combination of convertors, switches, and energy storage devices, such as batteries, constituting a power system for maintaining continuity of load power in case of input power failure. Input power failure occurs when voltage and frequency are outside rated steady-state and transient tolerance bands or when distortion or interruptions are outside the limits specified for the uninterruptible power supply. An AC-output UPS is an uninterruptible power supply that supplies power with a continuous flow of electric charge that periodically reverses direction.

ALTERNATIVE CALCULATION METHODS (ACM) are compliance software, or alternative component packages, or exceptional methods approved by the Commission under Section 10-109. ACMs are also referred to as Compliance Software.

ALTERNATIVE CALCULATION METHODS (ACM) APPROVAL MANUAL are the documents establishing the requirements for Energy Commission approval of Compliance Software used to demonstrate compliance with the Building Energy Efficiency Standards for Residential and Nonresidential Buildings currently adopted by the Energy Commission.

AMCA is the Air Movement and Control Association.

ANNUAL FUEL UTILIZATION EFFICIENCY (AFUE) is a measure of the percentage of heat from the combustion of gas or oil which is transferred to the space being heated during a year, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 110.2.

ANNUNCIATED is a type of visual signaling device that indicates the on, off, or other status of a load.

ANSI is the American National Standards Institute.

ANSI/AMCA 208 is the Air Movement and Control Association document titled “Calculation of the Fan Energy Index”. 2018 (ANSI/AMCA 208-18)

ANSI/AMCA 210 is the Air Movement and Control Association document titled “Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating”. 2016 (ANSI/AMCA 210-16)

ANSI/AMCA STANDARD 500-D is the American National Standards Institute / Air Movement and Control Association document titled “Laboratory Methods of Testing Dampers for Rating.” 2018 (ANSI/AMCA 500-D-2018).

ANSI/ASABE S640 is the American National Standards Institute/American Society of Agricultural and Biological Engineers document titled “Quantities and Units of Electromagnetic Radiation for Plants (Photosynthetic Organisms),” 2017 (ANSI/ASABE S640 JUL2017).

ANSI/ASSPE Z9.5 is the American National Standards Institute document titled “Laboratory Ventilation,” 2012 (ANSI/AIHA/ASSPE Z9.5-2012).

ANSI C82.6 is the American National Standards Institute document titled “AMERICAN NATIONAL STANDARD FOR LAMP BALLASTS – Ballasts For High-Intensity Discharge Lamps – Methods of Measurement,” 2020 (ANSI C82.6-2015 (R2020)).

ANSI/CTA-2045-B is the American National Standards Institute document titled "Modular Communications Interface for Energy Management," 2021 (ANSI/CTA-2045-B-2021).

ANSI/NEMA WD 6 is the National Electrical Manufacturers Association Document titled, “American National Standard for Wiring Devices – Dimensional Specification,” 2016 (ANSI/NEMA WD 6-2016).

ANSI Z21.40.4a is the American National Standards Institute document titled “Performance Testing and Rating of Gas-Fired, Air Conditioning and Heat Pump Appliances,” 2017 (ANSI Z21.40.4a-1996 (R2017)/CGA 2.94a-M96(R2017)).

ANSI Z21.47 is the American National Standards Institute document titled “Gas-Fired Central Furnaces,” 2021 (ANSI Z21.47-2021/CSA 2.3-2021).

ANSI Z83.8 is the American National Standards Institute document titled “Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters and Gas-Fired Duct Furnaces,” 2016 (ANSI Z83.8 -2016/CSA 2.6-2016 (R2021)).

APPLIANCE EFFICIENCY REGULATIONS are the regulations in Title 20, Sections 1601 et seq. of the California Code of Regulations.

APPROVED CALCULATION METHOD (See “alternative calculation methods.”)

ASCE 7-16 is the American Society of Civil Engineers Standard 7-16.

ASHRAE is the American Society of Heating, Refrigerating, and Air-Conditioning Engineers.

ASHRAE CLIMATIC DATA FOR REGION X is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "ASHRAE Climatic Data for Region X, Arizona, California, Hawaii and Nevada,” Publication SPCDX, 1982 and “Supplement,” 1994.

ASHRAE HANDBOOK, APPLICATIONS VOLUME is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "ASHRAE Handbook: Heating, Ventilating, and Air-Conditioning Applications" (I-P) (2019).

ASHRAE HANDBOOK, FUNDAMENTALS VOLUME is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "ASHRAE Handbook: Fundamentals" (I-P) (2017).

ASHRAE HANDBOOK, SYSTEMS AND EQUIPMENT VOLUME is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "ASHRAE Handbook: Heating, Ventilating, and Air-Conditioning Systems and Equipment" (I-P) (2020).

ASHRAE STANDARD 52.2 is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size,” 2017 (ANSI/ASHRAE Standard 52.2-2017).

ASHRAE STANDARD 55 is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled " Thermal Environmental Conditions for Human Occupancy,” 2020 (ANSI/ASHRAE Standard 55-2020).

ASHRAE STANDARD 62.1 is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled **"**Ventilation for Acceptable Indoor Air Quality," 2019 (ANSI/ASHRAE Standard 62.1-2019, including Addenda y, ao, P, B).

ASHRAE STANDARD 62.2 is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "Ventilation and Acceptable Indoor Air Quality in Residential Buildings," 2019 (ANSI/ASHRAE Standard 62.2-2019 including ANSI/ASHRAE Addenda v and d - published in the 2020).

ASHRAE STANDARD 84 is the American National Standards Institute/American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "Method of Testing Air-to-Air Heat/Energy Exchangers". 2020 (ANSI/ASHRAE 84-2020).

ASHRAE STANDARD 90.1 is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "Energy Standards for Buildings Except Low-Rise Residential Buildings," 2019 (ANSI/ASHRAE/IES Standards 90.1-2019).

ASHRAE STANDARD 154 is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "Ventilation for Commercial Cooking Operations," 2016 (ANSI/ASHRAE Standard 154-2016).

ASHRAE STANDARD 193 is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document titled "Method of Test for Determining the Airtightness of HVAC Equipment," RA2014 (ANSI/ASHRAE Standard 193-RA2014).

ASME is the American Society of Mechanical Engineers.

ASME A17.1/CSA B44 is the American Society of Mechanical Engineers document titled " Safety Code for Elevators and Escalators" 2019 (ASME A17.1-2019/CSAB44-19).

ASME A112.18.1/CSA B125.1 is the American Society of Mechanical Engineers document titled "Plumbing Supply Fittings," 2018 (ASME A112.18.1-2018/CSA B125.1-18).

ASTM is the American Society for Testing and Materials International.

ASTM C55 is the American Society for Testing and Materials document titled "Standard Specifications for Concrete Building Brick," 2017 (ASTM C55-17).

ASTM C177 is the American Society for Testing and Materials document titled "Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus," 2019 (ASTM C177-19).

ASTM C272 is the American Society for Testing and Materials document titled "Standard Test Method for Water Absorption of Core Materials for Sandwich Constructions," 2018 (ASTM C272/C272M-18).

ASTM C335/C335M is the American Society for Testing and Materials document titled "Standard Test Method for Steady-State Heat Transfer Properties of Pipe Insulation," 2017 (ASTM C335/C335M-17).

ASTM C518 is the American Society for Testing and Materials document titled "Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus," 2017 (ASTM C518-17).

ASTM C731 is the American Society for Testing and Materials document titled "Standard Test Method for Extrudability, After Package Aging of Latex Sealants," 2015 (ASTM C731-15).

ASTM C732 is the American Society for Testing and Materials document titled "Standard Test Method for Aging Effects of Artificial Weathering on Latex Sealants," 2017 (ASTM C732-17).

ASTM C836 is the American Society for Testing and Materials document titled "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course," 2018 (ASTM C836/C836M-18).

ASTM C1167 is the American Society for Testing and Materials document titled "Standard Specification for Clay Roof Tiles," 2017 (ASTM C1167-11(2017)).

ASTM C1371 is the American Society for Testing and Materials document titled "Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers," 2015 (ASTM C1371-15.

ASTM C1492 is the American Society for Testing and Materials document entitled “Standard Specification for Concrete Roof Tile,” 2016 (ASTM C1492-03(2016)).

ASTM C1549 is the American Society for Testing and Materials document entitled "Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer,"2016 (ASTM C1549-16).

ASTM C1583 is the American Society for Testing and Materials document titled “Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method),” 2020 (ASTM C1583/C1583M-20).

ASTM D448 is the American Society for Testing and Materials document titled "Standard Classification for Sizes of Aggregate for Road and Bridge Construction,"2017 (ASTM D448-12(2017)).

ASTM D522 is the American Society for Testing and Materials document titled “Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings,” 2017 (ASTM D522/D522M-17).

ASTM D822 is the American Society for Testing and Materials document titled “Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings,” 2018 (ASTM D822/D822M-13(2018)).

ASTM D1003 is the American Society for Testing and Materials document titled “Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics,” 2021 (ANSI/ASTM D1003-21).

ASTM D1653 is the American Society for Testing and Materials document titled “Standard Test Methods for Water Vapor Transmission of Organic Coating Films,” 2021 (ASTM D1653-21).

ASTM D1863 is the American Society for Testing and Materials document titled "Standard Specification for Mineral Aggregate Used on Built-Up Roofs,"2018 (ASTM D1863/D1863M-05 (2018)).

ASTM D2202 is the American Society for Testing and Materials document titled “Standard Test Method for Slump of Sealants,” 2019 (ASTM D2202-00(2019))

ASTM D2370 is the American Society for Testing and Materials document titled “Standard Test Method for Tensile Properties of Organic Coatings,” 2016 (ASTM D2370-98-16).

ASTM D2824 is the American Society for Testing and Materials document titled “Standard Specification for Aluminum-Pigmented Asphalt Roof Coatings, Nonfibered, and Fibered without Asbestos,” 2018 (ASTM D2824/D2824M-18).

ASTM D3468 is the American Society for Testing and Materials document titled “Standard Specification for Liquid-Applied Neoprene and Chlorosulfonated Polyethylene Used in Roofing and Waterproofing,” 2020 (ASTM D3468/D3468M-99 (2020)).

ASTM D3805 is the American Society for Testing and Materials document titled “Standard Guide for Application of Aluminum-Pigmented Asphalt Roof Coatings,” 2016 (ASTM D3805/D3805M-16).

ASTM D4798 is the American Society for Testing and Materials document titled “Standard Practice for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method),” 2021 (ASTM D4798/D4798M-11(2021)).

ASTM D5870 is the American Society for Testing and Materials document titled “Standard Practice for Calculating Property Retention Index of Plastics,” 2016 (ASTM D5870-16).

ASTM D6083 is the American Society for Testing and Materials document titled “Standard Specification for Liquid Applied Acrylic Coatings Used in Roofing,” 2021 (ASTM D6083/D6083M-21).

ASTM D6694 is the American Society for Testing and Materials document titled “Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems,” 2015 (ASTM D6694/D6694M-15).

ASTM E96 is the American Society for Testing and Materials document titled “Standard Test Methods for Water Vapor Transmission of Materials,” 2016 (ASTM E96/E96M-16).

ASTM E283 is the American Society for Testing and Materials document titled “Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylight, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen,” 2019 (ASTM E283/E238-19).

ASTM E408 is the American Society for Testing and Materials document titled “Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques,” 2019 (ASTM E408-13(2019)).

ASTM E779 is the American Society for Testing and Materials document titled “Standard Test Method for Determining Air Leakage Rate by Fan Pressurization,” 2019 (ASTM E779-19).

ASTM E903 is the American Society for Testing and Materials document titled "Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres,"2020 (ASTM E903-20).

ASTM E972 is the American Society for Testing and Materials document titled "Standard Test Method for Solar Photometric Transmittance of Sheet Materials Using Sunlight,"2021 (ASTM E972-96(2021)).

ASTM E1175 is the American Society for Testing and Materials document titled "Standard Test Method for Determining Solar or Photopic Reflectance, Transmittance, and Absorptance of Materials Using a Large Diameter Integrating Sphere," 2015 (ASTM E1175-87(2015)).

ASTM E1677 is the American Society for Testing and Materials document titled “Standard Specification for Air Barrier (AB) Material or Assemblies for Low-Rise Framed Building Walls,” 2019 (ASTM E1677-19).

ASTM E1680 is the American Society for Testing and Materials document titled ”Standard Test Method for Rate of Air Leakage through Exterior Metal Roof Panel Systems,” 2016 (ASTM E1680-16).

ASTM E1918 is the American Society for Testing and Materials document titled "Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field,"2016 (ASTM E1918-16).

ASTM E1980 is the American Society for Testing and Materials document titled “Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surface,” 2019 (ASTM E1980-11(2019)).

ASTM E2178 is the American Society for Testing and Materials document titled "Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials," 2021 (ASTM E21778-21).

ASTM E2357 is the American Society for Testing and Materials document titled "Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies,” 2018 (ASTM E2357-18).

ASTM E3087 is the American Society for Testing and Materials document titled “Standard Test Method for Measuring Capture Efficiency of Domestic Range Hoods,” 2018 (ASTM E3087-18).

ATTIC is an enclosed space directly below the roof deck and above the ceiling beams.

AUTOMATED TELLER MACHINE (ATM) is any electronic information processing device which accepts or dispenses currency in connection with a credit, deposit, or convenience account without involvement by a clerk.

AUTOMATIC is capable of operating without human intervention.

AZIMUTH is the degrees of clockwise rotation from true north.

BACK-UP COMPRESSORS are those compressors not used to meet peak compressed air loads. Back-up compressors are physically connected to the compressed air piping system and can be automatically controlled to turn on if one of the online compressors fails. Back-up compressors do not normally operate.

BATTERY SYSTEM, STATIONARY STORAGE. A rechargeable energy storage system consisting of electrochemical storage batteries, battery chargers, controls, and associated electrical equipment designed to provide electrical power to a building. The system is typically used to provide standby or emergency power, and uninterruptable power supply, load shedding, load sharing or similar capabilities.

BELOW-GRADE WALL is the portion of a wall, enclosing conditioned space that is below the grade line.

BOILER SYSTEM is one or more boilers and their piping and controls that work together to supply steam or hot water to heat output devices remote from the boiler.

BUBBLE POINT is the liquid saturation temperature of a refrigerant at a specified pressure.

BUILDING is any structure or space covered by Section 100.0 of the Building Energy Efficiency Standards.

BUILDING COMMISSIONING is a systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.

BUILDING ENVELOPE is the ensemble of exterior and demising partitions of a building that enclose conditioned space.

CALL CENTER is a phone center that handles large number of phone calls including but not limited to help desk, customer and sales support, technical support, emergency response, telephone answering service, and inbound and outbound telemarketing.

CARBON DIOXIDE ENRICHMENT is injection of additional carbon dioxide into controlled environment horticulture spaces for the purpose of stimulating plant growth.

CASCADE REFRIGERATION SYSTEM is a type of refrigeration system that uses a low-stage refrigeration system where the heat rejected from condensing the low-stage refrigerant is absorbed using a heat-exchanger by a separate high-stage refrigeration system, and the ultimate heat rejection to ambient air is accomplished by the high-stage refrigeration system.

CEILING FAN means a nonportable device that is suspended from a ceiling or overhead structure for circulating air via the rotation of fan blades as defined in 10 CFR 430.2.

CENTRAL FAN VENTILATION COOLING SYSTEM (CFVCS) is a ducting arrangement including outside air ducts, motorized dampers, and an automatic control system that allows a residential space conditioning system central fan and ducts to distribute outside air throughout a residential dwelling unit, intending to reduce or eliminate the need for mechanical cooling.

CERTIFIED TO THE ENERGY COMMISSION means, when used in association with appliances, certified under Section 1606 of Title 20 of the California Code of Regulations; and otherwise means certified by the manufacturer in a declaration, executed under penalty of perjury under the laws of the State of California, that all the information provided pursuant to the certification is true, complete, accurate and in compliance with all applicable provisions of Part 6; and if applicable that the equipment, product, or device was tested under the applicable test method specified in Part 6.

CERTIFYING ORGANIZATION is an independent organization recognized by the Commission to certify manufactured devices for performance values in accordance with procedures adopted by the Commission.

CIE 13.3 is the International Commission on Illumination (Commission Internationale de l'Eclairage) document titled "Method of Measuring and Specifying Colour Rendering Properties of Light Sources," 1995 (CIE 13.3-1995).

CIE 15 is the International Commission on Illumination (Commission Internationale de l'Eclairage) document titled "Technical Report: Colorimetry," 2018 (CIE 15: 2018).

CIRCULATING FAN means a fan that is not a ceiling fan, but that is used to move air within a space that has no provision for connection to ducting or separation of the fan inlet from its outlet, and designed to be used for the general circulation of air.

CLIMATE ZONES are the 16 geographic areas of California for which the Commission has established typical weather data, prescriptive packages and energy budgets. Climate zones are defined by ZIP code and listed in Reference Joint Appendix JA2. FIGURE 100.1-A is an approximate map of the 16 Climate Zones.

CLOSED-CIRCUIT COOLING TOWER is a cooling tower that utilizes indirect contact between a heated fluid, typically water or glycol, and the cooling atmosphere to transfer the source heat load through sensible heat, latent heat, and mass transfer indirectly to the air, essentially combining a heat exchanger and cooling tower into an integrated and relatively compact device.

CODES, CALIFORNIA HISTORICAL BUILDING CODE is the California Historical Building Code, California Code of Regulations, Title 24, Part 8 and Part 2 (Chapter 34).

CODES, CBC is the 2022 *California Building Code*.

CODES, CEC is the 2022 *California Electrical Code*.

CODES, CFC is the 2022 C*alifornia Fire Code.*

CODES, CMC is the 2022 *California Mechanical Code*.

CODES, CPC is the 2022 *California Plumbing Code*.

COEFFICIENT OF PERFORMANCE (COP), COOLING is the ratio of the rate of net heat removal to the rate of total energy input, calculated under designated operating conditions and expressed in consistent units, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 110.2.

COEFFICIENT OF PERFORMANCE (COP), HEATING is the ratio of the rate of net heat output to the rate of total energy input, calculated under designated operating conditions and expressed in consistent units, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 110.2.

COEFFICIENT OF PERFORMANCE (COP), HEAT PUMP is the ratio of the rate of useful heat output delivered by the complete heat pump unit (exclusive of supplementary heating) to the corresponding rate of energy input, in consistent units and as determined using the applicable test method in Appliance Efficiency Regulations or Section 110.2.

COMBINED ENERGY EFFICIENCY RATIO (CEER) is the ratio of net cooling capacity (in Btu/hr) to total rate of electrical energy input (in watts) of a cooling system under designated operating conditions, including standby mode, as determined using the applicable test method in the Appliance Efficiency Regulations.

COMBUSTION AIR POSITIVE SHUT-OFF is a means of restricting airflow through a boiler combustion chamber during standby periods, used to reduce standby heat loss. A flue damper and a vent damper are two examples of combustion air positive shut-off devices.

COMBUSTION EFFICIENCY is a measure of the percentage of heat from the combustion of gas or oil that is transferred to the medium being heated or lost as jacket loss.

COMMERCIAL BOILER is a type of boiler with a capacity (rated maximum input) of 300,000 Btus per hour (Btu/h) or more and serving a space heating or water heating load in a commercial building.

COMMISSION is the California State Energy Resources Conservation and Development Commission, which is also referred to as the California Energy Commission.

COMPLEX MECHANICAL SYSTEMS are systems that include 1) fan systems each serving multiple thermostatically controlled zones; or 2) built-up air handler systems (nonunitary or nonpackaged HVAC equipment); or 3) hydronic or steam heating systems; or 4) hydronic cooling systems. Complex mechanical systems are NOT the following: 1) unitary or packaged equipment listed in Table 110.2-A, 110.2-B, 110.2-C, or 110.2-E that each serves one zone, or 2) two-pipe, heating only systems serving one or more zones.

COMPLIANCE SOFTWARE is software that has been approved pursuant to Section 10-109 of Part 1 of Title 24 of the California Code of Regulations, to demonstrate compliance with the performance approach of Part 6.

COMPRESSED AIR SYSTEM is a system of at least one compressor providing compressed air at 40 psig or higher.

COMPUTER ROOM is a room within a building whose primary function is to house electronic equipment and that has a design information technology equipment (ITE) equipment power density exceeding 20 watts/ft^2 (215 watts/m^2) of conditioned floor area.

CONDENSER is a refrigeration component that condenses refrigerant vapor by rejecting heat to air mechanically circulated over its heat transfer surface.

CONDENSER, ADIABATIC is a condenser that has the ability to use two heat transfer processes in series as accomplished by a single factory-made unit. The first heat transfer process is the precooling of the entering air by lowering the entering air drybulb temperature. The second heat transfer process is forced-air circulation cooling over the heat transfer surface of the condenser.

DRY MODE is an operating condition of an adiabatic condenser wherein the only means of heat transfer is accomplished through forced-air circulation over the heat transfer surface of the condenser without any precooling of the entering air.

PRECOOL MODE is an operating condition of an adiabatic condenser wherein the entering air is precooled.

CONDENSER SPECIFIC EFFICIENCY is the full load condenser Total Heat of Rejection (THR) capacity at standardized conditions divided by the fan input electric power (including but not limited to spray pump electric input power for evaporative condensers) at 100 percent rated fan speed.

CONDITIONED FLOOR AREA (CFA) is the floor area (in square feet) of enclosed conditioned space on all floors of a building, as measured at the floor level of the exterior surfaces of exterior walls enclosing the conditioned space.

CONDITIONED GREENHOUSE is a greenhouse that is provided with wood heating, mechanical heating that has a capacity exceeding 10 Btu/hr-ft², or mechanical cooling that has a capacity exceeding 5 Btu/hr-ft².

CONDITIONED SPACE is an enclosed space within a building that is directly conditioned or indirectly conditioned.

CONDITIONED SPACE, DIRECTLY is an enclosed space that is provided with wood heating, mechanical heating that has a capacity exceeding 10 Btu/hr-ft², or mechanical cooling that has a capacity exceeding 5 Btu/hr-ft², . Directly conditioned space does not include process space. (See "process space.")

CONDITIONED SPACE, INDIRECTLY is enclosed space that (1) is not directly conditioned space; and (2) either (a) has a thermal transmittance area product (UA) to directly conditioned space exceeding that to the outdoors or to unconditioned space and does not have fixed vents or openings to the outdoors or to unconditioned space, or (b) is a space through which air from directly conditioned spaces is transferred at a rate exceeding three air changes per hour.

CONDITIONED VOLUME is the total volume (in cubic feet) of the conditioned space within a building.

CONTINUOUS INSULATION (c.i.) is insulation that is continuous across all assemblies that separate conditioned from unconditioned space. It is installed on the exterior or interior or is integral to any opaque surface of the building envelope and has no thermal bridges other than fasteners and necessary service openings.

CONTROLLED ATMOSPHERE is an airtight space maintained at reduced oxygen levels for the purpose of reducing respiration of perishable product in long term storage.

CONTROLLED ENVIRONMENT HORTICULTURE (CEH) SPACE is a building space dedicated to plant production by manipulating indoor environmental conditions, such as through electric lighting, irrigation, mechanical heating, mechanical cooling, or dehumidification. CEH space does not include building space where plants are grown solely to decorate that same space.

COOLER is a space to be capable of operation at a temperature greater than or equal to 28°F but less than 55°F.

COOL ROOF is a roofing material with high thermal emittance and high solar reflectance, or low thermal emittance and exceptionally high solar reflectance as specified in Part 6 that reduces heat gain through the roof.

COOLING EQUIPMENT is equipment used to provide mechanical cooling for a room or rooms in a building.

CRAWL SPACE is a space immediately under the first floor of a building adjacent to grade.

CRRC-1 is the Cool Roof Rating Council document titled "Product Rating Program Manual." (2021)

CTI is the Cooling Technology Institute.

CTI ATC-105 is the Cooling Technology Institute document titled "Acceptance Test Code for Cooling Towers," 2019 (CTI ATC-105-19).

CTI ATC-105DS is the Cooling Technology Institute document titled "Acceptance Test Code for Dry Fluid Coolers, 2018 (CTI ATC-105DS (18)).

CTI ATC-105S(11) is the Cooling Technology Institute document titled "Acceptance Test Code for Closed-Circuit Cooling Towers," 2011 (CTI ATC-105 11).

CTI ATC-106 is the Cooling Technology Institute document titled "Acceptance Test Code for Mechanical Draft Evaporative Vapor Condensers", 2011 (CTI ATC-106 11).

CTI STD-201 is the Cooling Technology Institute document titled "Standard for the Certification of Water Cooling Thermal Performance,"2017 (CTI STD-201-RS(17)).

CURRENT AIR DEMAND is the actual cubic feet per minute (acfm) of total airflow necessary for end uses in a compressed air system.

C-VALUE (also known as C-factor) is the time rate of heat flow through unit area of a body induced by a unit temperature difference between the body surfaces, in Btu (hr × ft² × °F). It is not the same as K-value or K-factor.

CYCLES OF CONCENTRATION is the number of times the concentration of total dissolved solids (TDS) in cooling tower water is multiplied relative to the TDS in the makeup water. Because evaporation of pure water leaves dissolved solids behind in the system water, TDS increases over time as the tower operates. The number of times the dissolved minerals are concentrated is relative to the TDS in the makeup water. For example, five cycles of concentration represents five times the concentration of solids in the cooling tower system water relative to the TDS in the makeup water entering the tower.

DATA CENTER is a building whose primary function is to house computer room(s).

DAYLIT ZONE is the floor area under skylights or next to windows. Types of daylit zones include primary sidelit daylit zone, secondary sidelit daylit zone, and skylit daylit zone.

DEADBAND is the temperature range within which the HVAC system is neither calling for heating or cooling.

DECORATIVE GAS APPLIANCE is a gas appliance that is designed or installed for visual effect only, cannot burn solid wood, and simulates a fire in a fireplace.

DEDICATED OUTDOOR AIR SYSTEM (DOAS) is ventilation system that delivers 100 percent outdoor air and delivers ventilation supply air to each space, either directly or in conjunction with local or central space-conditioning systems serving those same spaces such as a DX-DOAS, HRV, ERV, or custom ventilation only unit.

DEGREE DAY, HEATING, is a unit, based upon temperature difference and time, used in estimating fuel consumption and specifying nominal annual heating load of a building. For any one day, when the mean temperature is less than 65°F, there exist as many degree days as there are Fahrenheit degrees difference in temperature between the mean temperature for the day and 65°F. The number of degree days for specific geographical locations are those listed in the Reference Joint Appendix JA2. For those localities not listed in the Reference Joint Appendix JA2, the number of degree days is as determined by the applicable enforcing agency.

DEHUMIDIFIER is a product other than a portable air conditioner, room air conditioner, or packaged terminal air conditioner that is a self-contained, electrically operated, and mechanically encased assembly consisting of 1) a refrigerated surface (evaporator) that condenses moisture from the atmosphere, 2) a refrigerating system, including an electric motor, 3) an air-circulating fan, and 4) a means for collecting or disposing of the condensate.

DEMAND FLEXIBILITY MEASURE is a measure that reduces TDV energy consumption using communication and control technology to shift electricity use across hours of the day to decrease energy use onpeak or increase energy use offpeak, including but not limited to battery storage, or HVAC or water heating load shifting.

DEMAND RESPONSE is short-term changes in electricity usage by end-use customers from their normal consumption patterns. Demand response may be in response to:

a. changes in the price of electricity; or

b. participation in programs or services designed to modify electricity use:

   i. in response to wholesale market prices; or

   ii. when system reliability is jeopardized.

DEMAND RESPONSE PERIOD is a period of time during which electricity loads are modified in response to a demand response signal.

DEMAND RESPONSE SIGNAL is a signal that indicates a price or a request to modify electricity consumption for a limited time period.

DEMAND RESPONSIVE CONTROL is an automatic control that is capable of receiving and automatically responding to a demand response signal.

DEMISING PARTITION is a wall, fenestration, floor, or ceiling that separates conditioned space from enclosed unconditioned space or a controlled environment horticulture space.

DESICCANT DEHUMIDIFICATION SYSTEM is a mechanical dehumidification technology that uses a solid or liquid desiccant to remove moisture from the air.

DESIGN CONDITIONS are the parameters and conditions used to determine the performance requirements of space-conditioning systems. Design conditions for determining design heating and cooling loads are specified in Section 140.4(b) for nonresidential and hotel/motel buildings in Section 150.0(h) for single-family residential buildings, and in Sections 160.3(b) and 170.2(c) for multifamily buildings.

DESIGN HEAT GAIN RATE is the total calculated heat gain through the building envelope under design conditions.

DESIGN HEAT LOSS RATE is the total calculated heat loss through the building envelope under design conditions.

DESIGN REVIEW is an additional review of the construction documents (drawings and specifications) that seeks to improve compliance with existing Title 24 regulations, to encourage adoption of best practices in design, and to encourage designs that are constructible and maintainable. It is an opportunity for an experienced design engineer or architect to look at a project with a fresh perspective in an effort to catch missing or unclear design information and to suggest design enhancements.

DEW POINT TEMPERATURE is the vapor saturation temperature at a specified pressure for a substance undergoing phase change from vapor to liquid.

DIRECT DIGITAL CONTROL (DDC) is a type of control where controlled and monitored analog or binary data, such as temperature and contact closures, are converted to digital format for manipulation and calculations by a digital computer or microprocessor, then converted back to analog or binary form to control mechanical devices.

DIRECT-VENT APPLIANCE or “sealed combustion” appliance is an appliance that is constructed and installed so that air from combustion is derived directly from the outdoors and flue gases are discharged to the outdoors.

DISPLAY PERIMETER is the length of an exterior wall in a Group B; Group F, Division 1; or Group M, Occupancy that immediately abuts a public sidewalk, measured at the sidewalk level for each story that abuts a public sidewalk.

DOMESTIC WATER HEATING SYSTEMS (see “service water heating”).

DOOR is an operable opening in the building envelope, including swinging and roll-up doors, fire doors, pet doors and access hatches with less than 25 percent glazed area. When that operable opening has 25 percent or more glazed area it is a glazed door. See Fenestration: Glazed Door.

DOOR AREA is the total rough opening area which includes the door, and when present, the fenestration, and the fenestration frame components in the door frame assembly.

DRAIN WATER HEAT RECOVERY (DWHR) is a system that recovers heat from effluent in waste piping and uses it to preheat water in a domestic or service water heating system in order to reduce water heating energy usage.

DRY COOLER is a fan-powered heat rejection device that includes a water or glycol circuit connected by a closed circulation loop refrigerant condenser and is air-cooled.

DUAL-FUEL HEAT PUMP is an electric heat pump with gas furnace supplemental heat that alternates between the two fuel sources.

DUCT SEALING is a procedure for installing a space-conditioning distribution system that minimizes leakage of air from or to the distribution system. Minimum specifications for installation procedures, materials, diagnostic testing and field verification are contained in the Reference Residential Appendix RA3 and Reference Nonresidential Appendix NA1.

DUCT SYSTEM is all the ducts, duct fittings, plenums and fans when assembled to form a continuous passageway for the distribution of air.

DUCT WALL PENETRATIONS are openings to the duct wall made by pipes, holes, conduit, tie rods, or wires.

DUCTED SYSTEM is an air conditioner or heat pump, either a split system or single-packaged unit, that is designed to be permanently installed equipment and delivers conditioned air to an indoor space through a duct.

DWELLING is a building that contains one or two dwelling units used, intended or designed to be used, rented, leased, let or hired out to be occupied for living purposes.

DWELLING UNIT is a single unit providing complete, independent living facilities for one or more persons including access, permanent provisions for living, sleeping, eating, cooking and sanitation.

DWELLING UNIT, ATTACHED is a dwelling unit that shares a common wall or common floor/ceiling with another dwelling unit.

DWELLING UNIT, JUNIOR ACCESSORY, or JADU is a dwelling unit that is no more than 500 square feet in size and contained entirely within an existing single family building. A JADU includes a kitchen, a separate entrance from the main entrance to the building, and an interior entry to the main living area. A JADU may include separate sanitation facilities, or may share sanitation facilities with the existing single family building.

DX-DEDICATED OUTDOOR AIR SYSTEM UNIT (DX-DOAS) is a type of air-cooled, water-cooled, or water-source DOAS unit that dehumidifies 100 percent outdoor air and includes reheat that is capable of controlling the supply dry-bulb temperature of the dehumidified air to the designed supply air temperature. This conditioned outdoor air is then delivered directly or indirectly to the conditioned spaces. It may precondition outdoor air by containing an enthalpy wheel, sensible wheel, desiccant wheel, plate heat exchanger, heat pipes, or other heat or mass transfer apparatus.

EAST-FACING (See "orientation.")

ECONOMIZER, AIR, is a ducting arrangement, including dampers, linkages, and an automatic control system that allows a cooling supply fan system to supply outside air to reduce or eliminate the need for mechanical cooling.

ECONOMIZER, PUMPED REFRIGERANT, is a system by which the supply air of a cooling system is cooled directly by refrigerant pumped between indoor and outdoor units during cooler ambient temperatures in order to reduce or eliminate the need for mechanical cooling.

ECONOMIZER, WATER, is a system by which the supply air of a cooling system is cooled directly or indirectly by evaporation of water in order to reduce or eliminate the need for mechanical cooling.

ELECTRICAL POWER DISTRIBUTION SYSTEMS. The following definitions are intended to apply to Section 130.5 only:

ELECTRICAL METERING is a device or system for measuring the electrical power and energy supplied to a customer or premise(s).

EQUIPMENT. A general term, including devices, luminaires, apparatus, machinery, and the like used as a part of, or in connection with, an electrical installation.

LOW VOLTAGE DRY-TYPE DISTRIBUTION TRANSFORMER is a distribution transformer that has an input voltage of 600 volts or less, that is air-cooled, and that does not use oil as a coolant.

PLUG LOAD is the energy consumed by any appliances or electronic device that is plugged into a receptacle or receptacle outlet. Plug loads are not related to general lighting, heating, ventilation, cooling, and water heating, domestic and service water system, renewable power, information technology equipment, computer room electronic equipment, and electric vehicle charging.

SERVICE is the conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premise served.

SERVICE EQUIPMENT is the necessary equipment, usually consisting of a circuit breaker(s) or switch(es) and fuse(s) and their accessories, connected to the load end of service conductors to a building or other structure, or an otherwise designated area, and intended to constitute the main control and cutoff of the supply.

ELECTRONICALLY-COMMUTATED MOTOR is a brushless DC motor with a permanent magnet rotor that is surrounded by stationary motor windings, and an electronic controller that varies rotor speed and direction by sequentially supplying DC current to the windings.

EMITTANCE, THERMAL is the ratio of the radiant heat flux emitted by a sample to that emitted by a blackbody radiator at the same temperature.

ENCLOSED SPACE is space that is substantially surrounded by solid surfaces, including walls, ceilings or roofs, doors, fenestration areas, and floors or ground.

ENERGY BUDGET is the maximum energy consumption, based on Time Dependent Valuation (TDV) energy, that a proposed building, or portion of a building, can be designed to consume, calculated using Commission-approved compliance software as specified by the Alternative Calculation Method Approval Manual. The Energy Budget for newly constructed, low-rise residential buildings is expressed in terms of the Energy Design Rating.

ENERGY COMMISSION (CEC) is the California State Energy Resources Conservation and Development Commission.

ENERGY DESIGN RATING (EDR) is a way to express the energy consumption of a building as a rating score index where a score of 100 represents the energy consumption of the building built to the specifications of the Residential Energy Services (RESNET) reference home characterization of the 2006 International Energy Conservation Code (IECC) with Title 24, Part 6 modeling assumptions, and a score of 0 (zero) represents a building that has zero net energy consumption. The EDR is calculated using Commission-approved compliance software as specified by the Alternative Calculation Method Approval Manual.

ENERGY DESIGN RATING, ENERGY EFFICIENCY is an Energy Design Rating based on the TDV energy consumption of a building that results from the building's energy efficiency characteristics, calculated using Commission-approved compliance software as specified by the Alternative Calculation Methods Approval Manual.

ENERGY DESIGN RATING, SOLAR ELECTRIC GENERATION AND DEMAND FLEXIBILITY is the reduction in TDV energy consumption of a building expressed in terms of an Energy Design Rating reduction that results from the combination of the building's solar electric generation system and demand flexibility measures.

ENERGY DESIGN RATING, TOTAL is the total Energy Design Rating for the building that is determined by subtracting the Solar Electric Generation System and Demand Flexibility Energy Design Rating from the Energy Efficiency Energy Design Rating.

ENERGY EFFICIENCY RATIO (EER) is the ratio of net cooling capacity (in Btu/hr) to total rate of electrical energy input (in watts), of a cooling system under designated operating conditions, as determined using the applicable test method in the Appliance Efficiency Regulations or Section 110.2.

ENERGY EFFICIENCY RATIO 2 (EER2) is the EER metric for residential central air conditioners effective January 1, 2023, as created by the U.S. Department of Energy "ISSUANCE 2016-11-30 Energy Conservation Program: Test Procedures for Central Air Conditioners and Heat Pumps, Final Rule".

ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) is an automated control system that regulates the energy consumption of a building by controlling the operation of energy consuming systems, and is capable of monitoring loads and adjusting operations in order to optimize energy usage and respond to demand response signals.

ENERGY OBTAINED FROM DEPLETABLE SOURCES is electricity purchased from a public utility, or any energy obtained from coal, oil, natural gas, or liquefied petroleum gases.

ENERGY OBTAINED FROM NONDEPLETABLE SOURCES is energy that is not energy obtained from depletable sources.

ENERGY STORAGE SYSTEM (ESS) is one or more devices, assembled together, that are capable of storing energy used for safely supplying electrical energy to selected loads at a future time.

ENFORCEMENT AGENCY is the city, county, or state agency responsible for issuing a building permit.

ENTHALPY RECOVERY RATIO (ERR) is a ratio of the change in enthalpy of the outdoor air supply to the difference in enthalpy between the entering supply airflow and the entering exhaust airflow, with no adjustment to account for that portion of the psychometric change in the leaving supply airflow that is the result of leakage of entering exhaust airflow rather than exchange of heat or moisture between the airstreams.

ENTIRE BUILDING is the ensemble of all enclosed space in a building, including the space for which a permit is sought, plus all existing conditioned and unconditioned space within the structure.

ENVELOPE (See "building envelope".)

ESS READY INTERCONNECTION EQUIPMENT is equipment, including but not limited to an ESS ready panelboard, that can accommodate the connection of a distributed energy resource or an ESS capable of either automatic or manual isolation from the utility power source.

ESS READY PANELBOARD is a panelboard that can accommodate either automatic or manual switching between a utility power source to a distributed energy resource or an energy storage system, such as a split bus panelboard.

EXFILTRATION is uncontrolled outward air leakage from inside a building, including leakage through cracks and interstices, around windows and doors, and through any other exterior partition or duct penetration.

EXTERIOR FLOOR/SOFFIT is a horizontal exterior partition, or a horizontal demising partition, under conditioned space. For low-rise residential occupancies, exterior floors also include those on grade.

EXTERIOR PARTITION is an opaque, translucent, or transparent solid barrier that separates conditioned space from ambient air or space. For low-rise residential occupancies, exterior partitions also include barriers that separate conditioned space from unconditioned space, or the ground.

EXTERIOR ROOF/CEILING is an exterior partition, or a demising partition, that has a slope less than 60 degrees from horizontal, that has conditioned space below, and that is not an exterior door or skylight.

EXTERIOR ROOF/CEILING AREA is the area of the exterior surface of exterior roof/ceilings.

EXTERIOR WALL is any wall or element of a wall, or any member or group of members, which defines the exterior boundaries or courts of a building and which has a slope of 60 degrees or greater with the horizontal plane. An exterior wall or partition is not an exterior floor/soffit, exterior door, exterior roof/ceiling, window, skylight, or demising wall.

EXTERIOR WALL AREA is the area of the opaque exterior surface of exterior walls.

FAÇADE is the contiguous exterior of a building surface, but not limited to fenestration products.

FACTORY is a building, structure, or space designated as Factory Group F that is used for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations.

FACTORY ASSEMBLED COOLING TOWERS are cooling towers constructed from factory-assembled modules either shipped to the site in one piece or put together in the field.

FAN, EMBEDDED is a fan that is part of a manufactured assembly where the assembly includes functions other than air movement.

FAN ARRAYS are multiple fans in parallel and in a single enclosure between two plenum sections in an air distribution system, where plenum means a compartment or chamber that forms a part of the air distribution system, and that is not used for occupancy or storage.

FAN ELECTRICAL INPUT POWER (FAN kWdesign) is the electrical input power in kilowatts required to operate an individual fan or fan array at design conditions. It includes the power consumption of motor controllers, if present.

FAN ENERGY INDEX (FEI) is the ratio of the electric input power of a reference fan to the electric input power of the actual fan as calculated per ANSI/AMCA 208-18 at fan system design conditions.

FAN NAMEPLATE ELECTRICAL INPUT POWER (kW) is the nominal electrical input power rating stamped on a fan assembly nameplate.

FAN SYSTEM includes all the fans that contribute to the movement of air through a point of a common duct, plenum, or cabinet.

FAN SYSTEM, COMPLEX means a fan system that combines a single-cabinet fan system with other supply fans, exhaust fans, or both.

FAN SYSTEM, EXHAUST/RELIEF is a fan system dedicated to the removal of air from interior spaces to the outdoors.

FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV) is a fan system that serves three or more space-conditioning zones where airflow to each zone is individually controlled based on heating, cooling and/or ventilation requirements, indoor fan airflow varies as a function of load, and the sum of the minimum zone airflows is 40% or less of the fan system design conditions.

FAN SYSTEM, RETURN is a fan system dedicated to removing air from interior spaces where some or all of the air is to be recirculated except during economizer operation.

FAN SYSTEM, SINGLE-CABINET is a fan system where a single fan, single fan array, a single set of fans operating in parallel, or fans or fan arrays in series and embedded in the same cabinet, that both supplies air to a space and recirculates the air.

FAN SYSTEM, SUPPLY-ONLY is a fan system that provides supply air to interior spaces and does not recirculate the air.

FAN SYSTEM, TRANSFER is a fan system that exclusively moves air from one occupied space to another.

FAN SYSTEM AIRFLOW (cfm) is the sum of the airflow of all fans with fan electrical input power greater than 1 kW at fan system design conditions, excluding the airflow that passes through downstream fans with fan input power less than 1 kW.

FAN SYSTEM DESIGN CONDITIONS are operating conditions that can be expected to occur during normal system operation that result in the highest supply airflow rate to or from the conditioned spaces served by the fan system.

FAN SYSTEM ELECTRICAL INPUT POWER (Fan kWdesign,system) is the sum of the fan electrical input power (Fan kWdesign) in kilowatts of all fans that are required to operate at fan system design conditions to supply air from the heating or cooling source to the conditioned spaces, return it to the source, exhaust it to the outdoors, or transfer it to another space.

FENESTRATION: Includes the following:

ACE is an NFRC-Approved Calculation Entity that conducts calculations of fenestration product ratings for certification authorization using the NFRC Component Modeling approach and issues label certificates to Specifying Authorities for product certification authorization in accordance with NFRC requirements.

ALTERED COMPONENT is a new fenestration component that has undergone an alteration other than a repair and is subject to all applicable standards requirements.

BAY WINDOW is a combination assembly which is composed of three or more individual windows either joined side by side or installed within opaque assemblies and which projects away from the wall on which it is installed. Center windows, if used are parallel to the wall on which the bay is installed, the end panels or two side windows are angled with respect to the center window. Common angles are 30° and 45°, although other angles may be employed.

CHROMOGENIC GLAZING is a class of switchable glazing that includes active materials (e.g. electrochromic) and passive materials (e.g. photochromic and thermochromic) permanently integrated into the glazing assembly. Their primary function is to switch reversibly from a high transmission state to a low transmission state with associated changes in VT and SHGC.

CLERESTORY FENESTRATION is fenestration installed above a roofline greater than or equal to 60° from the horizontal, or any portion of exterior vertical glazing greater than eight feet per floor above the finished floor of a space.

CMA (component modeling approach) is a fenestration product certification program from the National Fenestration Rating Council (NFRC) that enables energy-related performance ratings for nonresidential fenestration products, including the thermal performance U-factor, Solar Heat Gain Coefficient, and Visible Transmittance.

CMAST (Component Modeling Approach Software Tool) is an NFRC approved software that allows a user to create a fenestration product "virtually," and generate its energy-related performance ratings, including the thermal performance U-factor, Solar Heat Gain Coefficient, and Visible Transmittance.

CURTAIN WALL/STOREFRONT is an external non-bearing wall intended to separate the exterior nonconditioned and interior conditioned spaces. It also consists of any combination of framing materials, fixed glazing, opaque glazing, operable windows, or other in-fill materials**. Note:** Window wall is also included as part of the curtain wall/storefront fenestration category.

DUAL-GLAZED GREENHOUSE WINDOWS is a double glass pane separated by an air or other gas space that adds conditioned volume but not conditioned floor area to a building.

DYNAMIC GLAZING SYSTEMS are glazing systems that have the ability to reversibly change their performance properties, including U-factor, Solar Heat Gain Coefficient (SHGC), and/or Visible Transmittance (VT) between well-defined end points. These may include, but are not limited to chromogenic glazing systems and integrated shading

systems (defined below). Dynamic Glazing systems do not include internally mounted or externally mounted shading devices that attach to the window framing/glazing that may or may not be removable.

FENESTRATION ALTERATION is any change to an existing building's exterior fenestration product that is not a repair (see "fenestration repair") that:

i. Replaces existing fenestration in an existing wall or roof with no net area added; or

ii. Replaces existing fenestration and adds new net area in the existing wall or roof; or

iii. Adds a new window that increases the net fenestration area to an existing wall or roof.

FENESTRATION AREA is the rough opening area of any fenestration product.

FENESTRATION PRODUCT is any transparent or translucent material plus any sash, frame, mullions and dividers, in the facade of a building, including, but not limited to, windows, glazed doors, skylights, curtain walls, dynamic glazing, garden windows ~~and~~, glass block, and glazing used in greenhouses.

FENESTRATION REPAIR is the reconstruction or renewal for the purpose of maintenance of any fenestration product, component or system and shall not increase the preexisting energy consumption of the repaired fenestration product, component, system, or equipment. Replacement of any component, system, or equipment for which there are requirements in the Standards are considered an alteration (see "fenestration", "alteration") and not a repair and is subject to the requirements of Part 6 of the Standards.

FIELD-FABRICATED is a fenestration product whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut, or otherwise formed with the specific intention of being used to fabricate a fenestration product. Field fabricated does not include site-built fenestration.

FIN is an opaque surface, oriented vertically and projecting outward horizontally from an exterior vertical surface.

FIN OFFSET is the horizontal distance from the edge of exposed exterior glazing at the jamb of a window to the fin.

FIN PROJECTION is the horizontal distance, measured outward horizontally, from the surface of exposed exterior glazing at the jamb of a window to the outward edge of a fin.

FIXED is fenestration that is not designed to be opened or closed.

GLAZED DOOR is an exterior door having a glazed area of 25 percent or greater of the area of the door. Glazed doors shall meet fenestration product requirements. See "door."

GREENHOUSE or GARDEN WINDOW is a window unit that consists of a three-dimensional, five-sided structure generally protruding from the wall in which it is installed. Operating sash may or may not be included.

HORIZONTAL SLATS, when referring to a daylighting device, is a set of adjacent surfaces located directly adjacent to vertical fenestration, oriented horizontally and projecting horizontally from its interior or exterior vertical surface.

INTEGRATED SHADING SYSTEM is a class of fenestration products including an active layer: e.g. shades, louvers, blinds or other materials permanently integrated between two or more glazing layers. The U-factor and/or SHGC and VT of the insulating glass assembly can be altered by reversibly changing the enclosed active layer.

LIGHT SHELF is an adjacent, opaque surfaced daylighting device located at the sill of clerestory glazing, oriented horizontally and projecting horizontally from an interior or exterior vertical surface.

MANUFACTURED or **KNOCKED DOWN PRODUCT** is a fenestration product constructed of materials which are factory cut or otherwise factory formed with the specific intention of being used to fabricate a fenestration product. Knocked down or partially assembled products may be sold as a fenestration product when provided with temporary and permanent labels as described in Section 10-111; or as a site-built fenestration product when not provided with temporary and permanent labels as described in Section 10-111.

NFRC 100 is the National Fenestration Rating Council document titled "Procedure for Determining Fenestration Product U-factors." (2020) (ANSI/NFRC 100-2020).

NFRC 200 is the National Fenestration Rating Council document titled "Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence." (2020) (ANSI/NFRC 200-2020).

NFRC 202 is the National Fenestration Rating Council document titled "Procedures for Determining Translucent Fenestration Product Visible Transmittance at Normal Incidence." (2020) (ANSI/NFRC 202-2020).

NFRC 203 is the National Fenestration Rating Council document titled "Procedure for Determining Visible Transmittance of Tubular Daylighting Devices." (2020) (ANSI/NFRC 203-2020).

NFRC 400 is the National Fenestration Rating Council document titled "Procedure for Determining Fenestration Product Air Leakage." (2020) (ANSI/NFRC 400-2020).

OPERABLE SHADING DEVICE is a device at the interior or exterior of a building or integral with a fenestration product, which is capable of being operated, either manually or automatically, to adjust the amount of solar radiation admitted to the interior of the building.

RELATIVE SOLAR HEAT GAIN COEFFICIENT (RSHGC) is the ratio of solar heat gain through a fenestration product (corrected for external shading) to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation, which is then reradiated, conducted, or convected into the space.

SITE-BUILT is fenestration designed to be field-glazed or field assembled units using specific factory cut or otherwise factory formed framing and glazing units, that are manufactured with the intention of being assembled at the construction site. These include storefront systems, curtain walls, and atrium roof systems.

SKYLIGHT ROOF RATIO (SRR) is the ratio of the skylight area to the gross exterior roof area.

SOLAR HEAT GAIN COEFFICIENT (SHGC) is the ratio of the solar heat gain entering the space through the fenestration area to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation, which is then reradiated, conducted, or convected into the space.

SPANDRAL is opaque glazing material most often used to conceal building elements between floors of a building so they cannot be seen from the exterior, also known as "opaque in-fill systems".

TINTED GLASS is colored glass by incorporation of a mineral admixture resulting in a degree of tinting. Any tinting reduces both visible and radiant transmittance.

VERTICAL FENESTRATION is all fenestration other than skylights and doors.

VISIBLE REFLECTANCE is the reflectance of light at wavelengths from 410 to 722 nanometers.

VISIBLE TRANSMITTANCE (VT) is the ratio (expressed as a decimal) of visible light that is transmitted through a glazing fenestration. The higher the VT rating, the more light is allowed through a window.

WINDOW is fenestration that is not a skylight and that is an assembled unit consisting of a frame and sash component holding one or more pieces of glazing.

WINDOW AREA is the area of the surface of a window, plus the area of the frame, sash, and mullions.

WINDOW HEAD HEIGHT is the height from the floor to the top of the vertical fenestration.

WINDOW WALL RATIO (WWR) is the ratio of the window area to the gross exterior wall area.

FIELD ERECTED COOLING TOWERS are cooling towers which are custom designed for a specific application and which cannot be delivered to a project site in the form of factory assembled modules due to their size, configuration, or materials of construction.

FIREPLACE is a hearth and fire chamber, or similar prepared place, in which a fire may be made and which is built in conjunction with a flue or chimney, including but not limited to factory-built fireplaces, masonry fireplaces, and masonry heaters as further clarified in the CBC.

FLOOR/SOFFIT TYPE is a type of floor/soffit assembly having a specific heat capacity, framing type, and U-factor.

FLUID COOLER is a fan-powered heat rejection device that includes a water or glycol circuit connected by a closed circulation loop to a liquid-cooled refrigerant condenser, and may be either evaporative-cooled, air-cooled, or a combination of the two.

FLUX is the rate of energy flow per unit area.

FOOD PREPARATION EQUIPMENT is cooking equipment intended for commercial use, including coffee machines, espresso coffee makers, conductive cookers, food warmers including heated food servers, fryers, griddles, nut warmers, ovens, popcorn makers, steam kettles, ranges, and cooking appliances for use in commercial kitchens, restaurants, or other business establishments where food is dispensed.

FREEZER is a space designed to be capable of operation at less than 28°F.

GAS COOLER is a refrigeration component that reduces the temperature of a refrigerant vapor by rejecting heat to air mechanically circulated over its heat transfer surface. Used by a CO2 refrigeration system in transcitical mode, and normally also capable of operating in subcritical mode.

GAS COOLING EQUIPMENT is cooling equipment that produces chilled water or cold air using natural gas or liquefied petroleum gas as the primary energy source.

GAS HEATING SYSTEM is a system that uses natural gas or liquefied petroleum gas as a fuel to heat a conditioned space.

GAS LOG is a self-contained, free-standing, open-flame, gas-burning appliance consisting of a metal frame or base supporting simulated logs, and designed for installation only in a vented fireplace.

GLAZING (See “fenestration product.”)

GLOBAL WARMING POTENTIAL (GWP) is the radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time.

GLOBAL WARMING POTENTIAL VALUE (GWP Value) is the 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995), or its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). Both the 1995 IPCC SAR values and the 2007 IPCC AR4 values are published in Table 2.14 of the 2007 IPCC AR4. The SAR GWP values are found in column “SAR (100-yr)” of Table 2.14.; the AR4 GWP values are found in column “100 yr” of Table 2.14.”

GOVERNMENTAL AGENCY is any public agency or subdivision thereof, including, but not limited to, any agency of the state, a county, a city, a district, an association of governments, or a joint power agency.

GROSS EXTERIOR ROOF AREA is the sum of the skylight area and the exterior roof/ceiling area.

GROSS EXTERIOR WALL AREA is the sum of the window area, door area, and exterior wall area.

HABITABLE SPACE is space in a building for living, sleeping, eating or cooking, excluding bathrooms, toilets, hallways, storage areas, closets, utility rooms and similar areas. (See also “occupiable space”.)

HABITABLE STORY is a story that contains habitable space and that has at least 50 percent of its volume above grade.

HEALTHCARE FACILITY is any building or portion thereof licensed pursuant to California Health and Safety Code Division 2, Chapter 1, §1204 or Chapter 2, §1250.

HEAT CAPACITY (HC) is the measurable physical quantity that characterizes the amount of heat required to change a substance's temperature by a given amount.

HEAT PUMP is an appliance, that consists of one or more assemblies; that uses an indoor conditioning coil, a compressor, and a refrigerant-to-outdoor air heat exchanger to provide air heating; and that may also provide air cooling, dehumidifying, humidifying, circulating, or air cleaning.

HEAT PUMP WATER HEATER (HPWH) is a water heater that transfers thermal energy from one temperature level to a higher temperature level for the purpose of heating water, including all ancillary equipment such as fans, storage tanks, pumps, or controls necessary for the device to perform its function.

> **MULTI-PASS HEAT PUMP WATER HEATER** is a HPWH in which the cold water passes through the heat pump(s) multiple times, each time gaining a temperature increase, until the tank reaches the intended storage temperature.
>
> **SINGLE-PASS HEAT PUMP WATER HEATER** is a HPWH in which the cold water passes through the heat pump(s) once and is heated to the intended storage temperature.

HEATED SLAB FLOOR is a concrete floor either, on-grade, raised, or a lightweight concrete slab topping. Heating is provided by a system placed within or under the slab, and is sometimes referred to as a radiant slab floor.

HEATING EQUIPMENT is equipment used to provide mechanical heating for a room or rooms in a building.

HEATING SEASONAL PERFORMANCE FACTOR (HSPF) is the total heating output of a central air-conditioning heat pump (in Btu) during its normal use period for heating divided by the total electrical energy input (in watt-hours) during the same period, as determined using the applicable test method in the Appliance Efficiency Regulations.

HEATING SEASONAL PERFORMANCE FACTOR 2 (HSPF2) is the HSPF metric for residential central heat pumps effective January 1, 2023, as created by the U.S. Department of Energy "ISSUANCE 2016-11-30 Energy Conservation Program: Test Procedures for Central Air Conditioners and Heat Pumps, Final Rule."

HIGH-RISE RESIDENTIAL BUILDING is a building, other than a hotel/motel, of Occupancy Group R-2 or R-4 with four or more habitable stories.

HORTICULTURAL LIGHTING consists of luminaires used for plant growth and maintenance. Horticultural luminaires may have either plug-in or hard-wired connections for electric power.

HOTEL/MOTEL is a building or buildings that has six or more guest rooms or a lobby serving six or more guest rooms, where the guest rooms are intended or designed to be used, or which are used, rented, or hired out to be occupied, or which are occupied for sleeping purposes by guests, and all conditioned spaces within the same building envelope. Hotel/motel includes all conditioned spaces which are (1) on the same property as the hotel/motel, (2) served by the same central heating, ventilation, and air-conditioning system as the hotel/motel, and (3) integrally related to the functioning of the hotel/motel as such, including, but not limited to, exhibition facilities, meeting and conference facilities, food service facilities, lobbies, and laundries. Hotel/motel also includes the following:

A building of Occupancy Group R-1,

Vacation timeshare properties and hotel or motel buildings of Occupancy Group R-2, and

The following types of Occupancy Group R-3:

Congregate residences for transient use,

Boarding houses of more than 6 guests, and

Alcohol or drug abuse recovery homes of more than 6 guests.

HVAC SYSTEM is a space-conditioning system or a ventilation system.

HVI 915 is the Home Ventilating Institute document titled "HVI Loudness Testing and Rating Procedure," 2020 (HVI Publication 915-2020).

HVI 916 is the Home Ventilating Institute document titled "VI Airflow Test Procedure," 2020 (HVI Publication 916-2020).

HVI 920 is the Home Ventilating Institute document titled "HVI Product Performance Certification Procedure Including Verification and Challenge," 2020 (HVI Publication 920-2020).

IES HB (See "IES Lighting Library.")

IES LIGHTING LIBRARY, formerly called the **"**IES Lighting Handbook (IES HB)," is the Illuminating Engineering Society document titled "The IES Lighting Library™."

INTEGRATED SEASONAL COEFFICIENT OF PERFORMANCE (ISCOP) is a seasonal efficiency number that is a combined value based on the formula listed in AHRI Standard 920 of the two COP values for the heating season of a DX-DOAS unit water or air source heat pump, expressed in W/W.

INTEGRATED SEASONAL MOISTURE REMOVAL EFFICIENCY (ISMRE) is a seasonal efficiency number that is a combined value based on the formula listed in AHRI Standard 920 of the four dehumidification moisture removal efficiency (MRE) ratings required for DX-DOAS units, expressed in lb. of moisture/kWh.

IES LM-79-19 is an American National Standard authored by the Illuminating Engineering Society and titled, "Approved Method: Optical and Electrical Measurements of Solid State Lighting Products" (2019) (ANSI/IES LM-79-19).

IES LS-1-20 is the American National Standard authored by the Illuminating Engineering Society and titled "Lighting Science: Nomenclature and Definitions for Illuminating Engineering" 2020 (ANSI/IES LS-1-20)

IES TM-15-20 is an American National Standard authored by the Illuminating Engineering Society and titled “Technical Memorandum: Luminaire Classification Systems for Outdoor Luminaires” (2020) (ANSI/IES TM-15-20).

INDOOR GROWING is a type of CEH space in a building with a Skylight Roof Ratio less than 50 percent. Growing plants in a warehouse with or without skylights is an example of indoor growing.

INFILTRATION is uncontrolled inward air leakage from outside a building or unconditioned space, including leakage through cracks and interstices, around windows and doors, and through any other exterior or demising partition or pipe or duct penetration. See AIR BARRIER.

INFORMATION TECHNOLOGY EQUIPMENT (ITE) includes computers, data storage, servers, and network/communication equipment located in a computer room.

INTEGRATED ENERGY EFFICIENCY RATIO (IEER) is a single-number cooling part load efficiency figure of merit calculated as specified by the method described in ANSI/AHRI Standard 340/360/1230 . This metric replaces the IPLV for ducted and non-ducted units.

INTEGRATED HVAC SYSTEM is an HVAC system designed to handle both sensible and latent heat removal. Integrated HVAC systems may include, but are not limited to: HVAC systems with a sensible heat ratio of 0.65 or less and the capability of providing cooling, dedicated outdoor air systems, single package air conditioners with at least one refrigerant circuit providing hot gas reheat, and dehumidifiers modified to allow external heat rejection.

INTEGRATED PART LOAD VALUE (IPLV) is a single-number cooling part-load efficiency figure of merit calculated as specified by the method described in ANSI/AHRI Standard 550/590 for use with chillers.

ISO 5801 is the International Organization for Standardization document titled “Fans – Performance testing using standardized airways”. 2017 (ISO 5801:2017)

ISO 13256-1 is the International Organization for Standardization document titled "Water-source heat pumps -- Testing and rating for performance - Part 1: Water-to-air and brine-to-air heat pumps," 2012 (ANSI/AHRI/ASHRAE ISO 13256-1:1998 (RA 2012).

ISO 13256-2 is the International Organization for Standardization document titled "Water-source heat pumps - Testing and rating for performance - Part 1: Water-to-water and brine-to-water heat pumps," 2012 (ANSI/AHRI/ASHRAE ISO 13256-2 (R2012)).

ISO 17025 is the International Organization for Standardization document titled "General Criteria for the Competence of Testing and Calibration Laboratories", 2017 (ISO/IEC 17025:2017).

ITE DESIGN LOAD is the combined power of all the ITE loads for which the ITE cooling system is designed.

LANGELIER SATURATION INDEX (LSI) is expressed as the difference between the actual system pH and the saturation pH. LSI indicates whether water will precipitate, dissolve, or be in equilibrium with calcium carbonate, and is a function of hardness, alkalinity, conductivity, pH and temperature.

LARGEST NET CAPACITY INCREMENT is the largest increase in capacity when switching between combinations of base compressors that is expected to occur under the compressed air system control scheme.

LIGHTING definitions:

Accent Lighting is directional lighting to emphasize a particular object or surface feature, or to draw attention to a part of the field of view. It can be recessed, surface mounted, or mounted to a pendant, stem, or track, and can be display lighting. It shall not provide general lighting.

Astronomical Time-Switch Control is a lighting control that controls lighting based on the time of day and astronomical events such as sunset and sunrise, accounting for geographic location and calendar date.

Automatic Daylight Control adjusts the luminous flux of the electric lighting system in either a series of steps or by continuous dimming in response to available daylight. This kind of control uses one or more photosensors to detect changes in daylight illumination and then automatically adjusts the electric lighting levels in response.

Automatic Scheduling Control is a time-based lighting control that is capable of being programmed to reduce or turn off lighting power for a portion of the night and to turn off lighting power for the day.

Automatic Time Switch Control controls lighting based on the time of day.

Captive-Key Override is a type of lighting control in which the key that activates the override cannot be released when the lights are in the on position.

Chandelier is a ceiling-mounted, close-to-ceiling, or suspended decorative luminaire that uses glass, crystal, ornamental metals, or other decorative material.

Color Rendering Index (CRI) is a measure of the degree of color shift that objects undergo when illuminated by the lighting source as compared with the color of the same objects when illuminated by a reference source of comparable color temperature. CRI is calculated according to CIE 13.3.

Colored light source is a light source designed and marketed as a colored light source and not designed or marketed for general lighting applications with either of the following characteristics maintained throughout all modes of operation including color changing operation:

(1) A Color Rendering Index (CRI) less than 40, as determined according to the method set forth in CIE Publication 13.3; or

(2) A Correlated Color Temperature as measured with ANSI/IES LM-66-20 or ANSI/IES LM-79-19 (as appropriate) and calculated with CIE 15, which does not have a corresponding nominal CCT designation in ANSI C78.377-2017.

Compact Fluorescent Lamp is a fluorescent lamp with a small diameter glass tube (T5 or smaller) that is folded, bent, or bridged to create a long discharge path in a small volume. The lamp designs generally include an amalgam and a cold chamber, or a cold spot, to control the mercury vapor pressure and light output.

Correlated Color Temperature (CCT) is the absolute temperature of a blackbody whose chromaticity most nearly resembles that of the light source.

Countdown Timer Switch turns lighting or other loads ON when activated using one or more selectable countdown time periods and then automatically turns lighting or other loads OFF when the selected time period has elapsed.

Daylight Continuous Dimming Controls are a continuous dimming controls that vary the luminous flux in response to available daylight.

Decorative (Lighting/Luminaires) is lighting or luminaires installed only for aesthetic purposes and that does not serve as display lighting or general lighting. Decorative luminaires are chandeliers, sconces, lanterns, neon or cold cathode, light emitting diodes, theatrical projectors, moving lights, and light color panels, not providing general lighting or task lighting.

Dimmer is a device used to control the intensity of light emitted by a luminaire by controlling the voltage or current available to it.

Dimmer, Continuous means a dimmer that varies the luminous flux of the electric lighting system over a continuous range from the device's maximum light output to the device's minimum light output without visually apparent abrupt changes in light level between the various steps.

Dimmer, Forward Phase Cut, varies the luminous flux of the electric lighting system in which a portion of the alternating current voltage waveform supplying to the light source is removed.

Dimmer, Stepped varies the luminous flux of the electric lighting system in one or more predetermined discrete steps between maximum light output and OFF with changes in light level between adjacent steps being visually apparent.

Display Lighting, Case is lighting that provides a higher level of illuminance to a specific area than the level of surrounding ambient illuminance of small art objects, artifacts, or valuable collections which involves customer inspection of very fine detail from outside of a glass enclosed display case.

Display Lighting, Floor is supplementary lighting that provides a higher level of illuminance to a specific area than the level of surrounding ambient illuminance required to highlight features, such as merchandise on a clothing rack or sculpture or free standing of artwork, which is not displayed against a wall.

Display Lighting, Wall is supplementary lighting that provides a higher level of illuminance to a specific area than the level of surrounding ambient illuminance required to highlight features, such as merchandise on a shelf or wall-mounted artwork, which is displayed on perimeter walls.

Display Lighting, Window is lighting that provides a higher level of illuminance to a specific area than the level of surrounding ambient illuminance of objects such as merchandise, goods, and artifacts, in a show window, to be viewed from the outside of a space through a window.

Driver, when used in relation to solid state lighting, is a device that uses semiconductors to control and supply dc power for LED starting and operation.

Enclosed Luminaires are luminaires which contain enclosed lamp compartments where ventilation openings are less than 3 square inches per lamp in the lamp compartment as defined by UL 1598.

General Lighting is installed electric lighting that provides a uniform level of illumination throughout an area, exclusive of any provision for special visual tasks or decorative effect, exclusive of daylighting, and also known as ambient lighting.

GU-24 is the designation of a lamp holder and socket configuration, based on a coding system by the International Energy Consortium, where “G” indicates the broad type of two or more projecting contacts, such as pins or posts, “U” distinguishes between lamp and holder designs of similar type but that are not interchangeable due to electrical or mechanical requirements, and “24” indicates 24 millimeters center to center spacing of the electrical contact posts.

Illuminance is the area density of the luminous flux incident at a point on a surface.

Illumination is commonly used in a qualitative sense to designate the act of illuminating or the state of being illuminated.

Inseparable Solid State Lighting (SSL) Luminaire is a luminaire featuring solid state lighting components such as LEDs, light engines, and/or driver components which cannot be easily removed or replaced by the end user, thus requiring replacement of the entire luminaire. Removal of solid state lighting components may require the cutting of wires, use of a soldering iron, or damage to or destruction of the luminaire. If solid state lighting components are not removable without destruction to the luminaire, the luminaire is deemed inseparable.

Institutional Tuning is the process of adjusting the maximum light output of lighting systems to support visual needs or save energy. Institutional tuning differs from personal tuning in that the control strategy is implemented at the institutional rather than the individual user level, and maximum light level adjustments are available only to authorized personnel.

Integrated LED lamp is an integrated assembly composed of light emitting diode (LED) packages (components) or LED arrays (modules), as well as an LED driver, an ANSI standard base, and other optical, thermal, mechanical and electrical components. The device is intended to connect directly to the branch circuit through a corresponding ANSI standard lamp-holder (socket). (ANSI/IES LS-1-20).

Lamp is an electrical appliance that produces optical radiation for the purpose of visual illumination, designed with a base to provide an electrical connection between the lamp and a luminaire, and designed to be installed into a luminaire. A lamp is not a luminaire and is not an LED retrofit kit.

Landscape Lighting is a type of outdoor lighting that is recessed into or mounted on the ground, paving, or raised deck, which is mounted less than 42 inches above grade or mounted onto trees or trellises, and that is intended to be aimed only at landscape features.

Lantern is an outdoor luminaire that uses an electric lamp to replicate the appearance of a pre-electric lantern, which used a flame to generate light.

LED Driver is a device composed of a power source and light emitting diode (LED) control circuitry designed to operate an LED package (component), an LED array (module), or an LED lamp. LED Driver is a power source that adjusts the voltage or current to LEDs, ranging in complexity from a resistor to a constant voltage or constant current power supply. LED Driver is also known and referred to as Lamp Control Gear.

LED Light Engine is an integrated assembly composed of light emitting diode (LED) packages (components) or LED arrays (modules), as well as an LED driver~~,~~ and other optical, thermal, mechanical and electrical components. The device is intended to connect directly to the branch circuit through a custom connector compatible with the LED luminaire for which it was designed. It does not use an ANSI standard base.

LED Retrofit Kit is a solid state lighting product intended to replace existing light sources and systems, including incandescent and fluorescent light sources, in previously installed luminaires that already comply with safety standards. These kits replace the existing light source and related electrical components, and are classified or certified to UL 1598C. They may employ an ANSI standard lamp base, either integral or connected to the retrofit by wire leads. LED retrofit kit does not include self-ballasted lamps.

Light is a form of radiant energy that is capable of exciting the retina and producing a visual sensation. The visible portion of the electromagnetic spectrum extends from about 380 to about 770 nanometers.

Lighting, or illumination, is commonly used in a qualitative or general sense to designate the act of illuminating or the state of being illuminated.

Lighting Control, Self-Contained is a unitary lighting control module that requires no additional components to be a fully functional lighting control.

Lighting Control System requires two or more components to be installed in the building to provide all of the functionality required to make up a fully functional and compliant lighting control.

Light Emitting Diode (LED) is a p-n junction semiconductor device that emits incoherent optical radiation when forward-biased. The optical emission may be in the ultraviolet, visible, or infrared wavelength regions.

Line-Voltage Track Lighting is equipped with luminaires that, use line-voltage lamps or that are equipped with integral transformers at each luminaire.

Low Voltage is less than 90 volts.

Low-Voltage Track Lighting is equipped with remote transformers for use with low-voltage equipment along the entire length of track.

Luminaire is a complete lighting unit consisting of a light source such as a lamp or lamps, together with the parts that distribute the light, to position and protect the light source, and to connect the light source to the power supply.

Luminaire Alteration is adding luminaires, removing and reinstalling luminaires, or combined replacement of lamps and ballasts or drivers. Luminaire alterations do not include repairs, such as replacing lamps only, ballasts or drivers only, diffusers, shades, or luminaire covers.

Luminance is the luminous intensity of the source or surface divided by the area of the source or surface seen by the observer.

Luminous Efficacy is a measure of the luminous efficiency of a light source. It is the quotient of the total luminous flux emitted by the total light source power input, expressed in lm/W.

Luminous Flux is the time rate of flow of radiant energy, evaluated in terms of a standardized visual response..

Luminous Maintenance (often referred to as “lumen flux maintenance” or “lumen maintenance”) is the remaining luminous flux output, typically expressed as a percentage of initial luminous flux output, at any selected elapsed operating time. Luminous maintenance is the converse of luminous flux depreciation (or “lumen depreciation”).

Marquee Lighting is a permanent lighting system consisting of one or more rows of many small lamps, including light emitting diodes (LEDs) lamps, tungsten lamps, low pressure discharge lamps or fiber optic lighting, attached to a canopy.

Multilevel Astronomical Time Switch is an Astronomical Time Switch Control that reduces lighting power in multiple steps.

Multilevel Lighting Control reduces power going to a lighting system in multiple steps.

Multiscene Programmable Control allows for two or more predefined lighting settings, in addition to all-OFF, for two or more groups of luminaires to suit multiple activities in the space.

Narrow Band Spectrum is a limited range of wavelengths (nm) concentric to a dominant peak wavelength in the visible spectrum. The limited range of wavelength shall be within 20 nm on either side of the peak wavelength at 50 percent of the peak wavelength’s relative spectral power, and within 75 nm on either side of the peak wavelength at 10 percent of the peak wavelength’s relative spectral power.

NEMA LSD 57 is the National Electrical Manufacturers Association document titled "Polyurethane Foam Application: Lighting Equipment," 2018 (NEMA LSD 57-2018).

NEMA SSL 7A is the National Electrical Manufacturers Association document titled "Phase Cut Dimming for Solid State Lighting: Basic Compatibility," 2015 (NEMA SSL 7A-2015).

Non-integrated LED lamp is an assembly composed of a light emitting diode (LED) array (module) or LED packages (components), and an ANSI standard base. The device is intended to connect to the LED driver of an LED luminaire through an ANSI standard lamp-holder (socket). The device cannot be connected directly to the branch circuit. (ANSI/IES LS-1-20).

Occupant Sensing Controls automatically control levels of illumination, allow for manual operation, and consist of the following types:

Motion Sensing Control is used outdoors, automatically reduces lighting power or turns lights OFF after an area is vacated of occupants, and automatically turns the lights ON when the area is occupied.

Occupant Sensing Control is used indoors, automatically reduces lighting power or turns lights OFF after an area is vacated of occupants and is capable of automatically turning the lighting load ON when an area is occupied.

Partial-ON Occupant or Motion Sensing Control automatically turns lights OFF after an area is vacated of occupants and is capable of automatically or manually turning ON part of the lighting load when an area is occupied.

Partial-OFF Occupant or Motion Sensing Control automatically dims the lighting or turns OFF part of the lighting load after an area is vacated of occupants, and is capable of automatically turning ON the lighting load or restoring it to full when an area is occupied.

Vacancy Sensing Control automatically turns lights OFF after an area is vacated of occupants but requires lights to be turned ON manually.

One-to-One Alteration is either replacement of whole luminaires one for one, in which the only electrical modification involves disconnecting the existing luminaire and reconnecting the replacement luminaire, or when components of a luminaire are modified without replacing the entire luminaire.

Ornamental (Lighting/Luminaires) is lighting or luminaires installed outdoor which are rated for 50 watts or less that are post-top luminaires, lanterns, pendant luminaires, chandeliers, and marquee lighting, not providing general lighting or task lighting.

Pendant Luminaire (Suspended Luminaire) is a luminaire that is hung from a ceiling by supports.

Permanently Installed lighting consists of luminaires that are affixed to land, within the meaning of Civil Code Sections 658 and 660, except as provided below. Permanently installed luminaires may be mounted inside or outside of a building or site. Permanently installed luminaires may have either plug-in or hardwired connections for electric power. Examples include track and flexible lighting systems; lighting attached to walls, ceilings, columns, inside or outside of permanently installed cabinets, internally illuminated cabinets, mounted on poles, in trees, or in the ground; attached to ceiling fans and integral to exhaust fans. Permanently installed lighting does not include portable lighting or lighting that is installed by the manufacturer in exhaust hoods for cooking equipment, refrigerated cases, food preparation equipment, and scientific and industrial equipment.

Photo Control automatically turns lights ON and OFF, or automatically adjusts lighting levels, in response to the amount of daylight that is available. A Photo Control may also be one component of a field assembled lighting system, the component having the capability to provide a signal proportional to the amount of daylight to a Lighting Control System to dim or brighten the electric lights in response.

Portable Lighting is lighting equipment designed for manual portability, with plug-in connections for electric power, that is: table and freestanding floor lamps; attached to modular furniture; workstation task luminaires; luminaires attached to workstation panels; attached to movable displays; or attached to other personal property.

Post Top Luminaire is an outdoor luminaire that is mounted directly on top of a lamp-post.

Precision Lighting is task lighting for commercial or industrial work that illuminates low contrast, finely detailed, or fast moving objects.

Radiant Energy is energy travelling in the form of electromagnetic waves. It is measured in units of energy such as joules or kilowatt hours.

Radiant Power is the time rate of flow of radiant energy. It is expressed preferably in watts.

Recessed Luminaire is a luminaire that is mounted in the ceiling or behind a wall or other surface with the opening of the luminaire flush with the surface.

Sconce is a wall mounted decorative accent luminaire.

Security Cameras are any operational camera used to enhance the safety and security within a general hardscape area.

Shut-off Controls is any lighting control capable of automatically shutting OFF the lighting in a space when the space is typically unoccupied.

Solid State Lighting (SSL) is a family of light sources that includes: semiconductor light emitting diodes (LEDs); and organic light emitting diodes (OLEDs).

Source (light) is the general term used to reference a source of light. It can refer variously to an electric lamp, a light emitting diode (LED), an entire luminaire with lamp and optical control, or fenestration for daylighting.

Special Effects Lighting is lighting installed to give off luminance instead of providing illuminance, which does not serve as general, task, or display lighting.

Task Lighting is lighting directed to a specific surface or area, providing illumination for visual tasks. Task lighting is not general lighting.

Temporary Lighting is a lighting installation, with plug-in connections, that does not persist beyond 60 consecutive days or more than 120 days per year.

Track Lighting is a lighting equipment system consisting of an electrified power channel (track) and removable luminaires (lamp holders; track heads) that can be mechanically attached anywhere along the power channel. The luminaires can be repositioned and re-aimed as desired. Track lighting includes the following types:

Track Lighting Integral Current Limiter consists of a current limiter integral to the end-feed housing of a manufactured line-voltage track lighting system.

Track Lighting Supplementary Overcurrent Protection Panel is a panelboard containing Supplementary Overcurrent Protection Devices as defined in Article 100 of the California Electrical Code, and used only with line voltage track lighting.

Track Mounted Luminaires are luminaires designed to be attached at any point along a track lighting system. Track mounted luminaires may be line-voltage or low-voltage.

Tunable Lighting are light sources with the ability to alter their luminous flux and/or spectral power distribution. Tunable lighting includes the following types:

> **Color tunable** light source is capable of emitting highly saturated light of varying hues, as well as white light, for example by varying the relative intensity of individual emitters within the light source**.**
>
> **Dim-to-warm** (also known as warm dim) light source is capable of simultaneously decreasing its correlated color temperature as its light output decreases, typically resembling the change in color temperature of an incandescent lamp as it dims.
>
> **Tunable white** light source is capable of adjusting its correlated color temperature while maintaining its relative light output and capable of adjusting its light output while maintaining its correlated color temperature.

LISTED is in accordance with Article 100 of the California Electrical Code.

LOW-GWP REFRIGERANT is a compound used as a heat transfer fluid or gas that is: (A) any compound or blend of compounds, with a GWP Value less than 150; and (B) U.S. EPA Significant New Alternatives Policy (SNAP)-approved; and (C) not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, §82.3 (as amended March 10, 2017).

LOW-RISE RESIDENTIAL BUILDING is a building, other than a hotel/motel, that is Occupancy Group:

R-2, multifamily, with three habitable stories or less; or

R-3, single-family; or

U-building, located on a residential site.

LPG is liquefied petroleum gas.

MANUAL is capable of being operated by personal intervention.

MANUFACTURED DEVICE is any heating, cooling, ventilation, lighting, water heating, refrigeration, cooking, plumbing fitting, insulation, door, fenestration product, or any other appliance, device, equipment, or system subject to Sections 110.0 through 110.9 of Part 6.

MECHANICAL COOLING is lowering the temperature within a space using refrigerant compressors or absorbers, desiccant dehumidifiers, or other systems that require energy to directly condition the space. Systems that are solely energy recovery ventilation (ERV) or heat recovery ventilation (HRV) are not considered mechanical cooling. In nonresidential, multifamily buildings, and hotel/motel buildings, cooling of a space by direct or indirect evaporation of water alone is not considered mechanical cooling.

MECHANICAL HEATING is raising the temperature within a space using electric resistance heaters, fossil fuel burners, heat pumps, or other systems that require energy to directly condition the space. Systems that only use solar energy or heat recovery as the heat source are not mechanical heating systems.

MERV is the minimum efficiency reporting value as determined by ASHRAE Standard 52.2 Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size.

METAL BUILDING is a complete integrated set of mutually dependent components and assemblies that form a building, which consists of a steel-framed superstructure and metal skin. This does not include structural glass or metal panels such as in a curtainwall system.

MICROCHANNEL CONDENSER is an air-cooled condenser for refrigeration systems which utilizes multiple small parallel gas flow passages in a flat configuration with fin surfaces bonded between the parallel gas passages.

MINISPLIT AIR CONDITIONERS AND HEAT PUMPS are air conditioner or heat pump systems that have a single outdoor section and one or more indoor sections. The indoor sections cycle on and off in unison in response to a single indoor thermostat.

MODELING ASSUMPTIONS are the conditions (such as weather conditions, thermostat settings and schedules, internal gain schedules, etc.) that are used for calculating a building's annual energy consumption as specified in the Alternative Calculation Methods (ACM) Approval Manuals.

MULTIFAMILY BUILDING is any of the following:

A building of Occupancy Group R-2, other than a hotel/motel building or timeshare property,

A building of Occupancy Group R-3 that is a nontransient congregate residence, other than boarding houses of more than 6 guests and alcohol or drug abuse recovery homes of more than 6 guests, or

A building of Occupancy Group R-4.

MULTIPLE-SPLIT AIR CONDITIONERS AND HEAT PUMPS are air conditioner or heat pump systems that have two or more indoor sections. The indoor sections operate independently and can be used to condition multiple zones in response to multiple indoor thermostats.

MULTIPLE ZONE SYSTEM is an air distribution system that supplies air to more than one space conditioning zone, each of which has one or more devices (such as dampers, cooling coils, and heating coils) that regulate airflow, cooling, or heating capacity to the zone.

NATURAL GAS AVAILABILITY. For newly constructed buildings, natural gas is available if a gas service line can be connected to the site without a gas main extension. For addition and alteration, natural gas is available if a gas service line is connected to the existing building.

NEEA is the Northwest Energy Efficiency Alliance.

NEEA ADVANCED WATER HEATER SPECIFICATION is the Northwest Energy Efficiency Alliance (NEEA) specification version 7.0 for heat pump water heaters.

NET EXHAUST FLOW RATE is the exhaust flow rate for a hood, minus any internal discharge makeup airflow rate.

NET SENSIBLE COEFFICIENT OF PERFORMANCE (COP) is defined by AHRI 1360 and includes all indoor unit power and air-cooled condenser/condensing unit power for air-cooled units and includes all indoor unit power and the power allowance for pump and heat rejection as described in the Heat Rejection/Cooling Fluid Standard Rating Conditions table of AHRI 1360 for water, glycol, and chilled water units.

NEWLY CONDITIONED SPACE is any space being converted from unconditioned to directly conditioned or indirectly conditioned space. Newly conditioned space must comply with the requirements for an addition. See Section 141.0 for nonresidential occupancies and Section 150.2 for residential occupancies.

NEWLY CONSTRUCTED BUILDING is a building that has never been used or occupied for any purpose.

NONDUCTED SYSTEM is an air conditioner or heat pump that is permanently installed; directly heats or cools air within the conditioned space; and uses one or more indoor coils that are mounted on walls or ceilings within the conditioned space. The system may be of a modular design that allows for combining multiple outdoor coils and compressors to create one unified system.

NONRESIDENTIAL BUILDING is any building which is identified in the California Building Code Table; Description of Occupancy as Group A, B, E, F, H, I, M, or S, and is a U; as defined by Part 2 of Title 24 of the California Code or Regulation.
NOTE: Requirements for high-rise residential buildings and hotels/motels are included in the nonresidential sections of Part 6.

NONRESIDENTIAL BUILDING OCCUPANCY TYPES are building types in which a minimum of 90 percent of the building floor area functions as one of the following, which do not qualify as any other Building Occupancy Types more specifically defined in Section 100.1, and which do not have a combined total of more than 10 percent of the area functioning of any Nonresidential Function Areas specifically defined in Section 100.1:

Assembly Building is a building with meeting halls in which people gather for civic, social, or recreational activities. These include civic centers, convention centers and auditoriums.

Commercial and Industrial Storage Building is a building with building floor areas used for storing items.

Financial Institution Building is a building with floor areas used by an institution which collects funds from the public and places them in financial assets, such as deposits, loans, and bonds.

Grocery Store Building is a building with building floor areas used for the display and sale of food.

Gymnasium Building is a building with building floor areas used for physical exercises and recreational sport events and activities.

Industrial/Manufacturing Facility Building is a building with building floor areas used for performing a craft, assembly or manufacturing operation.

Library Building is a building with building floor area used for repository of literary materials, and for reading reference such as books, periodicals, newspapers, pamphlets and prints.

Motion Picture Theater Building is a building with building floor areas used for showing motion pictures to audiences.

Museum Building is a building with building floor areas in which objects of historical, scientific, artistic or cultural interests are curated, treated, preserved, exhibited and stored.

Office Building is a building of CBC Group B Occupancy with building floor areas in which business, clerical or professional activities are conducted.

Parking Garage Building is a building with building floor areas used for parking vehicles, and consists of at least a roof over the parking area enclosed with walls on all sides. The building includes areas for vehicle maneuvering to

reach designated parking spaces. If the roof of a parking structure is also used for parking, the section without an overhead roof is considered an outdoor parking lot instead of a parking garage.

Performance Arts Theater Building is a building with building floor areas used for showing performing arts that include plays, music, or dance to audiences.

Religious Facility Building is a building with building floor areas used for assembly of people to worship.

Restaurant Building is a building with building floor areas in which food and drink are prepared and served to customers in return for money.

Retail Store Building is a building with building floor areas used for the display and sale of merchandise except food.

School Building is a building used by an educational institution. The building floor area can include classrooms or educational laboratories, and may include an auditorium, gymnasium, kitchen, library, multipurpose room, cafeteria, student union, or workroom. A maintenance or storage building is not a school building.

Sports Arena Building is a building with building floor areas used for public viewing of sporting events and activities. Sports arenas are classified according to the number of spectators they are able to accommodate, as follows:

Class I Facility is used for competition play for 5,000 or more spectators.

Class II Facility is used for competition play for up to 5,000 spectators.

Class III Facility is used for competition play for up to 2,000 spectators.

Class IV Facility is normally used for recreational play and there is limited or no provision for spectators.

NONRESIDENTIAL COMPLIANCE MANUAL is the manual developed by the Commission, under Section 25402.1(e) of the Public Resources Code, to aid designers, builders, and contractors in meeting the energy efficiency requirements for nonresidential, high-rise residential, and hotel/motel buildings.

NONRESIDENTIAL FUNCTION AREAS are those areas, rooms, and spaces within Nonresidential Buildings that fall within the following particular definitions, and are defined according to the most specific definition:

Aisle Way is the passage or walkway between storage racks permanently anchored to the floor in a Commercial or Industrial Storage Building, where the racks are used to store materials such as goods and merchandise.

Atrium is a large-volume indoor space created by openings between two or more stories but is not used for an enclosed stairway, elevator hoistway, escalator opening, or utility shaft for plumbing, electrical, air-conditioning or other equipment.

Audience Seating Area is a room or area with fixed seats for public meetings or gatherings.

Auditorium Area is a room or area with a stage and fixed seats used for public meetings or gatherings.

Auto Repair / Maintenance Area is an area used to repair or maintain automotive equipment and/or vehicles.

Barber, Beauty Salon, Spa Area is a room or area in which the primary activity is manicures, pedicures, facials, or the cutting or styling of hair.

Civic Meeting Place Area is a space in a government building designed or used for public debate, discussion, or public meetings of governmental bodies.

Classroom, Lecture, Training, Vocational Area is a room or area where an audience or class receives instruction.

Commercial and Industrial Storage Area (refrigerated) is a room or area used for storing items where mechanical refrigeration is used to maintain the space temperature at 55° F or less.

Convention, Conference, Multipurpose and Meeting Area are rooms or areas that are designed or used for meetings, conventions or events, and that have neither fixed seating nor fixed staging.

Copy Room is a room or area used for copying, scanning, or binding documents.

Corridor Area is a passageway or route into which compartments or rooms open.

Dining Areas include the following:

Bar/Lounge is a room or area where wait staff serve patrons with liquor, cocktails, wine and beer in a relaxed atmosphere, usually with tables and chairs.

Cafeteria/Fast Food is a room or area where customers pick up their food at a counter and there is little or no wait staff or table service.

Family Dining is a room or area where wait staff serve patrons with meals in a causal atmosphere.

Fine Dining is a room or area where wait staff serve patrons with meals in an elegant and formal atmosphere.

Electrical/Mechanical/Telephone Room is a room in which the building's electrical switchbox or control panels, telephone switchbox, and/or HVAC controls or equipment is located.

Exercise/Fitness Center and Gymnasium Area is a room or area equipped for gymnastics, exercise equipment, or indoor athletic activities.

Financial Transaction Area is a room or area used by an institution that collects funds from the public and places them in financial assets such as deposits, loans and bonds, and includes tellers, work stations, and customers' waiting areas; to complete financial transactions. Financial transaction areas do not include private offices, hallways, restrooms, or other support areas.

Healthcare Facilities may have a room or area as follows:

Exam/Treatment Room is a room or area that does not provide overnight patient care and that is used to provide physical and mental care through medical, dental, or psychological examination and treatment, including laboratories and treatment spaces.

Imaging Room is a diagnostic room and area for application and review of results from imaging technologies including x-ray, ultrasound, computerized tomography (CT), and magnetic resonance imaging (MRI).

Medical Supply Room is a room or area used for storing medical supplies.

Nursery is a room or area for providing medical care for newly born infants.

Nurse's Station is a room or area where health care staff work when not directly interacting with patients.

Operating Room is a room or area where surgical operations are carried out in a sterile environment. This category also applies to veterinary operating rooms.

Patient Room is a room or area that is occupied by one or more patients during a stay in a healthcare facility or hospital.

Physical Therapy Room is a room or area for providing physical therapy treatment.

Recovery Room is a room or area that is equipped with apparatus for meeting postoperative emergencies and in which surgical patients are kept during the immediate postoperative period for care and recovery from anesthesia.

Hotel Function Area is a hotel room or area such as a hotel ballroom, meeting room, exhibit hall or conference room, together with prefunction areas and other spaces ancillary to its function.

Kitchen/Food Preparation Area is a room or area with cooking facilities or where food is prepared.

Laboratory, Scientific Area is a room or area where research, experiments, and measurement in medical and physical sciences are performed requiring examination of fine details. The area may include workbenches, countertops, scientific instruments, and associated floor spaces. Scientific laboratory does not refer to film, computer, and other laboratories where scientific experiments are not performed.

Laundry Area is a room or area primarily designed or used for laundering activities.

Library Area is a room or area primarily designed or used as a repository for literary materials, such as books, periodicals, newspapers, pamphlets and prints, kept for reading or reference.

Reading Area is a room or area in a library containing tables, chairs, or desks for patrons to use for the purpose of reading books and other reference documents. Library reading areas include reading, circulation, and

checkout areas. Reading areas do not include private offices, meeting, photocopy, or other rooms not used specifically for reading by library patrons.

Stack Area is a room or area in a library with grouping of shelving sections. Stack aisles include pedestrian paths located in stack areas.

Lobby, Main Entry is the contiguous area in buildings including hotel/motel that is directly located by the main entrance of the building through which persons must pass, including any ancillary reception, waiting and seating areas.

Locker Room is a room or area for changing clothing, sometimes equipped with lockers.

Lounge/Breakroom or Waiting Area is a room or area in which people sit, wait and relax.

Mall is a roofed or covered common pedestrian area within a mall building that serves as access for two or more tenants.

Manufacturing, Commercial and Industrial Work Area is a room or area in which an art, craft, assembly or manufacturing operation is performed. Lighting installed in these areas is classified as follows:

High bay: Where the luminaires are 25 feet or more above the floor.

Low bay: Where the luminaires are less than 25 feet above the floor.

Precision: Where visual tasks of small size or fine detail such as electronics assembly, fine woodworking, metal lathe operation, fine hand painting and finishing, egg processing operations, or tasks of similar visual difficulty are performed.

Multipurpose Room is a room that can be used for multipurpose activities such as meetings, instructional activities and social gatherings. Multipurpose rooms are typically found in offices, schools, convention centers, and assisted living facilities.

Museum Areas include the following:

Exhibit/Display is a room or area in a museum that has for its primary purpose exhibitions, having neither fixed seating nor fixed staging. An exhibit does not include a gallery or other place where art is for sale. An exhibit does not include a lobby, conference room, or other occupancies where the primary function is not exhibitions.

Restoration Room is a room or area in which the primary function is the care of works of artistic, historical, or scientific value. A restoration does not include a gallery or other place where art is for sale. A restoration does not include a lobby, conference room, or other occupancies where the primary function is not the care or exhibit of works of artistic, historical, or scientific value.

Office Area is a room or area in a building of CBC Group B Occupancy in which business, clerical or professional activities are conducted.

Parking Garage Areas include the following:

Daylight Adaptation Zone in a Parking Garage is the interior path of travel for vehicles adjacent to the entrance or exit of a parking garage as needed for visual adaptation to transition from exterior daylight levels to interior light levels. Daylight Adaptation Zones only include the path of vehicular travel and do not include adjacent Parking Areas.

Parking Zone and Ramps in a Parking Garage is used for the purpose of parking and maneuvering of vehicles. Parking areas include sloping floors of a parking garage. Ramps and driveways specifically for the purpose of moving vehicles between floors of a parking garage. Parking areas and ramps do not include Daylight Adaptation Zones or the roof of a Parking Garage, which may be present in a Parking Garage.

Pharmacy Area is a room or area where medicinal drugs are dispensed and sold, usually in a retail store.

Playing Area for Sports Arena is an area where sports are played in front an audience.

Religious Worship Area is a room or area in which the primary function is for an assembly of people to worship. Religious worship does not include classrooms, offices, or other areas in which the primary function is not for an assembly of people to worship.

Restroom is a room providing personal facilities such as toilets and washbasins.

Retail Sales Areas include the following:

Fitting Room is a room or area where the retail customers try out clothing before purchasing.

Grocery Sales is a room or area that has as its primary purpose the sale of foodstuffs requiring additional preparation prior to consumption.

Retail Merchandise Sales is a room or area in which the primary activity is the sale of merchandise.

Server Room is a room smaller than 500 square feet, within a larger building, in which networking equipment and Information Technology (IT) server equipment is housed, and a minimum of five IT servers are installed in frame racks.

Server Aisle is an aisle of racks of Information Technology (IT) server equipment in a Server Room. While networking equipment may also be housed on these racks, it is largely a room to manage server equipment.

Stairs is a series of steps providing passage for persons from one level of a building to another, including escalators.

Stairwell is a vertical shaft in which stairs are located.

Storage, Commercial and Industrial Area includes the following:

Warehouse is a room or area~~s~~ used for storing of items such as goods, merchandise and materials.

Shipping & Handling is a room or area~~s~~ used for packing, wrapping, labeling and shipping out goods, merchandise and materials.

Support Area is a room or area used as a passageway, utility room, storage space, or other type of space associated with or secondary to the function of an occupancy that is listed in these regulations.

Tenant Lease Area is a room or area in a building intended for lease for which a specific tenant is not identified at the time of building permit application.

Theater Areas include the following:

Motion Picture Theater is an assembly room or area with rows of seats for the showing of motion pictures.

Performance Theater is an assembly room or area with rows of seats for the viewing of dramatic performances, lectures, musical events and similar live performances.

Transportation Function Areas include the following:

Baggage Area is a room or area in a transportation facility such as an airport where the travelers reclaim their baggage.

Ticketing Area is a room or area in a transportation facility such as an airport or a train station where travelers purchase tickets, check in baggage, or inquire about travel information.

Videoconferencing Studio is a room or area with permanently installed videoconferencing cameras, audio equipment, and playback equipment for both audio-based and video-based two-way communication between local and remote sites.

NONSTANDARD PART LOAD VALUE (NPLV) is a single- number part-load efficiency figure of merit for chillers referenced to conditions other than IPLV conditions. (See "integrated part load value.")

NORTH-FACING (See "orientation.")

OCCUPANCY is the purpose for which a building or part thereof is used or intended to be used.

OCCUPANCY, HUMAN is any occupancy that is intended primarily for human activities.

OCCUPANCY GROUP is a classification of occupancy defined in Chapter 3 of the CBC (Title 24, Part 2).

OCCUPANCY TYPE is a description of occupancy that is more specific than occupancy group and that relates to determining the amount of lighting, ventilation, or other services needed for that portion of the building.

OCCUPIABLE SPACE is any enclosed space that is intended for human occupancy, including all habitable spaces as well as bathrooms, toilets, closets, halls, storage and utility areas, laundry areas, and similar areas. (See also "habitable space".)

OCCUPIED STANDBY MODE is when a zone is scheduled to be occupied and an occupant sensor indicates zero population within the zone.

ONLINE CAPACITY is the total combined capacity in actual cubic feet per minute of compressed air at a given pressure from all online compressors.

ONLINE COMPRESSORS are all the compressors that are physically connected to compressed air piping and are available to serve peak load. Online compressors do not include back up compressors whose only purpose is to be available when an online compressor fails.

OPEN COOLING TOWER, or OPEN-CIRCUIT COOLING TOWER is an open, or direct contact, cooling tower which exposes water directly to the cooling atmosphere, thereby transferring the source heat load from the water directly to the air by a combination of heat and mass transfer.

OPENADR 2.0a is the OpenADR Alliance document titled, "OpenADR 2.0 Profile Specification A Profile," 2011.

OPENADR 2.0b is the OpenADR Alliance document titled, "OpenADR 2.0 Profile Specification B Profile," 2015.

OPERABLE FENESTRATION is designed to be opened or closed.

OPTIMUM START CONTROLS are controls that are designed to automatically adjust the start time of a space conditioning system each day with the intent of bringing the space to desired occupied temperature levels at the beginning of scheduled occupancy.

OPTIMUM STOP CONTROLS are controls that are designed to setup or setback thermostat setpoints before scheduled unoccupied periods based upon the thermal lag and acceptable drift in space temperature that is within comfort limits.

OSHPD is the California Office of Statewide Health Planning and Development

ORIENTATION, CARDINAL is one of the four principal directional indicators, north, east, south, and west, which are marked on a compass, also called cardinal directions.

ORIENTATION, EAST-FACING is oriented to within 45° of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).

ORIENTATION, NORTH-FACING is oriented to within 45° of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).

ORIENTATION, SOUTH-FACING is oriented to within 45° of true south including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).

ORIENTATION, WEST-FACING is oriented to within 45° of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).

OUTDOOR AIR (Outside air) is air taken from outdoors and not previously circulated in the building.

OUTDOOR AREAS are areas external to a building. These include but are not limited to the following areas:

Building entrance way is the external area of any operable doorway in or out of a building, including overhead doors. These areas serve any doorway, set of doors (including elevator doors such as in parking garages), turnstile, vestibule, or other form of portal that is ordinarily used to gain access to the building by its users and occupants. Where buildings have separate one-way doors to enter and to leave, this also includes any area serving any doors ordinarily used to leave the building.

Building façade is the exterior surfaces of a building, not including horizontal roofing, signs, and surfaces not visible from any public accessible viewing location.

Canopy is a permanent structure, other than a parking garage area, consisting of a roof and supporting building elements, with the area beneath at least partially open to the elements. A canopy may be freestanding or attached to surrounding structures. A canopy roof may serve as the floor of a structure above.

Carport is a covered, open-sided structure designed or used primarily for the purpose of parking vehicles, having a roof over the parking area. Typically, carports are free-standing or projected from the side of the building and are only two or fewer car lengths deep. A Carport is not a Garage.

Hardscape is the area of an improvement to a site that is paved or has other structural features such as curbs, plazas, entries, parking lots, site roadways, driveways, walkways, sidewalks, bikeways, water features and pools, storage or service yards, loading docks, amphitheaters, outdoor sales lots, and private monuments and statuary.

Outdoor Sales canopy is a canopy specifically to cover and protect an outdoor sales area.

Outdoor sales frontage is the portion of the perimeter of an outdoor sales area immediately adjacent to a public street, road, or sidewalk.

Outdoor sales lot is an uncovered paved area used exclusively for the display of vehicles, equipment or other merchandise for sale. All internal and adjacent access drives, walkway areas, employee and customer parking areas, vehicle service or storage areas are not outdoor sales lot areas, but are considered hardscape.

Parking lot is an uncovered area for the purpose of parking vehicles. Parking lot is a type of hardscape.

Paved area is an area that is paved with concrete, asphalt, stone, brick, gravel, or other improved wearing surface, including the curb.

Principal viewing location is anywhere along the adjacent highway, street, road or sidewalk running parallel to an outdoor sales frontage.

Public monuments are statuary, buildings, structures, and/or hardscape on public land.

Stairways and Ramps. Stairways are one or more flights of stairs with the necessary landings and platforms connecting them to form a continuous and uninterrupted passage from one level to another. An exterior stairway is open on at least one side, except for required structural columns, beams, handrails and guards. The adjoining open areas shall be either yards, courts or public ways. The other sides of the exterior stairway need not be open. Ramps are walking surfaces with a slope steeper than 5 percent.

Vehicle service station is a gasoline, natural gas, diesel, or other fuel dispensing station.

OUTDOOR LIGHTING is electrical lighting used to illuminate outdoor areas.

OUTDOOR LIGHTING ZONE is a geographic area designated by the California Energy Commission in accordance with Part 1, Section 10-114, that determines requirements for outdoor lighting, including lighting power densities and specific control, equipment or performance requirements. Lighting zones are numbered LZ0, LZ1, LZ2, LZ3 and LZ4.

OVERHANG is a contiguous opaque surface, oriented horizontally and projecting outward horizontally from an exterior vertical surface.

PART 1 means Part 1 of Title 24 of the California Code of Regulations.

PART 6 means Part 6 of Title 24 of the California Code of Regulations.

PART-LOAD OPERATION occurs when a system or device is operating below its maximum rated capacity.

PARTICLE SIZE EFFICIENCY is the fraction (percentage) of particles that are captured on air filter equipment as determined during rating tests conducted in accordance with ASHRAE Standard 52.2 or AHRI Standard 680. Particle Size Efficiency is measured in three particle size ranges: 0.3-1.0, 1.0-3.0, 3.0-10 microns.

PHOTOSYNTHETIC PHOTON EFFICACY (PPE) is photosynthetic photon flux divided by input electric power in units of micromoles per second per watt, or micromoles per joule as defined by ANSI/ASABE S640.

PHOTOSYNTHETIC PHOTON FLUX (PPF) is the rate of flow of photons between 400 to 700 nanometers in wavelength from a radiation source as defined by ANSI/ASABE S640.

POOLS, ANSI/APSP/ICC-5 is the American National Standards Institute and National Spa and Pool Institute document titled "American National Standard for Residential Inground Swimming Pools" 2011 (ANSI/ APSP/ICC 5 2011) with Addenda A.

POOLS, AUXILIARY POOL LOADS are features or devices that circulate pool water in addition to that required for pool filtration, including, but not limited to, solar pool heating systems, filter backwashing, pool cleaners, waterfalls, fountains, and spas.

POOLS, BACKWASH VALVE is a diverter valve designed to backwash filters located between the circulation pump and the filter, including, but not limited to, slide, push-pull, multiport, and full-flow valves.

POOLS, MULTISPEED PUMP is a pump capable of operating at two or more speeds and includes two-speed and variable-speed pumps.

POOLS, NSF/ANSI/CAN 50 is the NSF International (formerly National Sanitation Foundation) Standard and American National Standards Institute document titled "Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities" 2020 (NSF/ANSI/CAN 50 – 2020).

POOLS, RESIDENTIAL are permanently installed residential in-ground swimming pools intended for use by a single-family home for noncommercial purposes and with dimensions as defined in ANSI/NSPI-5.

PRESSURE BOUNDARY is the primary air enclosure boundary separating indoor and outdoor air. For example, a volume that has more leakage to the outside than to the conditioned space would be considered outside the pressure boundary. Exposed earth in a crawlspace or basement shall not be considered part of the pressure boundary.

PRIMARY AIRFLOW is the airflow (cfm or L/s) supplied to the zone from the air-handling unit at which the outdoor air intake is located. It includes outdoor intake air and recirculated air from that air-handling unit but does not include air transferred or air recirculated to the zone by other means.

PRIMARY STORAGE is compressed air storage located upstream of the distribution system and any pressure flow regulators.

PROCESS is an activity or treatment that is not related to the space conditioning, lighting, service water heating, or ventilating of a building as it relates to human occupancy.

PROCESS BOILER is a type of boiler with a capacity (rated maximum input) of 300,000 Btus per hour (Btu/h) or more that serves a process.

PROCESS, COVERED is a process that is regulated under Part 6, Sections 120.6 and 140.9, which includes computer rooms, data centers, elevators, escalators and moving walkways, laboratories, enclosed parking garages, commercial kitchens, refrigerated warehouses, commercial refrigeration, compressed air systems, process boilers, and controlled environment horticultural spaces.

PROCESS, EXEMPT is a process that is not a covered process regulated under Part 6.

PROCESS LOAD is an energy load resulting from a process.

PROCESS SPACE is a nonresidential space that is designed to be thermostatically controlled to maintain a process environment temperature less than 55° F or to maintain a process environment temperature greater than 90° F for the whole space that the system serves, or that is a space with a space-conditioning system designed and controlled to be incapable of operating at temperatures above 55° F or incapable of operating at temperatures below 90° F at design conditions.

PROPOSED DESIGN BUILDING is a building that is simulated by Commission-approved compliance software to determine the energy consumption resulting from all of the characteristics and energy consuming features that are actually proposed for a building, as specified by the Alternative Calculation Method (ACM) Approval Manual.

PUBLIC AREAS are spaces generally open to the public at large, customers or congregation members, or similar spaces where occupants need to be prevented from controlling lights for safety, security, or business reasons.

R-VALUE is the measure of the thermal resistance of insulation or any material or building component expressed in ft^2-hr-°F/Btu.

RADIANT BARRIER is a highly reflective, low emitting material installed at the underside surface of the roof deck and the inside surface of gable ends or other exterior vertical surfaces in attics to reduce solar heat gain.

RAISED FLOOR is a floor (partition) over a crawl space, or an unconditioned space, or ambient air.

READILY ACCESSIBLE is capable of being reached quickly for operation, repair or inspection, without requiring climbing or removing obstacles, or resorting to access equipment.

RECOOL is the cooling of air that has been previously heated by space-conditioning equipment or systems serving the same building.

RECOVERED ENERGY is energy used in a building that (1) is recovered from space conditioning, service water heating, lighting, or process equipment after the energy has performed its original function; (2) provides space conditioning, service water heating, or lighting; and (3) would otherwise be wasted.

REFERENCE APPENDICES is the support document for the Building Energy Efficiency Standards and the ACM Approval Manuals. The document consists of three sections: the Reference Joint Appendices (JA), the Reference Residential Appendices (RA), and the Reference Nonresidential Appendices (NA).

REFLECTANCE, SOLAR is the ratio of the reflected solar flux to the incident solar flux.

REFRIGERATED CASE is a manufactured commercial refrigerator or freezer, including but not limited to display cases, reach-in cabinets, meat cases, and frozen food and soda fountain units.

REFRIGERATED SPACE is a space constructed for storage or handling of products, where mechanical refrigeration is used to maintain the space temperature at 55° F or less.

REFRIGERATED WAREHOUSE is a building or a space greater than or equal to 3,000 square feet constructed for storage or handling of products, where mechanical refrigeration is used to maintain the space temperature at 55° F or less.

REHEAT is the heating of air that has been previously cooled by cooling equipment or supplied by an economizer.

RELOCATABLE PUBLIC SCHOOL BUILDING is a relocatable building as defined by Title 24, Part 1, Section 4-314, which is subject to Title 24, Part 1, Chapter 4, Group 1.

REPAIR is the reconstruction or renewal for the purpose of maintenance of any component, system, or equipment of an existing building. Repairs shall not increase the preexisting energy consumption of the repaired component, system, or equipment. Replacement of any component, system, or equipment for which there are requirements in the Standards is considered an alteration and not a repair.

RESIDENTIAL BUILDING (See “high-rise residential building” and “low-rise residential building.”)

RESIDENTIAL COMPLIANCE MANUAL is the manual developed by the Commission, under Section 25402.1 of the Public Resources Code, to aid designers, builders, and contractors in meeting Energy Efficiency Standards for low-rise residential buildings.

RESIDENTIAL SPACE TYPE is one of the following:

Bathroom is a room or area containing a sink used for personal hygiene, toilet, shower, or a tub.

Closet is a nonhabitable room used for the storage of linens, household supplies, clothing, nonperishable food, or similar uses, and which is not a hallway or passageway.

Garage is a nonhabitable building or portion of building, attached to or detached from a residential dwelling unit, in which motor vehicles are parked.

Kitchen is a room or area used for cooking, food storage and preparation and washing dishes, including associated counter tops and cabinets, refrigerator, stove, ovens, and floor area.

Laundry is a nonhabitable room or space which contains plumbing and electrical connections for a washing machine or clothes dryer.

Storage building is a nonhabitable detached building used for the storage of tools, garden equipment, or miscellaneous items.

Utility room is a nonhabitable room or building which contains only HVAC, plumbing, or electrical controls or equipment; and which is not a bathroom, closet, garage, or laundry room.

RESNET 380 is the Residential Energy Services Network document titled "Standard for Testing Airtightness of Building Enclosures, Dwelling Unit, and Sleeping Unit Enclosures, Airtightness of Heating and Cooling Air Distribution Systems; and Airflow of Mechanical Ventilation Systems" 2019 (ANSI/RESNET/ICC 380-2019).

ROOF is the outside cover of a building or structure including the structural supports, decking, and top layer that is exposed to the outside with a slope less than 60° from the horizontal.

ROOF, LOW-SLOPED is a roof that has a ratio of rise to run of less than 2:12 (9.5° from the horizontal).

ROOF, STEEP-SLOPED is a roof that has a ratio of rise to run of greater than or equal to 2:12 (9.5° from the horizontal).

ROOF RECOVER is the process of installing an additional roof covering over a prepared existing roof covering without removing the existing roof covering.

ROOF RECOVER BOARD is a rigid type board, installed directly below a low-sloped roof membrane, with or without above deck thermal insulation, to: (a) improve a roof system's compressive strength, (b) physically separate the roof membrane from the thermal insulation, or (c) physically separate a new roof covering from an underlying roof membrane as part of a roof overlay project.

ROOF REPLACEMENT is the process of removing the existing roof covering, repairing any damaged substrate and installing a new roof covering.

ROOFING PRODUCT is the top layer of the roof that is exposed to the outside, which has properties including but not limited to solar reflectance, thermal emittance, and mass.

RUNOUT is piping that is no more than 12 feet long and that connects to a fixture or an individual terminal unit.

SAE J1772 is the SAE International document titled "SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler" (SAE J1772_201710).

SATURATED CONDENSING TEMPERATURE (also known as CONDENSING TEMPERATURE) is: (a) for single component and azeotropic refrigerants, the saturation temperature corresponding to the refrigerant pressure at the condenser entrance, or (b) for zeotropic refrigerants, the arithmetic average of the Dew Point and Bubble Point temperatures corresponding to the refrigerant pressure at the condenser entrance.

SCIENTIFIC EQUIPMENT is measurement, testing or metering equipment used for scientific research or investigation, including but not limited to manufactured cabinets, carts and racks.

SEAL CLASS A is a ductwork sealing category that requires sealing all transverse joints, longitudinal seams, and duct wall penetrations. Duct wall penetrations are openings made by pipes, conduit, tie rods, or wires. Longitudinal seams are joints oriented in the direction of airflow. Transverse joints are connections of two duct sections oriented perpendicular to airflow. Openings for rotating shafts shall be sealed with bushings or other devices that seal off air leakage. All connections shall be sealed, including but not limited to spin-ins, taps, other branch connections, access doors, access panels, and duct connections to equipment. Sealing that would void product listings is not required. All duct pressure class ratings shall be designated in the design documents.

SEASONAL ENERGY EFFICIENCY RATIO (SEER) is the total cooling output of an air conditioner in Btu during its normal usage period for cooling divided by the total electrical energy input in watt-hours during the same period, as determined using the applicable test method in the Appliance Efficiency Regulations.

SEASONAL ENERGY EFFICIENCY RATIO 2 (SEER2) is the SEER metric for residential central air conditioners and heat pumps effective January 1, 2023, as created by the U.S. Department of Energy "ISSUANCE 2016-11-30 Energy Conservation Program: Test Procedures for Central Air Conditioners and Heat Pumps, Final Rule".

SENSIBLE ENERGY RECOVERY RATIO is a ratio of the change in the dry-bulb temperature of the outdoor air supply to the difference in dry-bulb temperature between the outdoor air and entering exhaust airflow, with no adjustment to account for that portion of the dry-bulb temperature change in the leaving supply airflow that is the result of leakage of entering exhaust airflow rather than heat exchange between the airstreams.

SERVICE WATER HEATING is heating of water for sanitary purposes for human occupancy, other than for comfort heating.

SHADING is the protection from heat gains because of direct solar radiation by permanently attached exterior devices or building elements, interior shading devices, glazing material, or adherent materials.

SHADING COEFFICIENT (SC) is the ratio of the solar heat gain through a fenestration product to the solar heat gain through an unshaded 1/8-inch-thick clear double strength glass under the same set of conditions. For nonresidential, high-rise residential, and hotel/motel buildings, this shall exclude the effects of mullions, frames, sashes, and interior and exterior shading devices.

SIDELIT DAYLIT ZONE, PRIMARY is the area in plan view directly adjacent to each vertical glazing, one window head height deep into the area, and window width plus 0.5 times window head height wide on each side of the rough opening of the window, minus any area on a plan beyond a permanent obstruction that is 6 feet or taller as measured from the floor.

SIDELIT DAYLIT ZONE, SECONDARY is the area in plan view directly adjacent to each vertical glazing, two window head heights deep into the area, and window width plus 0.5 times window head height wide on each side of the rough opening of the window, minus any area on a plan beyond a permanent obstruction that is 6 feet or taller as measured from the floor.

SIGN definitions include the following:

Electronic Message Center (EMC) is a pixelated image producing electronically controlled sign formed by any light source. Bare lamps used to create linear lighting animation sequences through the use of chaser circuits, also known as “chaser lights” are not considered an EMC.

Illuminated face is a side of a sign that has the message on it. For an exit sign it is the side that has the word “EXIT” on it.

Sign, cabinet is an internally illuminated sign consisting of frame and face, with a continuous translucent message panel, also referred to as a panel sign.

Sign, channel letter is an internally illuminated sign with multiple components, each built in the shape of an individual three dimensional letter or symbol that are each independently illuminated, with a separate translucent panel over the light source for each element.

Sign, double-faced is a sign with two parallel opposing faces.

Sign, externally illuminated is any sign or a billboard that is lit by a light source that is external to the sign directed towards and shining on the face of the sign.

Sign, internally illuminated is a sign that is illuminated by a light source that is contained inside the sign where the message area is luminous, including cabinet signs and channel letter signs.

Sign, traffic is a sign for traffic direction, warning, and roadway identification.

Sign, unfiltered is a sign where the viewer perceives the light source directly as the message, without any colored filter between the viewer and the light source, including neon, cold cathode, and LED signs.

SINGLE-FAMILY BUILDING is any of the following:

A residential building of Occupancy Group R-3 with two or less dwelling units,

A building of Occupancy Group R-3, other than a multifamily building or hotel/motel building,

A townhouse,

A building of Occupancy Group R-3.1, or

A building of Occupancy Group U when located on a residential site.

SINGLE PACKAGE VERTICAL AIR CONDITIONER (SPVAC) is a type of air-cooled small or large commercial package air-conditioning and heating equipment; factory assembled as a single package having its major components arranged vertically, which is an encased combination of cooling and optional heating components; is intended for exterior

mounting on, adjacent interior to, or through an outside wall; and is powered by single or three-phase current. It may contain separate indoor grille, outdoor louvers, various ventilation options, indoor free air discharge, ductwork, wall plenum, or sleeve. Heating components may include electrical resistance, steam, hot water, gas, or no heat but may not include reverse cycle refrigeration as a heating means.

SINGLE PACKAGE VERTICAL HEAT PUMP (SPVHP) is an SPVAC that utilizes reverse cycle refrigeration as its primary heat source, with secondary supplemental heating by means of electrical resistance, steam, hot water, or gas.

SINGLE ZONE SYSTEM is an air distribution system that supplies air to one thermal zone controlled by a single thermostat.

SITE SOLAR ENERGY is thermal, chemical, or electrical energy derived from direct conversion of incident solar radiation at the building site.

SKYLIGHT is fenestration installed on a roof less than 60° from the horizontal.

SKYLIGHT AREA is the area of the rough opening for the skylight.

SKYLIGHT TYPE is one of the following three types of skylights: glass mounted on a curb, glass not mounted on a curb or plastic (assumed to be mounted on a curb).

SKYLIT DAYLIT ZONE is the rough area in plan view under each skylight, plus 0.7 times the average ceiling height in each direction from the edge of the rough opening of the skylight, minus any area on a plan beyond a permanent obstruction that is taller than one-half of the distance from the floor to the bottom of the skylight. The bottom of the skylight is measured from the bottom of the skylight well for skylights having wells, or the bottom of the skylight if no skylight well exists. For the purpose of determining the skylit daylit zone, the geometric shape of the skylit daylit zone shall be identical to the plan view geometric shape of the rough opening of the skylight; for example, for a rectangular skylight the skylit daylit zone plan area shall be rectangular, and for a circular skylight the skylit daylit zone plan area shall be circular. For skylight located in an atrium, the skylit daylit zone shall include the floor area directly under the atrium, and the area of the top floor that is directly under the skylight, plus 0.7 times the average ceiling height of the top floor, in each direction from the edge of the rough opening of the skylight, minus any area on a plan beyond a permanent obstruction that is taller than one-half of the distance from the top floor to the bottom of the skylight.

SMACNA is the Sheet Metal and Air-Conditioning Contractors National Association.

SMACNA HVAC DUCT CONSTRUCTION STANDARDS is the Sheet Metal Contractors' National Association document "HVAC Duct Construction Standards Metal and Flexible - 3rd Edition," 2006 (2006 ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition).

SMACNA RESIDENTIAL COMFORT SYSTEM INSTALLATION STANDARDS is the Sheet Metal Contractors' National Association document titled "Residential Comfort System Installation Standards, Eighth Edition." (2016).

SOCIAL SERVICES BUILDING is a space where public assistance and social services are provided to individuals or families.

SOLAR ELECTRIC GENERATION SYSTEM or **PHOTOVOLTAIC SYSTEM** is the complete set of all components for converting sunlight into electricity through the photovoltaic process, including the array of panels, inverter(s) and the balance of system components required to enable the system to effectively deliver power to reduce a building's consumption of electricity from the utility grid.

SOLAR REFLECTANCE INDEX (SRI) is a measure of the roof's ability to reject solar heat which includes both reflectance and emittance.

SOLAR SAVINGS FRACTION (SSF) is the fraction of domestic hot water demand provided by a solar water-heating system.

SOLAR ZONE is a section of the roof designated and reserved for the future installation of a solar electric or solar thermal system.

SOUTH-FACING (See "orientation.")

SPA is a vessel that contains heated water in which humans can immerse themselves, is not a pool, and is not a bathtub.

SPACE-CONDITIONING SYSTEM is a system that provides mechanical heating, or mechanical cooling within or associated with conditioned spaces in a building, and may incorporate use of components such as chillers/compressors, fluid

distribution systems (e.g., air ducts, water piping, refrigerant piping), pumps, air handlers, cooling and heating coils, air or water cooled condensers, economizers, terminal units, and associated controls.

STANDARD DESIGN BUILDING is a building that is automatically simulated by Commission-approved compliance software to establish the Energy Budget that is the maximum energy consumption allowed by a Proposed Design Building to comply with the Title 24 Building Energy Efficiency Standards. The Standard Design building is simulated using the same location and having the same characteristics of the Proposed Design building, but assuming minimal compliance with the mandatory and prescriptive requirements that are applicable to the proposed building, as specified by the Alternative Calculation Methods Approval Manual.

STORAGE, COLD, is a storage area within a refrigerated warehouse where space temperatures are maintained at or above 32° F.

STORAGE, FROZEN is a storage area within a refrigerated warehouse where the space temperatures are maintained below 32° F.

TENANT SPACE is a portion of a building occupied by a tenant.

THERMAL MASS is solid or liquid material with a high overall heat capacity to store energy for heating or cooling requirements.

THERMAL RESISTANCE (R) is a measurement of the resistance over time of a material or building component to the passage of heat in (hr × ft² × °F)/Btu.

THERMOSTAT is an automatic control device or system used to maintain temperature at a fixed or adjustable setpoint.

THERMOSTATIC EXPANSION VALVE (TXV) is a refrigerant metering valve, installed in an air conditioner or heat pump, which controls the flow of liquid refrigerant entering the evaporator in response to the superheat of the gas leaving it.

TIME DEPENDENT VALUATION (TDV) ENERGY is the time varying energy caused to be used by the building to provide space conditioning and water heating and for specified buildings lighting. TDV energy accounts for the energy used at the building site and consumed in producing and in delivering energy to a site, including, but not limited to, power generation, transmission and distribution losses.

TOTAL HEAT OF REJECTION (THR) is the heat rejected by refrigeration system compressors at design conditions, consisting of the design cooling capacity plus the heat of compression added by the compressors.

TOWNHOUSE is a single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.

TRANSCRITICAL CO_2 REFRIGERATION SYSTEM is a type of refrigeration system that uses CO_2 as the refrigerant where the ultimate heat rejection to ambient air can take place above the critical point.

> **SUBCRITICAL MODE** is a system operating condition for a refrigeration system wherein the refrigerant pressure and temperature leaving the compressor is such that the refrigerant is below the critical point. Typically used in reference to CO_2 refrigeration systems.
>
> **TRANSCRITICAL MODE** is a system operating condition for a refrigeration system wherein the refrigerant pressure and temperature leaving the compressor is such that the refrigerant is at or above the critical point. Typically used in reference to CO_2 refrigeration systems.

TRANSIENT is the occupancy for not more than 30 days of a dwelling unit or sleeping unit.

TRIM COMPRESSOR is a compressor that is designated for part-load operation, handling the short term variable trim load of end uses, in addition to the fully loaded base compressors.

U-FACTOR is the overall coefficient of thermal transmittance of a fenestration, wall, floor, or roof/ceiling component, in Btu/(hr × ft² × ºF), including air film resistance at both surfaces.

UL is the Underwriters Laboratories.

UL 181 is the Underwriters Laboratories document titled “Standard for Safety for Factory-Made Air Ducts and Air Connectors,” 2017 (UL 181).

UL 181A is the Underwriters Laboratories document titled “Standard for Safety for Closure Systems for Use With Rigid Air Ducts,” 2017 (UL 181A).

UL 181B is the Underwriters Laboratories document titled “Standard for Safety for Closure Systems for Use With Flexible Air Ducts and Air Connectors,” 2017 (UL 181B).

UL 723 is the Underwriters Laboratories document titled “Standard for Safety for Test for Surface Burning Characteristics,” 2018 (UL 723).

UL 727 is the Underwriters Laboratories document titled “Standard for Safety for Oil-Fired Central Furnaces,”2018 (UL727).

UL 731 is the Underwriters Laboratories document titled “Standard for Safety for Oil-Fired Unit Heaters,” 2018 (UL 731).

UL 1077 is the Underwriters Laboratories document titled “Standard for Safety for Supplementary Protectors for Use in Electrical Equipment”, 2016 (UL 1077)**.**

UL 1574 is the Underwriters Laboratories document titled " Standard for Safety for Track Lighting Systems," 2020 (UL 1574).

UL 1598 is the Underwriters Laboratories document titled “Standard for Safety for Luminaires,” 2021 (UL 1598).

UL 1741 is the Underwriter Laboratories document titled “Standard for Safety for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources,” 2021 (UL 1741).

UL 1973 is the Underwriter Laboratories document titled “Standard for Safety for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications),” 2018 (ANSI/CAN/UL 1973:2018).

UL 2108 is the Underwriters Laboratories document titled “Standard for Safety for Low Voltage Lighting Systems,” 2019 (UL 2108).

UL 8750 is the Underwriters Laboratories document titled “Standards for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products,”2021 (UL 8750).

UL 9540 is the Underwriter Laboratories document titled “Standard for Safety for Energy Storage Systems and Equipment” 2020 (ANSI/CAN/UL 9540:2021)

UNCONDITIONED SPACE is enclosed space within a building that is not directly conditioned, or indirectly conditioned.

UNIFORM ENERGY FACTOR (UEF) of a water heater is a measure of overall water heater efficiency, as determined using the applicable test method in the Appliance Efficiency Regulations.

USDOE 10 CFR 430 is the regulation issued by Department of Energy and available in the Code of Federal Regulation - Title 10, Chapter II, Subchapter D, Part 430 – Energy Conservation Program for Consumer Products. Relevant testing methodologies are specified in applicable appendices.

USDOE 10 CFR 431 is the regulation issued by Department of Energy and available in the Code of Federal Regulation - Title 10, Chapter II, Subchapter D, Part 431 - Energy Conservation Program for Certain Commercial and Industrial equipment. Relevant testing methodologies are specified in “Subpart E to Part 431 – Uniform test method for the measurement of energy efficiency of commercial packaged boilers.”

VAPOR RETARDER CLASS is a measure of the ability of a material or assembly to limit the amount of moisture that passes through the material or assembly meeting Section 202 of the California Building Code.

VARIABLE AIR VOLUME (VAV) SYSTEM is a space-conditioning system that maintains comfort levels by varying the volume of supply air to the zones served.

VENDING MACHINE is a machine for vending and dispensing refrigerated or nonrefrigerated food and beverages or general merchandise.

VENTILATION SYSTEM, BALANCED is a mechanical device intended to remove air from buildings, and simultaneously replace it with outdoor air.

VENTILATION SYSTEM, CENTRAL FAN INTEGRATED, or CFI is a ventilation system configuration in which the ventilation ductwork is connected to the duct system of a dwelling unit space conditioning system to enable distribution of ventilation air to the dwelling unit while the space conditioning system air handling unit is operating.

VENTILATION SYSTEM, ENERGY RECOVERY, or ERV is a mechanical device intended to remove air from buildings, simultaneously replace it with outdoor air, and in the process transfer heat from the warmer to the colder of the simultaneous airflows and transfer moisture from the most humid to least humid of the simultaneous airflows.

VENTILATION SYSTEM, EXHAUST is a mechanical device intended to remove air from buildings, causing outdoor air to enter by ventilation inlets or normal leakage paths through the building envelope.

VENTILATION SYSTEM, HEAT RECOVERY, or HRV is a mechanical device intended to remove air from buildings, simultaneously replace it with outdoor air, and in the process transfer heat from the warmer to the colder of the simultaneous airflows.

VENTILATION SYSTEM, SUPPLY is a mechanical device intended to bring outdoor air into buildings, causing indoor air to flow out of the building through ventilation relief outlets or normal leakage paths through the building envelope.

VERY VALUABLE MERCHANDISE is rare or precious objects, including, but not limited to, jewelry, coins, small art objects, crystal, ceramics, or silver, the selling of which involves customer inspection of very fine detail from outside of a locked case.

VIRTUAL END NODE (VEN) is an interface with a demand responsive control system that accepts signals transmitted through OpenADR, consistent with the specifications in OpenADR 2.0a or 2.0b.

WALL TYPE is a type of wall assembly having a specific heat capacity, framing type, and U-factor.

WATER BALANCE IN EVAPORATIVE COOLING TOWERS The water balance of a cooling tower is:

M = E + B, where:

M = makeup water (from the mains water supply)

E = losses due to evaporation

B = losses due to blowdown

WEST-FACING (See “orientation”)

WINDOW FILM is a fenestration attachment product that consists of a flexible adhesive-backed polymer film which may be applied to the interior or exterior surface of an existing glazing system.

WOOD HEATER is an enclosed wood-burning appliance used for space heating and/or domestic water heating.

WOOD STOVE (See “wood heater.”)

ZONAL describes characterized by or relating to a zone or zones.

ZONE, CRITICAL is a zone serving a process where reset of the zone temperature setpoint during a demand shed event might disrupt the process, including but not limited to computer rooms, data centers, telecom and private branch exchange (PBX) rooms, and laboratories.

ZONE, NONCRITICAL is a zone that is not a critical zone.

ZONE, SPACE-CONDITIONING, is a space or group of spaces within a building with sufficiently similar comfort conditioning requirements so that comfort conditions, as specified in Section 140.4(b)3 or 150.0(h), as applicable, can be maintained throughout the zone by a single controlling device.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, *Public Resources Code*. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, *Public Resources Code*.

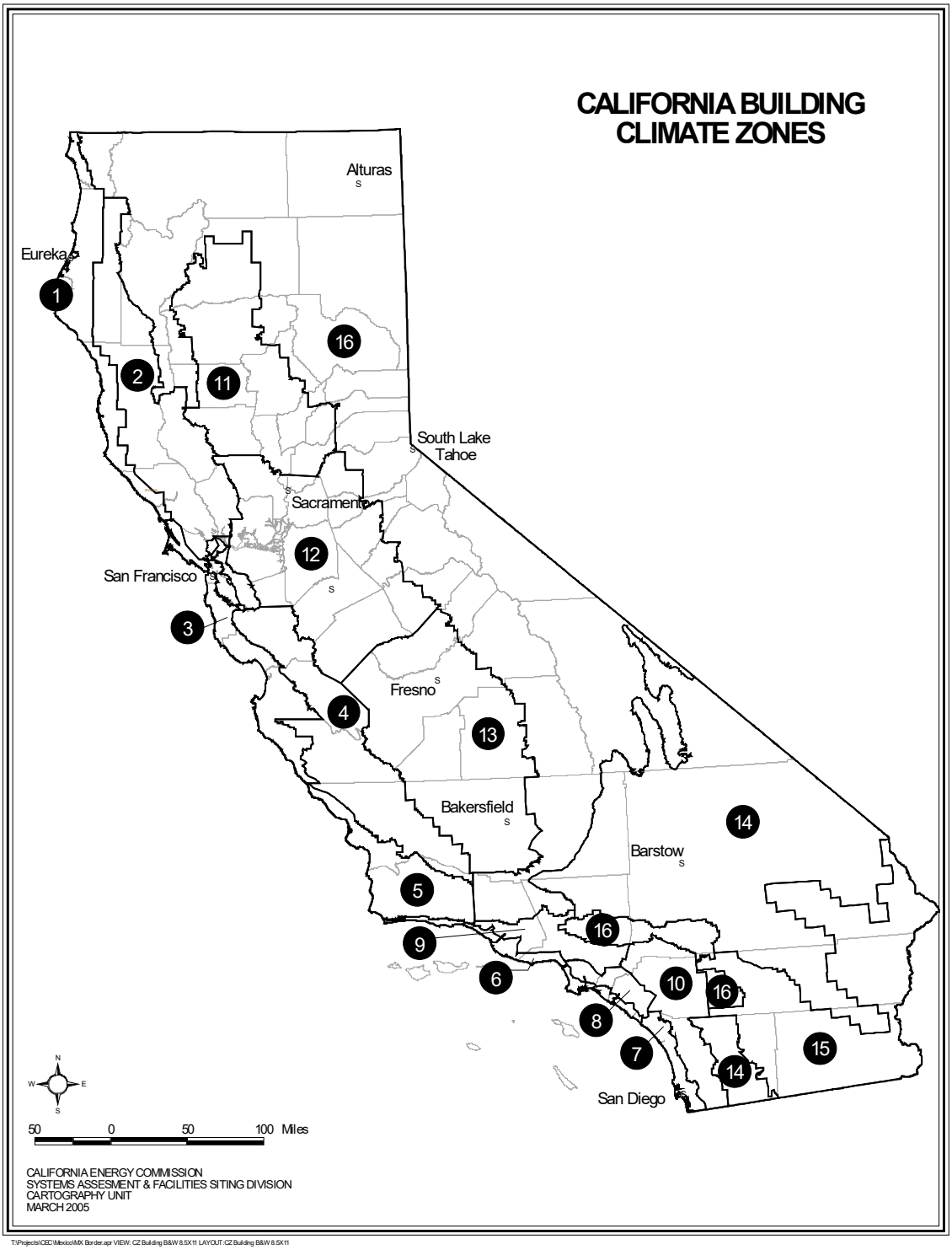

FIGURE 100.1-A—CALIFORNIA CLIMATE ZONES

Climate Zones for Residential and Nonresidential Occupancies

SECTION 100.2 – CALCULATION OF TIME DEPENDENT VALUATION (TDV) ENERGY

Time Dependent Valuation (TDV) energy shall be used to compare proposed designs to their energy budget when using the performance compliance approach. TDV energy is calculated by multiplying the site energy use (electricity kWh, natural gas therms, or fuel oil or LPG gallons) for each energy type times the applicable TDV multiplier. TDV multipliers vary for each hour of the year and by energy type (electricity, natural gas or propane), by Climate Zone and by building type (low-rise residential or nonresidential, high-rise residential or hotel/motel). TDV multipliers are summarized in Reference Joint Appendix JA3. TDV multipliers for propane shall be used for all energy obtained from depletable sources other than electricity and natural gas.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, *Public Resources Code*. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, *Public Resources Code*.

SUBCHAPTER 2
ALL OCCUPANCIES—MANDATORY REQUIREMENTS FOR THE MANUFACTURE, CONSTRUCTION AND INSTALLATION OF SYSTEMS, EQUIPMENT AND BUILDING COMPONENTS

SECTION 110.0 – SYSTEMS AND EQUIPMENT—GENERAL

Sections 110.1 through 110.12 specify requirements for manufacturing, construction and installation of certain systems, equipment, appliances and building components that are installed in buildings within the scope of Section 100.0(a).

NOTE: The requirements of Sections 110.0 through 110.12 apply to newly constructed buildings. Sections 141.0 and 150.2 specify which requirements of Sections 110.1 through 110.12 also apply to additions and alterations to existing buildings.

(a) **General Requirements.** Systems, equipment, appliances and building components shall only be installed in a building within the scope of Section 100.0(a) regulated by Part 6 only if:

1. The manufacturer has certified that the system, equipment, appliances or building component complies with the applicable manufacturing provisions of Sections 110.1 through 110.12; and
2. The system, equipment, appliance or building component complies with all applicable installation provisions of Sections 110.1 through 110.12.

(b) **Certification Requirements for Manufactured Systems, Equipment, Appliances and Building Components.**

1. Appliances that are within the scope of Section 1601 of the Appliance Efficiency Regulations shall only be installed if they have been certified to the Energy Commission by the manufacturer, pursuant to the provisions of Title 20 California Code of Regulations, Section 1606; or
2. Systems, equipment, appliances and building components that are required by Part 6 or the Reference Appendices to be certified to the Energy Commission, which are not appliances that are within the scope of Section 1601 of the Appliance Efficiency Regulations, shall only be installed if they are certified by the manufacturer in a declaration, executed under penalty of perjury under the laws of the State of California, that:
   A. all the information provided pursuant to the certification is true, complete, accurate and in compliance with all applicable requirements of Part 6; and
   B. the equipment, product, or device was tested using the test procedure specified in Part 6 if applicable
3. The certification status of any system, equipment, appliance or building component shall be confirmed only by reference to:
   A. A directory published or approved by the Commission; or
   B. A copy of the application for certification from the manufacturer and the letter of acceptance from the Commission staff; or
   C. Written confirmation from the publisher of a Commission-approved directory that a device has been certified; or
   D. A Commission-approved label on the device.

Note: Part 6 does not require a builder, designer, owner, operator, or enforcing agency to test any certified device to determine its compliance with minimum specifications or efficiencies adopted by the Commission.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 110.1 – MANDATORY REQUIREMENTS FOR APPLIANCES

(a) Any appliance regulated by the Appliance Efficiency Regulations, Title 20 California Code of Regulations, Section 1601 et seq., may be installed only if the appliance fully complies with Section 1608(a) of those regulations.

(b) Except for those circumstances described in Section 110.1(c), conformance with efficiency levels required to comply with Part 6 mandatory, prescriptive and performance standards shall be verified utilizing data from either:

1. The Energy Commission's database of certified appliances maintained pursuant to Title 20 California Code of Regulations Section 1606, and which is available at: www.energy.ca.gov/appliances/database/; or
2. An equivalent directory published by a federal agency; or
3. An approved trade association directory as defined in Title 20 California Code of Regulations Section 1606(h).

(c) Conformance with efficiency levels required to comply with Part 6 mandatory, prescriptive and performance standards shall be demonstrated either by default to the mandatory efficiency levels specified in Part 6 or by following procedures approved by the Commission pursuant to Section 10-109 of Title 24, Part 1, when:

1. Data to verify conformance with efficiency levels required to comply with Part 6 mandatory, prescriptive and performance standards is not available pursuant to subdivision (b); or
2. Field verification and diagnostic testing is required for compliance with Part 6 and the Energy Commission has not approved a field verification and diagnostic test protocol that is applicable to the appliance; or
3. The appliance meets the requirements of Section 110.1(a) but has been site-modified in a way that affects its performance; or
4. The U.S. Department of Energy has approved a waiver from federal test procedures, pursuant to 10 CFR Section 430.27 or Section 431.401 and that waiver fails to specify how the efficiency of the system shall be determined.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 110.2 – MANDATORY REQUIREMENTS FOR SPACE-CONDITIONING EQUIPMENT

Certification by manufacturers. Any space-conditioning equipment listed in this section may be installed only if the manufacturer has certified to the Commission that the equipment complies with all the applicable requirements of this section.

(a) **Efficiency.** Equipment shall meet the applicable efficiency requirements in Tables 110.2-A through 110.2-N, subject to the following:

1. If more than one efficiency standard is listed for any equipment in Tables 110.2-A through 110.2-N, the equipment shall meet all the applicable standards that are listed; and
2. If more than one test method is listed in Tables 110.2-A through 110.2-N, the equipment shall comply with the applicable efficiency standard when tested with each listed test method; and
3. Where equipment serves more than one function, it shall comply with the efficiency standards applicable to each function; and
4. Where a requirement is for equipment rated at its "maximum rated capacity" or "minimum rated capacity," the capacity shall be as provided for and allowed by the controls, during steady-state operation.

Exception 1 to Section 110.2(a): Water-cooled centrifugal water-chilling packages that are not designed for operation at ANSI/AHRI Standard 550/590 test conditions of 44°F leaving chilled water temperature and 85°F entering condenser water temperature with 3 gallons per minute per ton condenser water flow shall have a maximum full load kW/ton and NPLV ratings adjusted using the following equation:

Adjusted maximum full-load kW/ton rating = (full- load kW/ton from Table 110.2-D)/Kadj

Adjusted maximum NPLV rating = (IPLV from Table 110.2-D)/Kadj

Where:

Kadj = (A) × (B)

$A = 0.00000014592 \times (LIFT)^4 - 0.0000346496 \times (LIFT)^3 + 0.00314196 \times (LIFT)^2 - 0.147199 \times (LIFT) + 3.9302$

LIFT = LvgCond – LvgEvap (°F)

LvgCond = Full-load leaving condenser fluid temperature (°F)

LvgEvap = Full-load leaving evaporator fluid temperature (°F)

$B = (0.0015 \times LvgEvap) + 0.934$

The adjusted full-load and NPLV values are only applicable for centrifugal chillers meeting all of the following full-load design ranges:

• Minimum Leaving Evaporator Fluid Temperature: 36°F

• Maximum Leaving Condenser Fluid Temperature: 115°F

• LIFT ³ 20°F and £ 80°F

Centrifugal chillers designed to operate outside of these ranges are not covered by this exception.

Exception 2 to Section 110.2(a): Positive displacement (air-cooled and water-cooled) chillers with a leaving evaporator fluid temperature higher than 32°F shall show compliance with Table 110.2-D when tested or certified with water at standard rating conditions, per the referenced test procedure.

Exception 3 to Section 110.2(a): Equipment primarily serving refrigerated warehouses or commercial refrigeration.

(b) **Controls for heat pumps with supplementary electric resistance heaters.** Heat pumps with supplementary electric resistance heaters shall have controls:

1. That prevent supplementary heater operation when the heating load can be met by the heat pump alone; and
2. In which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.

Exception 1 to Section 110.2(b): The controls may allow supplementary heater operation during:

A. Defrost; and

B. Transient periods such as start-ups and following room thermostat setpoint advance, if the controls provide preferential rate control, intelligent recovery, staging, ramping or another control mechanism designed to preclude the unnecessary operation of supplementary heating.

Exception 2 to Section 110.2(b): Room air-conditioner heat pumps.

(c) **Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) shall have a setback thermostat.

1. **Setback capabilities.** All thermostats shall have a clock mechanism that allows the building occupant to program the temperature setpoints for at least four periods within 24 hours. Thermostats for heat pumps shall meet the requirements of Section 110.2(b).

Exception to Section 110.2(c): Gravity gas wall heaters, gravity floor heaters, gravity room heaters, noncentral electric heaters, fireplaces or decorative gas appliances, wood stoves, room air conditioners and room air-conditioner heat pumps.

(d) **Gas-fired and oil-fired furnace standby loss controls.** Gas-fired and oil-fired forced-air furnaces with input ratings ³ 225,000 Btu/hr shall also have an intermittent ignition or interrupted device (IID), and have either power venting or a flue damper. A vent damper is an acceptable alternative to a flue damper for furnaces where combustion air is drawn from the conditioned space. All furnaces with input ratings ³ 225,000 Btu/hr, including electric furnaces, that are not located within the conditioned space shall have jacket losses not exceeding 0.75 percent of the input rating.

(e) **Open and closed-circuit cooling towers.** All open and closed cooling tower installations shall comply with the following:

1. Be equipped with conductivity or flow-based controls that maximize cycles of concentration based on local water quality conditions. Controls shall automate system bleed and chemical feed based on conductivity, or in proportion to metered makeup volume, metered bleed volume, recirculating pump run time, or bleed time. Conductivity controllers shall be installed in accordance with manufacturer's specifications in order to maximize accuracy.
2. Documentation of maximum achievable cycles of concentration. Building owners shall document the maximum cycles of concentration based on local water supply as reported annually by the local water supplier, and using the calculator approved by the Energy Commission. The calculator is intended to determine maximum cycles based on a Langelier Saturation Index (LSI) of 2.5 or less. Building owner shall document maximum cycles of concentration on the mechanical compliance form which shall be reviewed and signed by the Professional Engineer (P.E.) of Record.
3. Be equipped with a flow meter with an analog output for flow either hardwired or available through a gateway on the makeup water line.
4. Be equipped with an overflow alarm to prevent overflow of the sump in case of makeup water valve failure. Overflow alarm shall send an audible signal or provide an alert via the energy management control system to the tower operator in case of sump overflow.
5. Be equipped with efficient drift eliminators that achieve drift reduction to 0.002 percent of the circulated water volume for counter-flow towers and 0.005 percent for cross-flow towers.

Exception to Section 110.2(e): Open and closed-circuit cooling towers with rated capacity < 150 tons.

(f) **Low leakage air-handling units**. To qualify as a low leakage air-handling unit for use for meeting the requirements for applicable low leakage air-handling unit compliance credit(s) available in the performance standards set forth in

Sections 150.1(b) and 140.1, the manufacturer shall certify to the Energy Commission that the air-handling unit meets the specifications in Reference Joint Appendix JA9.

TABLE 110.2-A AIR CONDITIONERS AND CONDENSING UNITS – MINIMUM EFFICIENCY REQUIREMENTS

Equipment Type	Size Category	Efficiency	Test Procedure[b]
Air conditioners, air cooled both split system and single package	≥ 65,000 Btu/h and < 135,000 Btu/h	11.2 EER[a] 14.8 IEER[a]	AHRI 340/360
Air conditioners, air cooled both split system and single package	≥ 135,000 Btu/h and < 240,000 Btu/h	11.0 EER[a] 14.2 IEER[a]	AHRI 340/360
Air conditioners, air cooled both split system and single package	≥ 240,000 Btu/h and < 760,000 Btu/h	10.0 EER[a] 13.2 IEER[a]	AHRI 340/360
Air conditioners, air cooled both split system and single package	≥ 760,000 Btu/h	9.7 EER[a] 12.5 IEER[a]	AHRI 340/360
Air conditioners, water cooled	≥ 65,000 Btu/h and < 135,000 Btu/h	12.1 EER[a] 13.9 IEER[a]	AHRI 340/360
Air conditioners, water cooled	≥135,000 Btu/h and < 240,000 Btu/h	12.5 EER[a] 13.9 IEER[a]	AHRI 340/360
Air conditioners, water cooled	≥240,000 Btu/h and < 760,000 Btu/h	12.4 EER[a] 13.6 IEER[a]	AHRI 340/360

CONTINUED: TABLE 110.2-A AIR CONDITIONERS AND CONDENSING UNITS – MINIMUM EFFICIENCY REQUIREMENTS

Equipment Type	Size Category	Efficiency	Test Procedure[b]
Air conditioners, water cooled	≥ 760,000 Btu/h	12.2EER[a] 13.5 IEER[a]	AHRI 340/360
Air conditioners, evaporatively cooled	≥65,000 Btu/h and < 135,000 Btu/h	12.1 EER[a] 12.3 IEER[a]	AHRI 340/360
Air conditioners, evaporatively cooled	≥ 135,000 Btu/h and < 240,000 Btu/h	12.0 EER[a] 12.2 IEER[a]	AHRI 340/360
Air conditioners, evaporatively cooled	≥240,000 Btu/h and < 760,000 Btu/h	11.9 EER[a] 12.1 IEER[a]	AHRI 340/360
Air conditioners, evaporatively cooled	≥ 760,000 Btu/h	11.7 EER[a] 11.9 IEER[a]	AHRI 340/360
Condensing units, air cooled	≥ 135,000 Btu/h	10.5 EER 11.8 IEER	AHRI 365
Condensing units, water cooled	≥ 135,000 Btu/h	13.5 EER 14.0 IEER	AHRI 365
Condensing units, evaporatively cooled	≥ 135,000 Btu/h	13.5 EER 14.0 IEER	AHRI 365

[a] Deduct 0.2 from the required EERs and IEERs for units with a heating section other than electric resistance heat.

[b] Applicable test procedure and reference year are provided under the definitions.

TABLE 110.2-B HEAT PUMPS, MINIMUM EFFICIENCY REQUIREMENTS

Equipment Type	Size Category	Rating Condition	Efficiency [a]	Test Procedure[b]
Air Cooled (Cooling Mode), both split system and single package	≥ 65,000 Btu/h and < 135,000 Btu/h		11.0 EER 14.1 IEER	AHRI 340/360
Air Cooled (Cooling Mode), both split system and single package	≥ 135,000 Btu/h and < 240,000 Btu/h		10.6 EER 13.5 IEER	AHRI 340/360
Air Cooled (Cooling Mode), both split system and single package	≥ 240,000 Btu/h		9.5 EER 12.5 IEER	AHRI 340/360
Water source (cooling mode)	≥ 65,000 Btu/h and < 135,000 Btu/h	86ºF entering water	13.0 EER	ISO-13256-1
Groundwater source (cooling mode)	< 135,000 Btu/h	59ºF entering water	18.0 EER	ISO-13256-1
Ground source (cooling mode)	< 135,000 Btu/h	77ºF entering water	14.1 EER	ISO-13256-1
Water source water-to-water (cooling mode)	< 135,000 Btu/h	86ºF entering water	10.6 EER	ISO-13256-2
Groundwater source water-to-water (cooling mode)	< 135,000 Btu/h	59ºF entering water	16.3 EER	ISO-13256-2
Ground source brine-to-water (cooling mode)	< 135,000 Btu/h	77ºF entering water	12.1 EER	ISO-13256-2
Air Cooled (Heating Mode) Split system and single package	≥ 65,000 Btu/h and < 135,000 Btu/h (cooling capacity)	47° F db/43° F wb outdoor air	3.4 COP	AHRI 340/360
Air Cooled (Heating Mode) Split system and single package	≥ 65,000 Btu/h and < 135,000 Btu/h (cooling capacity)	17° F db/15° F wb outdoor air	2.25 COP	AHRI 340/360

CONTINUED: TABLE 110.2-B HEAT PUMPS, MINIMUM EFFICIENCY REQUIREMENTS

Equipment Type	Size Category	Rating Condition	Efficiency [a]	Test Procedure[b]
Air Cooled (Heating Mode) Split system and single package	≥ 135,000 Btu/h and < 240,000 Btu/h (cooling capacity)	47° F db/43° F wb outdoor air	3.3 COP	AHRI 340/360
Air Cooled (Heating Mode) Split system and single package	≥ 240,000 Btu/h and < 760,000 Btu/h	47° F db/43° F wb outdoor air	3.2 COP	AHRI 340/360
Air Cooled (Heating Mode) Split system and single package	≥ 135,000 Btu/h (cooling capacity)	17° F db/15° F wb outdoor air	2.05 COP	AHRI 340/360
Water source (heating mode)	< 135,000 Btu/h (cooling capacity)	68ºF entering water	4.3 COP	ISO-13256-1
Water source (heating mode)	≥ 135,000 Btu/h and < 240,000 Btu/h	68ºF entering water	2.90 COP	ISO-13256-1
Groundwater source (heating mode)	< 135,000 Btu/h (cooling capacity)	50ºF entering water	3.7 COP	ISO-13256-1
Ground source (heating mode)	< 135,000 Btu/h (cooling capacity)	32ºF entering water	3.2 COP	ISO-13256-1
Water source water-to-water (heating mode)	< 135,000 Btu/h (cooling capacity)	68ºF entering water	3.7 COP	ISO-13256-2
Groundwater source water-to-water (heating mode)	< 135,000 Btu/h (cooling capacity)	50ºF entering water	3.1 COP	ISO-13256-2
Ground source brine-to-water (heating mode)	< 135,000 Btu/h (cooling capacity)	32ºF entering water	2.5 COP	ISO-13256-2

[a] Deduct 0.2 from the required EERs and IEERs for units with a heating section other than electric resistance heat.
[b] Applicable test procedure and reference year are provided under the definitions.

TABLE 110.2-C AIR-COOLED GAS-ENGINE HEAT PUMPS

Equipment Type	Size Category	Subcategory or Rating Condition	Efficiency	Test Procedure[a]
Air-Cooled Gas-Engine Heat Pump (Cooling Mode)	All Capacities	95° F db Outdoor Air	0.60 COP	ANSI Z21.40.4A
Air-Cooled Gas-Engine Heat Pump (Heating Mode)	All Capacities	47° F db/43° F wb Outdoor Air	0.72 COP	ANSI Z21.40.4A

[a] Applicable test procedure and reference year are provided under the definitions.

TABLE 110.2-D WATER CHILLING PACKAGES – MINIMUM EFFICIENCY REQUIREMENTS [a,b]

Equipment Type	Size Category	Path A Efficiency [a,b]	Path B Efficiency [a,b]	Test Procedure [c]
Air Cooled, With Condenser Electrically Operated	< 150 Tons	≥ 10.100 EER ≥ 13.700 IPLV	≥ 9.700 EER ≥15.800 IPLV	AHRI 550/590
Air Cooled, With Condenser Electrically Operated	≥ 150 Tons	≥ 10.100 EER ≥ 14.000 IPLV	≥ 9.700 EER ≥16.100 IPLV	AHRI 550/590
Air Cooled, Without Condenser Electrically Operated	All Capacities	Air-cooled chillers without condensers must be rated with matching condensers and comply with the air-cooled chiller efficiency requirements.	Air-cooled chillers without condensers must be rated with matching condensers and comply with the air-cooled chiller efficiency requirements.	AHRI 550/590
Water Cooled, Electrically Operated, Reciprocating	All Capacities	Reciprocating units must comply with the water-cooled positive displacement efficiency requirements.	Reciprocating units must comply with the water-cooled positive displacement efficiency requirements.	AHRI 550/590
Water Cooled, Electrically Operated Positive Displacement	< 75 Tons	≤0.750kW/ton ≤ 0.600 IPLV	≤ 0.780 kW/ton ≤ 0.500 IPLV	AHRI 550/590
Water Cooled, Electrically Operated Positive Displacement	≥ 75 tons and < 150 tons	≤ 0.720 kW/ton ≤ 0.560 IPLV	≤ 0.750 kW/ton ≤ 0.490 IPLV	AHRI 550/590
Water Cooled, Electrically Operated Positive Displacement	≥ 150 tons and < 300 tons	≤ 0.660 kW/ton ≤ 0.540 IPLV	≤ 0.680 kW/ton ≤ 0.440 IPLV	AHRI 550/590
Water Cooled, Electrically Operated Positive Displacement,	≥ 300 Tons and < 600 tons	≤ 0.610kW/ton ≤ 0.520 IPLV	≤ 0.625 kW/ton ≤ 0.410 IPLV	AHRI 550/590
Water Cooled, Electrically Operated Positive Displacement	≥ 600 tons	≤ 0.560 kW/ton ≤ 0.500 IPLV	≤ 0.585 kW/ton ≤ 0.380 IPLV	AHRI 550/590

CONTINUED: TABLE 110.2-D WATER CHILLING PACKAGES – MINIMUM EFFICIENCY REQUIREMENTS [a,b]

Equipment Type	Size Category	Path A Efficiency [a,b]	Path B Efficiency [a,b]	Test Procedure [c]
Water Cooled, Electrically Operated, Centrifugal	< 150 Tons	≤ 0.610 kW/ton ≤ 0.550IPLV	≤ 0.695 kW/ton ≤ 0.440 IPLV	AHRI 550/590
Water Cooled, Electrically Operated, Centrifugal	≥ 150 tons and < 300 tons	≤ 0.610 kW/ton ≤ 0.550 IPLV	≤ 0.635 kW/ton ≤ 0.400 IPLV	AHRI 550/590
Water Cooled, Electrically Operated, Centrifugal	≥ 300 tons and < 400 tons	≤ 0.560 kW/ton ≤ 0.520 IPLV	≤ 0.595 kW/ton ≤ 0.390 IPLV	AHRI 550/590
Water Cooled, Electrically Operated, Centrifugal	≥ 400 tons and < 600 tons	≤ 0.560 kW/ton ≤ 0.500 IPLV	≤ 0.585 kW/ton ≤ 0.380 IPLV	AHRI 550/590
Water Cooled, Electrically Operated, Centrifugal	≥ 600 tons	≤ 0.560 kW/ton ≤ 0.500 IPLV	≤ 0.585 kW/ton ≤ 0.380 IPLV	AHRI 550/590
Air Cooled Absorption, Single Effect	All Capacities	≥0.600 COP	N.A. [d]	AHRI 560
Water Cooled Absorption, Single Effect	All Capacities	≥ 0.700 COP	N.A. [d]	AHRI 560
Absorption Double Effect, Indirect-Fired	All Capacities	≥ 1.000 COP ≥ 1.050 IPLV	N.A. [d]	AHRI 560
Absorption Double Effect, Direct-Fired	All Capacities	≥ 1.000 COP ≥1.000 IPLV	N.A. [d]	AHRI 560
Water Cooled Gas Engine Driven Chiller	All Capacities	≥ 1.2 COP ≥ 2.0 IPLV	N.A. [d]	ANSI Z21.40.4A

[a] No requirements for:

- Centrifugal chillers with design leaving evaporator temperature < 36°F; or
- Positive displacement chillers with design leaving fluid temperature ≤ 32°F; or
- Absorption chillers with design leaving fluid temperature < 40°F.

[b] Must meet the minimum requirements of Path A or Path B. However, both the full load (COP) and IPLV must be met to fulfill the requirements of the applicable Path.

[c] See Section 100.1 for definitions.

[d] N.A. means not applicable.

TABLE 110.2-E PACKAGED TERMINAL AIR CONDITIONERS AND PACKAGED TERMINAL HEAT PUMPS – MINIMUM EFFICIENCY REQUIREMENTS

Equipment Type	Size Category (Input)	Subcategory or Rating Condition	Efficiency	Test Procedure [c]
PTAC (Cooling mode) Newly constructed or newly conditioned buildings or additions	All Capacities	95°F db Outdoor Air	14.0 - (0.300 × Cap/1000) [a] EER	AHRI 310/380
PTAC (Cooling mode) Replacements [b]	All Capacities	95°F db Outdoor Air	10.9 - (0.213 × Cap/1000) [a] EER	AHRI 310/380
PTHP (Cooling mode) Newly constructed or newly conditioned buildings or additions	All Capacities	95°F db Outdoor Air	14.0 - (0.300 × Cap/1000) [a] EER	AHRI 310/380
PTHP (Cooling mode) Replacements [b]	All Capacities	95°F db Outdoor Air	10.8 - (0.213 × Cap/1000) [a] EER	AHRI 310/380
PTHP (Heating Mode) Newly constructed or newly conditioned buildings or additions	All Capacities	-	3.7 - (0.052 × Cap/1000) [a] COP	AHRI 310/380
PTHP (Heating mode) Replacements [b]	All Capacities	-	2.9 - (0.026 × Cap/1000) [a] COP	AHRI 310/380
SPVAC (Cooling Mode)	<65,000 Btu/h	95°F db / 75°F wb Outdoor Air	11.0 EER	AHRI 390
SPVAC (Cooling Mode)	≥65,000 Btu/h and <135,000 Btu/h	95°F db / 75°F wb Outdoor Air	10.0 EER	AHRI 390
SPVAC (Cooling Mode)	≥135,000 Btu/h and <240,000 Btu/h	95°F db / 75°F wb Outdoor Air	10.0 EER	AHRI 390
SPVHP (Cooling Mode)	<65,000 Btu/h	95°F db / 75°F wb Outdoor Air	11.0 EER	AHRI 390
SPVHP (Cooling Mode)	≥65,000 Btu/h and <135,000 Btu/h	95°F db / 75°F wb Outdoor Air	10.0 EER	AHRI 390
SPVHP (Cooling Mode)	≥135,000 Btu/h and <240,000 Btu/h	95°F db / 75°F wb Outdoor Air	10.0 EER	AHRI 390
SPVHP (Heating Mode)	<65,000 Btu/h	47°F db / 43°F wb Outdoor Air	3.3 COP	AHRI 390
SPVHP (Heating Mode)	≥65,000 Btu/h and <135,000 Btu/h	47°F db / 43°F wb Outdoor Air	3.0 COP	AHRI 390
SPVHP (Heating Mode)	≥135,000 Btu/h and <240,000 Btu/h	47°F db / 43°F wb Outdoor Air	3.0 COP	AHRI 390

a Cap means the rated cooling capacity of the product in Btu/h. If the unit's capacity is less than 7000 Btu/h, use 7000 Btu/h in the calculation. If the unit's capacity is greater than 15,000 Btu/h, use 15,000 Btu/h in the calculation.

b Replacement units must be factory labeled as follows: "MANUFACTURED FOR REPLACEMENT APPLICATIONS ONLY; NOT TO BE INSTALLED IN NEWLY CONSTRUCTED BUILDINGS." Replacement efficiencies apply only to units with existing sleeves less than 16 inches high or less than 42 inch wide and having a cross-sectional area less than 670 square inches.

c Applicable test procedure and reference year are provided under the definitions.

TABLE 110.2-F PERFORMANCE REQUIREMENTS FOR HEAT REJECTION EQUIPMENT

Equipment Type	Total System Heat Rejection Capacity at Rated Conditions	Subcategory or Rating Condition	Performance Required ,[a,b,c,d]	Test Procedure [e]
Propeller or axial fan Open-circuit cooling towers	All	95°F entering water 85°F leaving water 75°F entering air wb	≥ 42.1 gpm/hp	CTI ATC-105 and CTI STD-201 RS
Centrifugal fan Open-circuit cooling towers	All	95°F entering water 85°F leaving water 75°F entering air wb	≥ 20.0 gpm/hp	CTI ATC-105 and CTI STD-201 RS
Propeller or axial fan closed-circuit cooling towers	All	102°F entering water 90°F leaving water 75°F entering air wb	≥ 16.1 gpm/hp	CTI ATC-105S and CTI STD-201 RS
Centrifugal fan closed-circuit cooling towers	All	102°F entering water 90°F leaving water 75°F entering air wb	≥ 7.0 gpm/hp	CTI ATC-105S and CTI STD-201 RS
Propeller or axial fan evaporative condensers	All	R-448A test fluid 165°F entering gas temp 105°F condensing temp 75°F entering air wb	≥ 157,000 Btu/h • hp	CTI ATC-106
Propeller or axial fan evaporative condensers	All	Ammonia test fluid 140°F entering gas temp 96.3°F condensing temp 75°F entering air wb	≥ 134,000 Btu/h • hp	CTI ATC-106
Centrifugal fan evaporative condensers	All	R-448A test fluid 165°F entering gas temp 105°F condensing temp 75°F entering air wb	≥ 135,000 Btu/h • hp	CTI ATC-106

CONTINUED: TABLE 110.2-F PERFORMANCE REQUIREMENTS FOR HEAT REJECTION EQUIPMENT

Equipment Type	Total System Heat Rejection Capacity at Rated Conditions	Subcategory or Rating Condition	Performance Required ,[a,b,c,d]	Test Procedure [e]
Centrifugal fan evaporative condensers	All	Ammonia test fluid 140°F entering gas temp 96.3°F condensing temp 75°F entering air wb	≥ 110,000 Btu/h • hp	CTI ATC-106
Air cooled condensers	All	125°F condensing temperature 190°F entering gas temperature 15°F subcooling 95°F entering drybulb	≥ 176,000 Btu/h · hp	AHRI 460
Propeller or axial fan dry coolers (air-cooled fluid coolers)	All	115°F entering water 105°F leaving water 95°F entering air db	≥4.5 gpm/hp	CTI ATC-105DS

[a] For purposes of this table, open-circuit cooling tower performance is defined as the water flow rating of the tower at the given rated conditions divided by the fan motor nameplate power.

[b] For purposes of this table, closed-circuit cooling tower performance is defined as the process water flow rating of the tower at the given rated conditions divided by the sum of the fan motor nameplate rated power and the integral spray pump motor nameplate power.

[c] For purposes of this table dry cooler performance is defined as the process water flow rating of the unit at the given thermal rating condition divided by the total fan motor nameplate power of the unit and air-cooled condenser performance is defined as the heat rejected from the refrigerant divided by the fan motor nameplate power of the unit.

[d] Open cooling towers shall be tested using the test procedures in CTI ATC-105. Performance of factory assembled open cooling towers shall be either certified as base models as specified in CTI STD-201 or verified by testing in the field by a CTI approved testing agency. Open factory assembled cooling towers with custom options added to a CTI certified base model for the purpose of safe maintenance or to reduce environmental or noise impact shall be rated at 90 percent of the CTI certified performance of the associated base model or at the manufacturer's stated performance, whichever is less. Base models of open factory assembled cooling towers are open cooling towers configured in exact accordance with the Data of Record submitted to CTI as specified by CTI STD-201. There are no certification requirements for field erected cooling towers.

[e] Applicable test procedure and reference year are provided under the definitions. For refrigerated warehouses or commercial refrigeration applications, condensers shall comply with requirements specified by Section 120.6(a) or Section 120.6(b).

TABLE 110.2-G Electrically Operated Variable Refrigerant Flow (VRF) Air Conditioners
Minimum Efficiency Requirements

Equipment Type	Size Category	Heating Section Type	Sub-Category or Rating Condition	Minimum Efficiency	Test Procedure[a]
VRF Air Conditioners, Air Cooled	<65,000 Btu/h	All	VRF Multi-split System	13.0 SEER	AHRI 1230
VRF Air Conditioners, Air Cooled	≥65,000 Btu/h and <135,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System	11.2 EER 15.5 IEER [b]	AHRI 1230
VRF Air Conditioners, Air Cooled	≥135,000 Btu/h and <240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System	11.0 EER 14.9 IEER [b]	AHRI 1230
VRF Air Conditioners, Air Cooled	≥240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System	10.0 EER 13.9 IEER [b]	AHRI 1230

[a] Applicable test procedure and reference year are provided under the definitions.

[b] IEERs are only applicable to equipment with capacity control as specified by AHRI 1230 test procedures.

TABLE 110.2-H Electrically Operated Variable Refrigerant Flow Air-to-Air and Applied Heat Pumps - Minimum Efficiency Requirements

Equipment Type	Size Category	Heating Section Type	Sub-Category or Rating Condition	Minimum Efficiency	Test Procedure [b]
VRF Air Cooled, (cooling mode)	<65,000 Btu/h	All	VRF Multi-split System	13.0 SEER	AHRI 1230
VRF Air Cooled, (cooling mode)	≥65,000 Btu/h and <135,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System [a]	11.0 EER 14.6 IEER [c]	AHRI 1230
VRF Air Cooled, (cooling mode)	≥135,000 Btu/h and <240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System [a]	10.6 EER 13.9 IEER [c]	AHRI 1230
VRF Air Cooled, (cooling mode)	≥240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System [a]	9.5 EER 12.7 IEER [c]	AHRI 1230
VRF Water source (cooling mode)	<65,000 Btu/h	All	VRF Multi-split systems [a] 86ºF entering water	12.0 EER 16.0 IEER [c]	AHRI 1230
VRF Water source (cooling mode)	≥65,000 Btu/h and <135,000 Btu/h	All	VRF Multi-split System [a] 86ºF entering water	12.0 EER 16.0 IEER [c]	AHRI 1230
VRF Water source (cooling mode)	≥135,000 Btu/h and < 240,000	All	VRF Multi-split System [a] 86ºF entering water	10.0 EER 14.0 IEER [c]	AHRI 1230
VRF Water source (cooling mode)	≥ 240,000 Btu/h	All	VRF Multi-split System[a] 86ºF entering water	10.0 EER 12.0 IEER	AHRI 1230

CONTINUED: TABLE 110.2-H Electrically Operated Variable Refrigerant Flow Air-to-Air and Applied Heat Pumps - Minimum Efficiency Requirements

Equipment Type	Size Category	Heating Section Type	Sub-Category or Rating Condition	Minimum Efficiency	Test Procedure [b]
VRF Groundwater source (cooling mode)	<135,000 Btu/h	All	VRF Multi-split System [a] 59ºF entering water	16.2 EER	AHRI 1230
VRF Groundwater source (cooling mode)	≥135,000 Btu/h	All	VRF Multi-split System [a] 59ºF entering water	13.8 EER	AHRI 1230
VRF Ground source (cooling mode)	<135,000 Btu/h	All	VRF Multi-split System [a] 77ºF entering water	13.4 EER	AHRI 1230
VRF Ground source (cooling mode)	≥135,000 Btu/h	All	VRF Multi-split System [a] 77ºF entering water	11.0 EER	AHRI 1230
VRF Air Cooled (heating mode)	<65,000 Btu/h (cooling capacity)	---	VRF Multi-split System	7.7 HSPF	AHRI 1230
VRF Air Cooled (heating mode)	≥65,000 Btu/h and <135,000 Btu/h (cooling capacity)	---	VRF Multi-split system 47ºF db/ 43ºF wb outdoor air	3.3 COP	AHRI 1230
VRF Air Cooled (heating mode)	≥65,000 Btu/h and <135,000 Btu/h (cooling capacity)	---	VRF Multi-split system 17ºF db/15ºF wb outdoor air	2.25 COP	AHRI 1230
VRF Air Cooled (heating mode)	≥135,000 Btu/h (cooling capacity)	---	VRF Multi-split system 47ºF db/ 43ºF wb outdoor air	3.2 COP	AHRI 1230

CONTINUED: TABLE 110.2-H Electrically Operated Variable Refrigerant Flow Air-to-Air and Applied Heat Pumps - Minimum Efficiency Requirements

Equipment Type	Size Category	Heating Section Type	Sub-Category or Rating Condition	Minimum Efficiency	Test Procedure [b]
VRF Air Cooled (heating mode)	≥135,000 Btu/h (cooling capacity)	---	VRF Multi-split system 17ºF db/15ºF wb outdoor air	2.05 COP	AHRI 1230
VRF Water source (heating mode)	< 65,000 Btu/h (cooling capacity)	---	VRF Multi-split System 68ºF entering water	4.3 COP	AHRI 1230
VRF Water source (heating mode)	≥65,000 Btu/h and <135,000 Btu/h (cooling capacity)	---	VRF Multi-split System 68ºF entering water	4.3 COP	AHRI 1230
VRF Water source (heating mode)	≥135,000 Btu/h and < 240,000 Btu/h (cooling capacity)	---	VRF Multi-split System 68ºF entering water	4.0 COP	AHRI 1230
VRF Water source (heating mode)	≥ 240,000 Btu/h (cooling capacity)	---	VRF Multi-split System 68ºF entering water	3.9 COP	AHRI 1230
VRF Groundwater source (heating mode)	<135,000 Btu/h (cooling capacity)	---	VRF Multi-split System 50ºF entering water	3.6 COP	AHRI 1230
VRF Groundwater source (heating mode)	≥135,000 Btu/h (cooling capacity)	---	VRF Multi-split System 50ºF entering water	3.3 COP	AHRI 1230
VRF Ground source (heating mode)	<135,000 Btu/h (cooling capacity)	---	VRF Multi-split System 32ºF entering water	3.1 COP	AHRI 1230
VRF Ground source (heating mode)	≥135,000 Btu/h (cooling capacity)	---	VRF Multi-split System 32ºF entering water	2.8 COP	AHRI 1230

Footnote for Table 110.2H

[a] Deduct 0.2 from the required EERs and IEERs for Variable Refrigerant Flow (VRF) Multi-split system units with a heating recovery section.

[b] Applicable test procedure and reference year are provided under the definitions.

[c] IEERs are only applicable to equipment with capacity control as specified by AHRI 1230 test procedures.

TABLE 110.2-I Warm-Air Furnaces and Combination Warm-Air Furnaces/Air-Conditioning Units, Warm-Air Duct Furnaces, and Unit Heaters

Equipment Type	Size Category (Input)	Subcategory or Rating Condition[b]	Minimum Efficiency[d,e]	Test Procedure[a]
Warm-Air Furnace, Gas-Fired	≥ 225,000 Btu/h	Maximum Capacity[b]	81% E_t	Section 2.39, Thermal Efficiency, ANSI Z21.47
Warm-Air Furnace, oil-Fired	≥ 225,000 Btu/h	Maximum Capacity[b]	82% E_t	Section 42, Combustion, UL 727
Warm-Air Duct Furnaces, Gas-Fired	All Capacities	Maximum Capacity[b]	80% E_c	Section 2.10, Efficiency, ANSI Z83.8
Warm-Air Unit Heaters, Gas-Fired	All Capacities	Maximum Capacity[b]	80% E_c	Section 2.10, Efficiency, ANSI Z83.8
Warm-Air Unit Heaters, Oil-Fired	All Capacities	Maximum Capacity[b]	81% E_c	Section 40, Combustion, UL 731

[a] Applicable test procedure and reference year are provided under the definitions.

[b] Compliance of multiple firing rate units shall be at maximum firing rate.

[c] Combustion units not covered by the U.S. Department of Energy Code of Federal Regulations 10 CFR 430 (3-phase power or cooling capacity greater than or equal to 19 kW) may comply with either rating.

[d] E_t= thermal efficiency. Units must also include an interrupted or intermittent ignition device (IID), have jacket losses not exceeding 0.75% of the input rating, and have either power venting or a flue damper. A vent damper is an acceptable alternative to a flue damper for those furnaces where combustion air is drawn from the conditioned space.

[e] E_c= combustion efficiency (100% less flue losses). See test procedure for detailed discussion.

[f] As of August 8, 2008, according to the Energy Policy Act of 2005, units must also include interrupted or intermittent ignition device (IID) and have either power venting or an automatic flue damper.

TABLE 110.2-J Gas- and Oil-Fired Boilers, Minimum Efficiency Requirements

Equipment Type	Sub Category	Size Category (Input)	Minimum Efficiency [b,c] Before 1/10/2023	Minimum Efficiency [b,c] On or After 1/10/2023	Test Procedure [a]
Boiler, hot water	Gas-Fired	< 300,000 Btu/h	82% AFUE	82% AFUE	DOE 10 CFR Part 430
Boiler, hot water	Gas-Fired	≥ 300,000 Btu/h and ≤ 2,500,000 Btu/h [d]	80% E_t	84% E_t	DOE 10 CFR Part 431
Boiler, hot water	Gas-Fired	> 2,500,000 Btu/h and ≤10,000,000 Btu/h	82% E_c	85% E_c	DOE 10 CFR Part 431
Boiler, hot water	Gas-Fired	>10,000,000 Btu/h	82% E_c	82% E_c	DOE 10 CFR Part 431
Boiler, hot water	Oil-Fired [e]	< 300,000 Btu/h	84% AFUE	84% AFUE	DOE 10 CFR Part 430
Boiler, hot water	Oil-Fired [e]	≥ 300,000 Btu/h and ≤ 2,500,000 Btu/h [d]	82% E_t	87% E_t	DOE 10 CFR Part 431
Boiler, hot water	Oil-Fired [e]	> 2,500,000 Btu/h and ≤10,000,000 Btu/h	84% E_c	88% E_c	DOE 10 CFR Part 431
Boiler, hot water	Oil-Fired [e]	>10,000,000 Btu/h	84% E_c	84% E_c	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired	< 300,000 Btu/h	80% AFUE	80% AFUE	DOE 10 CFR Part 430
Boiler, steam	Gas-Fired	≥ 300,000 Btu/h and ≤2,500,000 Btu/h		81% E_t	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired	>2,500,000 Btu/h and ≤10,000,000 Btu/h		82% E_t	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired	>10,000,000 Btu/h		79% E_t	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired all, except natural draft [f]	≥ 300,000 Btu/h and ≤ 2,500,000 Btu/h [d]	79% E_t	81% E_t	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired all, except natural draft [f]	> 2,500,000 Btu/h and ≤10,000,000 Btu/h	79% E_t	82% E_t	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired all, except natural draft [f]	>10,000,000 Btu/h	79% E_t	79% E_t	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired, natural draft [f]	≥ 300,000 Btu/h and ≤ 2,500,000 Btu/h [d]	77% E_t	81% E_t	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired, natural draft [f]	> 2,500,000 Btu/h and ≤10,000,000 Btu/h	77% E_t	82% E_t	DOE 10 CFR Part 431
Boiler, steam	Gas-Fired, natural draft [f]	>10,000,000 Btu/h	77% E_t	79% E_t	DOE 10 CFR Part 431
Boiler, steam	Oil-Fired [e]	< 300,000 Btu/h	82% AFUE	82% AFUE	DOE 10 CFR Part 430
Boiler, steam	Oil-Fired [e]	≥ 300,000 Btu/h and ≤ 2,500,000 Btu/h [d]	81% E_t	84% E_t	DOE 10 CFR Part 431
Boiler, steam	Oil-Fired [e]	> 2,500,000 Btu/h and ≤10,000,000 Btu/h	81% E_t	85% E_t	DOE 10 CFR Part 431
Boiler, steam	Oil-Fired [e]	≥ 10,000,000 Btu/h	81% E_t	81% E_t	DOE 10 CFR Part 431

Footnote for Table -110-2J:

[a] Applicable test procedure and reference year are provided under the definitions.

[b] Ec = combustion efficiency (100% less flue losses).See test procedure for detailed information.

[c] Et= thermal efficiency. See test procedure for detailed information.

[d] Maximum capacity - maximum rating per the certified unit capacity.

[e] Included oil-fired (residual).

[f] Federal efficiency standards do not distinguish between natural draft gas-fired steam boilers and other gas-fired steam boilers on or after January 10, 2023.

TABLE 110.2-K DX-DOAS Units, Single-Package and Remote Condenser – Minimum Efficiency Requirements

Equipment Type	Energy Recovery	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure[a]
Air cooled (dehumidification mode)	Without energy recovery		4.0 ISMRE	AHRI 920
Air source heat pumps (dehumidification mode)	Without energy recovery		4.0 ISMRE	AHRI 920
Water cooled (dehumidification mode)	Without energy recovery	Cooling Tower Condenser Water	4.9 ISMRE	AHRI 920
Water cooled (dehumidification mode)	Without energy recovery	Chilled Water	6.0 ISMRE	AHRI 920
Water source heat pump (dehumidification mode)	Without energy recovery	Ground source, closed loop	4.8 ISMRE	AHRI 920
Water source heat pump (dehumidification mode)	Without energy recovery	Ground-water source	5.0 ISMRE	AHRI 920
Water source heat pump (dehumidification mode)	Without energy recovery	Water source	4.0 ISMRE	AHRI 920
Air source heat pumps (heating mode)	Without energy recovery		2.7 ISCOP	AHRI 920
Water source heat pump (heating mode)	Without energy recovery	Ground source, closed loop	2.0 ISCOP	AHRI 920
Water source heat pump (heating mode)	Without energy recovery	Ground-water source	3.2 ISCOP	AHRI 920
Water source heat pump (heating mode)	Without energy recovery	Water source	3.5 ISCOP	AHRI 920
Air cooled (dehumidification mode)	With energy recovery		5.2 ISMRE	AHRI 920
Air source heat pumps (dehumidification mode)	With energy recovery		5.2 ISMRE	AHRI 920

CONTINUED: *TABLE 110.2-K DX-DOAS Units, Single-Package and Remote Condenser – Minimum Efficiency Requirements*

Equipment Type	**Energy Recovery**	**Subcategory or Rating Condition**	**Minimum Efficiency**	**Test Procedure[a]**
Water cooled (dehumidification mode)	With energy recovery	Cooling tower condenser water	5.3 ISMRE	AHRI 920
Water cooled (dehumidification mode)	With energy recovery	Chilled water	6.6 ISMRE	AHRI 920
Water source heat pump (dehumidification mode)	With energy recovery	Ground source, closed loop	5.2 ISMRE	AHRI 920
Water source heat pump (dehumidification mode)	With energy recovery	Ground-water source	5.8 ISMRE	AHRI 920
Water source heat pump (dehumidification mode)	With energy recovery	Water source	4.8 ISMRE	AHRI 920
Air source heat pumps (heating mode)	With energy recovery		3.3 ISCOP	AHRI 920
Water source heat pump (heating mode)	With energy recovery	Ground source, closed loop	3.8 ISCOP	AHRI 920
Water source heat pump (heating mode)	With energy recovery	Ground-water source	4.0 ISCOP	AHRI 920
Water source heat pump (heating mode)	With energy recovery	Water source	4.8 ISCOP	AHRI 920

Footnote to TABLE 110.2-K:

[a] Applicable test procedure and reference year are provided under the definitions.

TABLE 110.2-L Floor-Mounted Air Conditioners and Condensing Units Serving Computer Rooms – Minimum Efficiency Requirements

Equipment Type	Standard Model	Net Sensible Cooling Capacity	Minimum Net Sensible COP	Rating Conditions Return air (dry bulb/dew point)	Test Procedure[a]
Air Cooled	Downflow	< 80,000 Btu/h	2.70	85°F / 52°F (Class 2)	AHRI 1360
Air Cooled	Downflow	≥ 80,000 Btu/h and < 295,000 Btu/h	2.58	85°F / 52°F (Class 2)	AHRI 1360
Air Cooled	Downflow	≥ 295,000 Btu/h	2.36	85°F / 52°F (Class 2)	AHRI 1360
Air Cooled	Upflow - ducted	< 80,000 Btu/h	2.67	85°F / 52°F (Class 2)	AHRI 1360
Air Cooled	Upflow - ducted	≥ 80,000 Btu/h and < 295,000 Btu/h	2.55	85°F / 52°F (Class 2)	AHRI 1360
Air Cooled	Upflow - ducted	≥ 295,000 Btu/h	2.33	85°F / 52°F (Class 2)	AHRI 1360
Air Cooled	Upflow - nonducted	< 65,000 Btu/h	2.16	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled	Upflow - nonducted	≥ 65,000 Btu/h and < 240,000 Btu/h	2.04	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled	Upflow - nonducted	≥ 240,000 Btu/h	1.89	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled	Horizontal	< 65,000 Btu/h	2.65	95°F / 52°F (Class 3)	AHRI 1360
Air Cooled	Horizontal	≥ 65,000 Btu/h and < 240,000 Btu/h	2.55	95°F / 52°F (Class 3)	AHRI 1360
Air Cooled	Horizontal	≥ 240,000 Btu/h	2.47	95°F / 52°F (Class 3)	AHRI 1360
Air cooled with fluid economizer	Downflow	< 80,000 Btu/h	2.70	85°F / 52°F (Class 2)	AHRI 1360
Air cooled with fluid economizer	Downflow	≥ 80,000 Btu/h and < 295,000 Btu/h	2.58	85°F / 52°F (Class 2)	AHRI 1360
Air cooled with fluid economizer	Downflow	≥ 295,000 Btu/h	2.36	85°F / 52°F (Class 2)	AHRI 1360
Air cooled with fluid economizer	Upflow - ducted	< 80,000 Btu/h	2.67	85°F / 52°F (Class 2)	AHRI 1360
Air cooled with fluid economizer	Upflow - ducted	≥ 80,000 Btu/h and < 295,000 Btu/h	2.55	85°F / 52°F (Class 2)	AHRI 1360
Air cooled with fluid economizer	Upflow - ducted	≥ 295,000 Btu/h	2.33	85°F / 52°F (Class 2)	AHRI 1360
Air cooled with fluid economizer	Upflow - nonducted	< 65,000 Btu/h	2.09	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer	Upflow - nonducted	≥ 65,000 Btu/h and < 240,000 Btu/h	1.99	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer	Upflow - nonducted	≥ 240,000 Btu/h	1.81	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer	Horizontal	< 65,000 Btu/h	2.65	95°F / 52°F (Class 3)	AHRI 1360

Air cooled with fluid economizer	Horizontal	≥ 65,000 Btu/h and < 240,000 Btu/h	2.55	95°F / 52°F (Class 3)	AHRI 1360
Air cooled with fluid economizer	Horizontal	≥ 240,000 Btu/h	2.47	95°F / 52°F (Class 3)	AHRI 1360
Water cooled	Downflow	< 80,000 Btu/h	2.82	85°F / 52°F (Class 2)	AHRI 1360
Water cooled	Downflow	≥ 80,000 Btu/h and < 295,000 Btu/h	2.73	85°F / 52°F (Class 2)	AHRI 1360
Water cooled	Downflow	≥ 295,000 Btu/h	2.67	85°F / 52°F (Class 2)	AHRI 1360
Water cooled	Upflow - ducted	< 80,000 Btu/h	2.79	85°F / 52°F (Class 2)	AHRI 1360
Water cooled	Upflow - ducted	≥ 80,000 Btu/h and < 295,000 Btu/h	2.70	85°F / 52°F (Class 2)	AHRI 1360
Water cooled	Upflow - ducted	≥ 295,000 Btu/h	2.64	85°F / 52°F (Class 2)	AHRI 1360
Water cooled	Upflow - nonducted	< 65,000 Btu/h	2.43	75°F / 52°F (Class 1)	AHRI 1360
Water cooled	Upflow - nonducted	≥ 65,000 Btu/h and < 240,000 Btu/h	2.32	75°F / 52°F (Class 1)	AHRI 1360
Water cooled	Upflow - nonducted	≥ 240,000 Btu/h	2.20	75°F / 52°F (Class 1)	AHRI 1360
Water cooled	Horizontal	< 65,000 Btu/h	2.79	95°F / 52°F (Class 3)	AHRI 1360
Water cooled	Horizontal	≥ 65,000 Btu/h and < 240,000 Btu/h	2.68	95°F / 52°F (Class 3)	AHRI 1360
Water cooled	Horizontal	≥ 240,000 Btu/h	2.60	95°F / 52°F (Class 3)	AHRI 1360

Water cooled with fluid economizer	Downflow	< 80,000 Btu/h	2.77	85°F / 52°F (Class 2)	AHRI 1360
Water cooled with fluid economizer	Downflow	≥ 80,000 Btu/h and < 295,000 Btu/h	2.68	85°F / 52°F (Class 2)	AHRI 1360
Water cooled with fluid economizer	Downflow	≥ 295,000 Btu/h	2.61	85°F / 52°F (Class 2)	AHRI 1360
Water cooled with fluid economizer	Upflow - ducted	< 80,000 Btu/h	2.74	85°F / 52°F (Class 2)	AHRI 1360
Water cooled with fluid economizer	Upflow - ducted	≥ 80,000 Btu/h and < 295,000 Btu/h	2.65	85°F / 52°F (Class 2)	AHRI 1360
Water cooled with fluid economizer	Upflow - ducted	≥ 295,000 Btu/h	2.58	85°F / 52°F (Class 2)	AHRI 1360
Water cooled with fluid economizer	Upflow - nonducted	< 65,000 Btu/h	2.35	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Upflow - nonducted	≥ 65,000 Btu/h and < 240,000 Btu/h	2.24	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Upflow - nonducted	≥ 240,000 Btu/h	2.12	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Horizontal	< 65,000 Btu/h	2.71	95°F / 52°F (Class 3)	AHRI 1360
Water cooled with fluid economizer	Horizontal	≥ 65,000 Btu/h and < 240,000 Btu/h	2.60	95°F / 52°F (Class 3)	AHRI 1360
Water cooled with fluid economizer	Horizontal	≥ 240,000 Btu/h	2.54	95°F / 52°F (Class 3)	AHRI 1360
Glycol cooled	Downflow	< 80,000 Btu/h	2.56	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled	Downflow	≥ 80,000 Btu/h and < 295,000 Btu/h	2.24	85°F / 52°F (Class 2)	AHRI 1360

Glycol cooled	Downflow	≥ 295,000 Btu/h	2.21	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled	Upflow - ducted	< 80,000 Btu/h	2.53	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled	Upflow - ducted	≥ 80,000 Btu/h and < 295,000 Btu/h	2.21	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled	Upflow - ducted	≥ 295,000 Btu/h	2.18	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled	Upflow - nonducted	< 65,000 Btu/h	2.08	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled	Upflow - nonducted	≥ 65,000 Btu/h and < 240,000 Btu/h	1.90	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled	Upflow - nonducted	≥ 240,000 Btu/h	1.81	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Horizontal	< 65,000 Btu/h	2.48	95°F / 52°F (Class 3)	AHRI 1360
Glycol cooled with fluid economizer	Horizontal	≥ 65,000 Btu/h and < 240,000 Btu/h	2.18	95°F / 52°F (Class 3)	AHRI 1360
Glycol cooled with fluid economizer	Horizontal	≥ 240,000 Btu/h	2.18	95°F / 52°F (Class 3)	AHRI 1360
Glycol cooled with fluid economizer	Downflow	< 80,000 Btu/h	2.51	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled with fluid economizer	Downflow	≥ 80,000 Btu/h and < 295,000 Btu/h	2.19	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled with fluid economizer	Downflow	≥ 295,000 Btu/h	2.15	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled with fluid economizer	Upflow - ducted	< 80,000 Btu/h	2.48	85°F / 52°F (Class 2)	AHRI 1360

Glycol cooled with fluid economizer	Upflow - ducted	≥ 80,000 Btu/h and < 295,000 Btu/h	2.16	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled with fluid economizer	Upflow - ducted	≥ 295,000 Btu/h	2.12	85°F / 52°F (Class 2)	AHRI 1360
Glycol cooled with fluid economizer	Upflow - nonducted	< 65,000 Btu/h	2.00	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Upflow - nonducted	≥ 65,000 Btu/h and < 240,000 Btu/h	1.82	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Upflow - nonducted	≥ 240,000 Btu/h	1.73	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Horizontal	< 65,000 Btu/h	2.44	95°F / 52°F (Class 3)	AHRI 1360
Glycol cooled with fluid economizer	Horizontal	≥ 65,000 Btu/h and < 240,000 Btu/h	2.10	95°F / 52°F (Class 3)	AHRI 1360
Glycol cooled with fluid economizer	Horizontal	≥ 240,000 Btu/h	2.10	95°F / 52°F (Class 3)	AHRI 1360

[a] Applicable test procedure and reference year are provided under the definitions.

TABLE 110.2-M Ceiling-Mounted Air Conditioners and Condensing Units Serving Computer Rooms – Minimum Efficiency Requirements

Equipment Type	Standard Model	Net Sensible Cooling Capacity	Minimum Net Sensible COP	Rating Conditions Return air (dry bulb/dew point)	Test Procedure[a]
Air Cooled with free air discharge condenser	Ducted	< 29,000 Btu/h	2.05	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser	Ducted	≥ 29,000 Btu/h and < 65,000 Btu/h	2.02	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser	Ducted	≥ 65,000 Btu/h	1.92	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser	Nonducted	< 29,000 Btu/h	2.08	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser	Nonducted	≥ 29,000 Btu/h and < 65,000 Btu/h	2.05	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser	Nonducted	≥ 65,000 Btu/h	1.94	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser with fluid economizer	Ducted	< 29,000 Btu/h	2.01	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser with fluid economizer	Ducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.97	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser with fluid economizer	Ducted	≥ 65,000 Btu/h	1.87	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser with fluid economizer	Nonducted	< 29,000 Btu/h	2.04	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser with fluid economizer	Nonducted	≥ 29,000 Btu/h and < 65,000 Btu/h	2.00	75°F / 52°F (Class 1)	AHRI 1360
Air Cooled with free air discharge condenser with fluid economizer	Nonducted	≥ 65,000 Btu/h	1.89	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with ducted condenser	Ducted	< 29,000 Btu/h	1.86	75°F / 52°F (Class 1)	AHRI 1360

Air cooled with ducted condenser	Ducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.83	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with ducted condenser	Ducted	≥ 65,000 Btu/h	1.73	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with ducted condenser	Nonducted	< 29,000 Btu/h	1.89	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with ducted condenser	Nonducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.86	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with ducted condenser	Nonducted	≥ 65,000 Btu/h	1.75	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer and ducted condenser	Ducted	< 29,000 Btu/h	1.82	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer and ducted condenser	Ducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.78	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer and ducted condenser	Ducted	≥ 65,000 Btu/h	1.68	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer and ducted condenser	Nonducted	< 29,000 Btu/h	1.85	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer and ducted condenser	Nonducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.81	75°F / 52°F (Class 1)	AHRI 1360
Air cooled with fluid economizer and ducted condenser	Nonducted	≥ 65,000 Btu/h	1.70	75°F / 52°F (Class 1)	AHRI 1360
Water cooled	Ducted	< 29,000 Btu/h	2.38	75°F / 52°F (Class 1)	AHRI 1360
Water cooled	Ducted	≥ 29,000 Btu/h and < 65,000 Btu/h	2.38	75°F / 52°F (Class 1)	AHRI 1360
Water cooled	Ducted	≥ 65,000 Btu/h	2.18	75°F / 52°F (Class 1)	AHRI 1360
Water cooled	Nonducted	< 29,000 Btu/h	2.41	75°F / 52°F (Class 1)	AHRI 1360

Water cooled	Nonducted	≥ 29,000 Btu/h and < 65,000 Btu/h	2.31	75°F / 52°F (Class 1)	AHRI 1360
Water cooled	Nonducted	≥ 65,000 Btu/h	2.20	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Ducted	< 29,000 Btu/h	2.33	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Ducted	≥ 29,000 Btu/h and < 65,000 Btu/h	2.23	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Ducted	≥ 65,000 Btu/h	2.13	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Nonducted	< 29,000 Btu/h	2.36	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Nonducted	≥ 29,000 Btu/h and < 65,000 Btu/h	2.26	75°F / 52°F (Class 1)	AHRI 1360
Water cooled with fluid economizer	Nonducted	≥ 65,000 Btu/h	2.16	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled	Ducted	< 29,000 Btu/h	1.97	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled	Ducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.93	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled	Ducted	≥ 65,000 Btu/h	1.78	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled	Nonducted	< 29,000 Btu/h	2.00	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled	Nonducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.98	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled	Nonducted	≥ 65,000 Btu/h	1.81	75°F / 52°F (Class 1)	AHRI 1360

Glycol cooled with fluid economizer	Ducted	< 29,000 Btu/h	1.92	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Ducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.88	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Ducted	≥ 65,000 Btu/h	1.73	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Nonducted	< 29,000 Btu/h	1.95	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Nonducted	≥ 29,000 Btu/h and < 65,000 Btu/h	1.93	75°F / 52°F (Class 1)	AHRI 1360
Glycol cooled with fluid economizer	Nonducted	≥ 65,000 Btu/h	1.76	75°F / 52°F (Class 1)	AHRI 1360

[a] Applicable test procedure and reference year are provided under the definitions.

TABLE 110.2-N Heat Pump and Heat Recovery Chiller Packages – Minimum Efficiency Requirements

Equipment Type	Size Category, (tons)	Cooling-Only Operation Cooling Efficiency [a] Full Load Efficiency (EER orkW/ton) IPLV (EER or kW/ton)		Heating Operation								Test Procedure
				Heating Source Conditions [d,e]	Heat-Pump Heating Full-Load Efficiency (COP_H)[b]				Heat Recovery Chiller Full-Load Efficiency (COP_{HR})[b, c] Simultaneous Cooling and Heating Full-Load Efficiency (COP_{SHC})[b]			
					Leaving Heating Water Temperature				Leaving Heating Water Temperature			
					Low	Medium	High	Boost	Low	Medium	High	Boost
		Path A	Path B		105°F	120°F	140°F	140°F	105°F	120°F	140°F	140°F
Air source	All sizes	≥9.595 EER ≥13.02 IPLV	≥9.215 EER ≥15.01 IPLV	47°F [d] / 43°F [d]	≥ 3.290	≥2.770	≥2.310	NA	NA	NA	NA	NA	AHRI 550/590
		≥9.595 EER ≥13.30 IPLV	≥9.215 EER ≥15.30 IPLV	17°F [d] / 15°F [d]	≥2.230	≥1.950	≥1.630	NA	NA	NA	NA	NA	
Water source electrically operated positive displacement	<75	≤0.7885 kW/ton ≤0.6316 IPLV	≤0.7875 kW/ton ≤0.5145 IPLV	54°F [e] / 44°F [e]	≥4.640	≥3.680	≥2.680	NA	≥8.330	≥6.410	≥4.420	NA	AHRI 550/590
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.550	NA	NA	NA	≥6.150	
	≥75 and <150	≤0.7579 kW/ton ≤0.5895 IPLV	≤0.7140 kW/ton ≤0.4620 IPLV	54°F [e] / 44°F [e]	≥4.640	≥3.680	≥2.680	NA	≥8.330	≥6.410	≥4.420	NA	
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.550	NA	NA	NA	≥6.150	
	≥150 and <300	≤0.6947 kW/ton ≤0.5684 IPLV	≤0.7140 kW/ton ≤0.4620 IPLV	54°F [e] / 44°F [e]	≥4.640	≥3.680	≥2.680	NA	≥8.330	≥6.410	≥4.420	NA	
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.550	NA	NA	NA	≥6.150	
	≥300 and <600	≤0.6421 kW/ton ≤0.5474 IPLV	≤0.6563 kW/ton ≤0.4305 IPLV	54°F [e] / 44°F [e]	≥4.930	≥3.960	≥2.970	NA	≥8.900	≥6.980	≥5.000	NA	
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.900	NA	NA	NA	≥6.850	
	≥600	≤0.5895 kW/ton ≤0.5263 IPLV	≤0.6143 kW/ton ≤0.3990 IPLV	54°F [e] / 44°F [e]	≥4.930	≥3.960	≥2.970	NA	≥8.900	≥6.980	≥5.000	NA	
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.900	NA	NA	NA	≥6.850	

Water source electrically operated centrifugal	<75	≤0.6421 kW/ton ≤0.5789 IPLV	≤0.7316 kW/ton ≤0.4632 IPLV	54°F [e] / 44°F [e]	≥4.640	≥3.680	≥2.680	NA	≥8.330	≥6.410	≥4.420	NA	AHRI 550/590
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.550	NA	NA	NA	≥6.150	
	≥75 and <150	≤0.5895 kW/ton ≤0.5474 IPLV	≤0.6684 kW/ton ≤0.4211 IPLV	54°F [e] / 44°F [e]	≥4.640	≥3.680	≥2.680	NA	≥8.330	≥6.410	≥4.420	NA	
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.550	NA	NA	NA	≥6.150	
	≥150 and <300	≤0.5895 kW/ton ≤0.5263 IPLV	≤0.6263 kW/ton ≤0.4105 IPLV	54°F [e] / 44°F [e]	≥4.640	≥3.680	≥2.680	NA	≥8.330	≥6.410	≥4.420	NA	
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.550	NA	NA	NA	≥6.150	
	≥300 and <600	≤0.5895 kW/ton ≤0.5263 IPLV	≤0.6158 kW/ton ≤0.4000 IPLV	54°F [e] / 44°F [e]	≥4.930	≥3.960	≥2.970	NA	≥8.900	≥6.980	≥5.000	NA	
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.900	NA	NA	NA	≥6.850	
	≥600	≤0.5895 kW/ton ≤0.5263 IPLV	≤0.6158 kW/ton ≤0.4000 IPLV	54°F [e] / 44°F [e]	≥4.930	≥3.960	≥2.970	NA	≥8.900	≥6.980	≥5.000	NA	
				75°F [e] / 65°F [e]	NA	NA	NA	≥3.900	NA	NA	NA	≥6.850	

a. Cooling-only rating conditions are standard rating conditions defined in AHRI550/590, Table 1.
b. Heating full-load rating conditions are at rating conditions defined in AHRI550/590, Table1.
c. For water-cooled heat recovery chillers that have capabilities for heat rejection to a heat recovery condenser and a tower condenser, the COP applies to operation at full load with 100% heat recovery (no tower rejection). Units that only have capabilities for partial heat recovery shall meet the requirements of Table 110.2-D
d. Outdoor air entering dry-bulb (db) temperature and wet-bulb (wb) temperature.
e. Source-water entering and leaving water temperature.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

SECTION 110.3 – MANDATORY REQUIREMENTS FOR SERVICE WATER-HEATING SYSTEMS AND EQUIPMENT

(a) **Certification by manufacturers.** Any service water- heating system or equipment may be installed only if the manufacturer has certified that the system or equipment complies with all of the requirements of this subsection for that system or equipment.

1. Temperature controls for service water-heating systems. Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use as listed in Table 3, Chapter 50 of the ASHRAE Handbook, HVAC Applications Volume or Table 613.1 of the California Plumbing Code for healthcare facilities.

   Exception to Section 110.3(a)1: Residential occupancies.

(b) **Efficiency.** Equipment shall meet the applicable requirements of the Appliance Efficiency Regulations as required by Section 110.1, subject to the following:

1. If more than one standard is listed in the Appliance Efficiency Regulations, the equipment shall meet all the standards listed; and
2. If more than one test method is listed in the Appliance Efficiency Regulations, the equipment shall comply with the applicable standard when tested with each test method; and
3. Where equipment can serve more than one function, such as both heating and cooling, or both space heating and water heating, it shall comply with all the requirements applicable to each function; and
4. Where a requirement is for equipment rated at its “maximum rated capacity” or “minimum rated capacity,” the capacity shall be as provided for and allowed by the controls, during steady-state operation.

(c) **Installation.** Any service water-heating system or equipment may be installed only if the system or equipment complies with all of the applicable requirements of this subsection for the system or equipment.

1. **Outlet temperature controls.** On systems that have a total capacity greater than 167,000 Btu/hr, outlets that require higher than service water temperatures as listed in the ASHRAE Handbook, Applications Volume, shall have separate remote heaters, heat exchangers or boosters to supply the outlet with the higher temperature.

   Exception to Section 110.3(c)1: Systems covered by California Plumbing Code Section 613.0 shall instead follow the requirements of that section.

2. **Controls for hot water distribution systems.** Service hot water systems with circulating pumps or with electrical heat trace systems shall be capable of automatically turning off the system.

   Exception to Section 110.3(c)2: Systems serving healthcare facilities.

3. **Insulation.** Unfired service water heater storage tanks and backup tanks for solar water-heating systems shall have:

   A. External insulation with an installed R-value of at least R-3.5; or

   B. Internal and external insulation with a combined R-value of at least R-16; or

   C. The heat loss of the tank surface based on an 80°F water-air temperature difference shall be less than 6.5 Btu per hour per square foot.

4. **Water heating recirculation loops serving multiple dwelling units, high-rise residential, hotel/motel, and nonresidential occupancies.** A water heating recirculation loop is a type of hot water distribution system that reduces the time needed to deliver hot water to fixtures that are distant from the water heater, boiler or other water heating equipment. The recirculation loop is comprised of a supply portion, connected to

branches that serve multiple dwelling units, guest rooms, or fixtures and a return portion that completes the loop back to the water heating equipment. A water heating recirculation loop shall meet the following requirements:

A. **Air release valve or vertical pump installation.** An automatic air release valve shall be installed on the recirculation loop piping on the inlet side of the recirculation pump and no more than 4 feet from the pump. This valve shall be mounted on top of a vertical riser at least 12 inches in length and shall be accessible for replacement and repair. Alternatively, the pump shall be installed on a vertical section of the return line.

B. **Recirculation loop backflow prevention.** A check valve or similar device shall be located between the recirculation pump and the water heating equipment to prevent water from flowing backwards though the recirculation loop.

C. **Equipment for pump priming.** A hose bibb shall be installed between the pump and the water heating equipment. An isolation valve shall be installed between the hose bibb and the water heating equipment. This hose bibb is used for bleeding air out of the pump after pump replacement.

D. **Pump isolation valves.** Isolation valves shall be installed on both sides of the pump. These valves may be part of the flange that attaches the pump to the pipe. One of the isolation valves may be the same isolation valve as in Item C.

E. **Cold water supply and recirculation loop connection to hot water storage tank.** Storage water heaters and boilers shall be plumbed in accordance with the manufacturer's specifications The cold water piping and the recirculation loop piping shall not be connected to the hot water storage tank drain port.

F. **Cold water supply backflow prevention.** A check valve shall be installed on the cold water supply line between the hot water system and the next closest tee on the cold water supply line. The system shall comply with the expansion tank requirements as described in the California Plumbing Code Section 608.3.

5. **Service water heaters in state buildings.** Any newly constructed building constructed by the State shall derive its service water heating from a system that provides at least 60 percent of the energy needed for service water heating from site solar energy or recovered energy, per the statutory requirement of California Public Resources Code Section 25498.

   Exception to Section 110.3(c)5: Buildings for which the state architect determines that service water heating from site solar energy or recovered energy is economically or physically infeasible.

6. **Isolation valves.** Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2 kW) shall have isolation valves on both the cold water supply and the hot water pipe leaving the water heater, and hose bibbs or other fittings on each valve for flushing the water heater when the valves are closed.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

SECTION 110.4 – MANDATORY REQUIREMENTS FOR POOL AND SPA SYSTEMS AND EQUIPMENT

(a) **Certification by manufacturers.** Any pool or spa heating system or equipment may be installed only if the manufacturer has certified that the system or equipment has all of the following:

1. **Efficiency.** For equipment subject to State or federal appliance efficiency standards, listings in the Commission's directory of certified equipment showing compliance with applicable standards; and
2. **On-off switch.** A readily accessible on-off switch, mounted on the outside of the heater that allows shutting off the heater without adjusting the thermostat setting; and
3. **Instructions.** A permanent, easily readable and weatherproof plate or card that gives instruction for the energy efficient operation of the pool or spa heater and for the proper care of pool or spa water when a cover is used; and
4. **Electric resistance heating.** No electric resistance heating.

   Exception 1 to Section 110.4(a)4: Listed package units with fully insulated enclosures, and with tight-fitting covers that are insulated to at least R-6.

   Exception 2 to Section 110.4(a)4: Pools or spas deriving at least 60 percent of the annual heating energy from site solar energy or recovered energy.

(b) **Installation.** Any pool or spa system or equipment shall be installed with all of the following:

1. **Piping.** At least 36 inches of pipe shall be installed between the filter and the heater or dedicated suction and return lines, or built-in or built-up connections shall be installed to allow for the future addition of solar heating equipment;
2. **Covers.** A cover for outdoor pools or outdoor spas that have a heat pump or gas heater; and
3. **Directional inlets and time switches for pools.** If the system or equipment is for a pool:
   i. The pool shall have directional inlets that adequately mix the pool water; and
   ii. A time switch or similar control mechanism shall be installed as part of a pool water circulation control system that will allow all pumps to be set or programmed to run only during off-peak electric demand period, and for the minimum time necessary to maintain the water in the condition required by applicable public health standards.

SECTION 110.5 – NATURAL GAS CENTRAL FURNACES, COOKING EQUIPMENT, POOL AND SPA HEATERS, AND FIREPLACES: PILOT LIGHTS PROHIBITED

Any natural gas system or equipment listed below may be installed only if it does not have a continuously burning pilot light:

(a) Fan-type central furnaces.

(b) Household cooking appliances.

Exception to Section 110.5(b): Household cooking appliances without an electrical supply voltage connection and in which each pilot consumes less than 150 Btu/hr.

(c) Pool heaters.

(d) Spa heaters.

(e) Indoor and outdoor fireplaces.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 110.6 – MANDATORY REQUIREMENTS FOR FENESTRATION PRODUCTS AND EXTERIOR DOORS

(a) **Certification of fenestration products and exterior doors other than field-fabricated.** Any fenestration product and exterior door, other than field-fabricated fenestration products and field-fabricated exterior doors, may be installed only if the manufacturer has certified to the Commission, or if an independent certifying organization approved by the Commission has certified, that the product complies with all of the applicable requirements of this subsection.

1. **Air leakage.** Manufactured fenestration products and exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft^2 of window area, 0.3 cfm/ft^2 of door area for residential doors, 0.3 cfm/ft^2 of door area for nonresidential single doors (swinging and sliding), and 1.0 cfm/ft^2 for nonresidential double doors (swinging), when tested according to NFRC-400 or ASTM E283 at a pressure differential of 75 pascals (or 1.57 pounds/ft^2), incorporated herein by reference.

   NOTES TO SECTION 110.6(a)1:Pet doors must meet 0.3 cfm/ft^2 when tested according to ASTM E283 at 75 pascals (or 1.57 pounds per square foot). AAMA/WDMA/CSA 101/I.S.2/A440-2011 specification is equivalent to ASTM E283 at a pressure differential of 75 pascals (or 1.57 pounds per square foot) and satisfies the air leakage certification requirements of this section.

   Exception to Section 110.6(a)1: Field-fabricated fenestration and field-fabricated exterior doors.

2. **U-factor.** The fenestration product and exterior door's U-factor shall be rated in accordance with NFRC 100, or use the applicable default U-factor set forth in Table 110.6-A.

   Exception 1 to Section 110.6(a)2: If the fenestration product is a skylight in a building covered by the nonresidential standards with less than 200 square feet of skylight area, the default U-factor may be calculated as set forth in Reference Nonresidential Appendix NA6.

   Exception 2 to Section 110.6(a)2: If the fenestration product is an alteration consisting of any area replacement of glass in a skylight product in a building covered by the nonresidential standards, the default U-factor may be calculated as set forth in Reference Nonresidential Appendix NA6.

3. **Solar heat gain coefficient SHGC.** The fenestration product's SHGC shall be rated in accordance with NFRC 200, or use the applicable default SHGC set forth in TABLE 110.6-B.

   EXCEPTION 1 to Section 110.6(a)3: If the fenestration product is a skylight in a building covered by the nonresidential standards with less than 200 square feet of skylight area, the default SHGC may be calculated as set forth in Reference Nonresidential Appendix NA6.

   EXCEPTION 2 to Section 110.6(a)3: If the fenestration product is an alteration consisting of any area replacement of glass in a skylight product in a building covered by the nonresidential standards, the default SHGC may be calculated as set forth in Reference Nonresidential Appendix NA6.

4. **Visible transmittance (VT).** The fenestration product's VT shall be rated in accordance with NFRC 200 or ASTM E972, for tubular daylighting devices VT shall be rated using NFRC 203**.**

   Exception 1 to Section 110.6(a)4: If the fenestration product is a skylight in a building covered by the nonresidential standards with less than 200 square feet of skylight area, the default VT may be calculated as set forth in Reference Nonresidential Appendix NA6.

   Exception 2 to Section 110.6(a)4: If the fenestration product is an alteration consisting of any area; replacement of glass in a skylight product in a building covered by the nonresidential standards, the default VT may be calculated as set forth in Reference Nonresidential Appendix NA6.

5. **Labeling.** Fenestration products and exterior doors shall:

   A. Have a temporary label for manufactured fenestration products and exterior doors or a label certificate when the Component Modeling Approach (CMA) is used and for site-built fenestration meeting the requirements of Section 10-111(a)1. The temporary label shall not be removed before inspection by the enforcement agency; and

B. Have a permanent label or label certificate when the Component Modeling Approach (CMA) is used and for site-built fenestration meeting the requirements of Section 10-111(a)2 if the product is rated using NFRC procedures.

6. **Fenestration acceptance requirements.** Before an occupancy permit is granted site-built fenestration products in other than single-family buildings shall be certified as meeting the Acceptance Requirements for Code Compliance, as specified in the Reference Nonresidential Appendix NA7 to ensure that site-built fenestration meets Standards requirements, including a matching label certificate for product(s) installed and be readily accessible at the project location. A certificate of acceptance certifying that the fenestration product meets the acceptance requirements shall be completed, signed and submitted to the enforcement agency.

   Exception to Section 110.6(a): Fenestration products removed and reinstalled as part of a building alteration or addition.

(b) **Installation of field-fabricated fenestration and exterior doors.** Field-fabricated fenestration and field-fabricated exterior doors may be installed only if the compliance documentation has demonstrated compliance for the installation using U-factors from Table 110.6-A and SHGC values from Table 110.6-B. Field-fabricated fenestration and field-fabricated exterior doors shall be caulked between the fenestration products or exterior door and the building, and shall be weatherstripped.

Exception to Section 110.6(b): Unframed glass doors and fire doors need not be weatherstripped or caulked.

TABLE 110.6-A DEFAULT FENESTRATION PRODUCT U-FACTORS

Frame	Product Type	Single Pane [3, 4] U-Factor	Double Pane [1, 3, 4] U-Factor	Glass Block [2,3] U-Factor
Metal	Operable	1.28	0.79	0.87
Metal	Fixed	1.19	0.71	0.72
Metal	Greenhouse/Garden Window	2.26	1.40	N.A.
Metal	Glazed Doors	1.25	0.77	N.A.
Metal	Skylight	1.98	1.30	N.A.
Metal, Thermal Break	Operable	N.A.	0.66	N.A.
Metal, Thermal Break	Fixed	N.A.	0.55	N.A.
Metal, Thermal Break	Greenhouse/Garden Window	N.A.	1.12	N.A.
Metal, Thermal Break	Glazed Doors	N.A.	0.59	N.A.
Metal, Thermal Break	Skylight	N.A.	1.11	N.A.
Nonmetal	Operable	0.99	0.58	0.60
Nonmetal	Fixed	1.04	0.55	0.57
Nonmetal	Glazed Doors	0.99	0.53	N.A.
Nonmetal	Greenhouse/Garden Windows	1.94	1.06	N.A.
Nonmetal	Skylight	1.47	0.84	N.A.

1. For all dual-glazed fenestration products, adjust the listed U-factors as follows:

    a. Add 0.05 for products with dividers between panes if spacer is less than 7/16 inch wide.

    b. Add 0.05 to any product with true divided lite (dividers through the panes).

2. Translucent or transparent panels shall use glass block values when not rated by NFRC 100.

3. Visible Transmittance (VT) shall be calculated by using Reference Nonresidential Appendix NA6.

4. Windows with window film applied that is not rated by NFRC 100 shall use the default values from this table.

TABLE 110.6-B DEFAULT SOLAR HEAT GAIN COEFFICIENT (SHGC)

FRAME TYPE	**PRODUCT**	**GLAZING**	**FENESTRATION PRODUCT SHGC Single Pane[2,3] SHGC**	**FENESTRATION PRODUCT SHGC** Double Pane[2,3] SHGC	**FENESTRATION PRODUCT SHGC** Glass Block[1,2] SHGC
Metal	Operable	Clear	0.80	0.70	0.70
Metal	Fixed	Clear	0.83	0.73	0.73
Metal	Operable	Tinted	0.67	0.59	N.A.
Metal	Fixed	Tinted	0.68	0.60	N.A.
Metal, Thermal Break	Operable	Clear	N.A.	0.63	N.A.
Metal, Thermal Break	Fixed	Clear	N.A.	0.69	N.A.
Metal, Thermal Break	Operable	Tinted	N.A.	0.53	N.A.
Metal, Thermal Break	Fixed	Tinted	N.A.	0.57	N.A.
Nonmetal	Operable	Clear	0.74	0.65	0.70
Nonmetal	Fixed	Clear	0.76	0.67	0.67
Nonmetal	Operable	Tinted	0.60	0.53	N.A.
Nonmetal	Fixed	Tinted	0.63	0.55	N.A.

1. Translucent or transparent panels shall use glass block values when not rated by NFRC 200.

2. Visible Transmittance (VT) shall be calculated by using Reference Nonresidential Appendix NA6.

3. Windows with window film applied that is not rated by NFRC 200 shall use the default values from this table.

SECTION 110.7 – MANDATORY REQUIREMENTS TO LIMIT AIR LEAKAGE

All joints, penetrations and other openings in the building envelope that are potential sources of air leakage shall be caulked, gasketed, weather-stripped or otherwise sealed to limit infiltration and exfiltration.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 110.8 – MANDATORY REQUIREMENTS FOR INSULATION, ROOFING PRODUCTS AND RADIANT BARRIERS

(a) **Insulation certification by manufacturers.** All insulation shall be certified by Department of Consumer Affairs, Bureau of Household Goods and Services that the insulation conductive thermal performance is approved pursuant to the California Code of Regulations, Title 24, Part 12, Chapters 12-13, Article 3, "Standards for Insulating Material."

(b) **Installation of urea formaldehyde foam insulation.** Urea formaldehyde foam insulation may be applied or installed only if:

1. It is installed in exterior side walls; and
2. A 4-mil-thick plastic polyethylene vapor retarder or equivalent plastic sheathing vapor retarder is installed between the urea formaldehyde foam insulation and the interior space in all applications.

(c) **Flame spread rating of insulation.** All insulating material shall be installed in compliance with the flame spread rating and smoke density requirements of the CBC.

(d) **Installation of insulation in existing buildings.** Insulation installed in an existing attic, or on an existing duct or water heater, shall comply with the applicable requirements of Subsections 1, 2 and 3 below. If a contractor installs the insulation, the contractor shall certify to the customer, in writing, that the insulation meets the applicable requirements of Subsections 1, 2 and 3 below.

1. **Attics.** If insulation is installed in the existing attic of a low-rise residential building, the R-value of the total amount of insulation (after addition of insulation to the amount, if any, already in the attic) shall meet the requirements of Section 150.0(a) for single-family buildings and Section 180.2(a)1 for multifamily buildings three habitable stories or less.

   Exception to Section 110.8(d)1: Where the accessible space in the attic is not large enough to accommodate the required R-value, the entire accessible space shall be filled with insulation, provided such installation does not violate Section 1202.2 of Title 24, Part 2 or Section 806 of Title 24, Part 2.5.

2. **Water heaters.** If external insulation is installed on an existing unfired water storage tank or on an existing back-up tank for a solar water-heating system, it shall have an R-value of at least R-3.5, or the heat loss of the tank surface based on an 80°F water-air temperature difference shall be less than 6.5 Btu per hour per square foot.

3. **Ducts.** If insulation is installed on an existing space-conditioning duct, it shall comply with Section 605.0 of the CMC.

(e) Reserved.

(f) Reserved**.**

(g) **Insulation requirements for heated slab floors.** Heated slab floors shall be insulated according to the requirements in Table 110.8-A.

1. Insulation materials in ground contact must:
   A. Comply with the certification requirements of Section 110.8(a); and
   B. Have a water absorption rate for the insulation material alone without facings that is no greater than 0.3 percent when tested in accordance with Test Method A – 24 Hour-Immersion of ASTM C272.
   C. Water vapor permeance no greater than 2.0 perm/ inch when tested in accordance with ASTM E96.
2. Insulation installation must:
   A. Be covered with a solid guard that protects against damage from ultraviolet radiation, moisture, landscaping operation, equipment maintenance and wind; and

B. Include a rigid plate, which penetrates the slab and blocks the insulation from acting as a conduit for insects from the ground to the structure above the foundation.

TABLE 110.8-A SLAB INSULATION REQUIREMENTS FOR HEATED SLAB FLOOR

Insulation Location	Insulation Orientation	Installation Requirements	Climate Zone	Insulation R-Value
Outside edge of heated slab, either inside or outside the foundation wall	Vertical	From the level of the top of the slab, down 16 inches or to the frost line, whichever is greater. Insulation may stop at the top of the footing where this is less than the required depth. For below grade slabs, vertical insulation shall be extended from the top of the foundation wall to the bottom of the foundation (or the top of the footing) or to the frost line, whichever is greater.	1 – 15	5
			16	10
Between heated slab and outside foundation wall	Vertical and Horizontal	Vertical insulation from top of slab at inside edge of outside wall down to the top of the horizontal insulation. Horizontal insulation from the outside edge of the vertical insulation extending 4 feet toward the center of the slab in a direction normal to the outside of the building in plan view.	1 – 15	5
			16	10 vertical and 7 horizontal

(h) **Wet insulation systems.** When insulation is installed on roofs above the roofing membrane or layer used to seal the roof from water penetration, the effective R-value of the insulation shall be as specified in Reference Joint Appendix JA4.

(i) **Roofing products solar reflectance and thermal emittance.**

1. In order to meet the requirements of Sections 140.1, 140.2, 140.3(a)1, 141.0(b)2B, 150.1(c)11, 150.2(b)1I or 150.2(b)2, a roofing product's thermal emittance and an aged solar reflectance shall be certified and labeled according to the requirements of Section 10-113.

   Exception 1 to Section 110.8(i)1: Roofing products that are not certified according to Section 10-113 shall assume the following default aged solar reflectance/thermal emittance values:

   A. For asphalt shingles: 0.08/0.75

   B. For all other roofing products: 0.10/0.75

2. If CRRC testing for an aged solar-reflectance is not available for any roofing products, the aged value shall be derived from the CRRC initial value using the equation $\rho_{aged}=[0.2+\beta[\rho_{initial}-0.2]$, where $\rho_{initial}$ = the initial solar reflectance and soiling resistance β is listed by product type in Table 110.8-B.

TABLE 110.8-B VALUES OF SOILING RESISTANCE β BY PRODUCT TYPE

Product Type	CRRC Product Category	β
Field-Applied Coating	Field-Applied Coating	0.65
Other	Not A Field-Applied Coating	0.70

3. Solar Reflectance Index (SRI), calculated as specified by ASTM E1980-01, may be used as an alternative to thermal emittance and an aged solar reflectance when complying with the requirements of Sections 140.2, 140.3(a)1, 141.0(b)2B, 150.1(c)11, 150.2(b)1I or 150.2(b)2. SRI calculations shall be based on moderate wind velocity of 2–6 meters per second. The SRI shall be calculated based on the aged solar reflectance value of the roofing products.
4. Liquid applied roof coatings applied to low-sloped roofs in the field as the top surface of a roof covering shall:
   A. Be applied across the entire roof surface to meet the dry mil thickness or coverage recommended by the coating manufacturer, taking into consideration the substrate on which the coating is applied; and
   B. Meet the minimum performance requirements listed in Table 110.8-C or the minimum performance requirements of ASTM C836, D3468, D6083 or D6694, whichever are appropriate to the coating material.

      Exception 1 to Section 110.8(i)4B: Aluminum- pigmented asphalt roof coatings shall meet the requirements of ASTM D2824 and be installed as specified by ASTM D3805.

      Exception 2 to Section 110.8(i)4B: Cement- based roof coatings shall contain a minimum of 20 percent cement and shall meet the requirements of ASTM C1583, ASTM D822 and ASTM D5870.

TABLE 110.8-C MINIMUM PERFORMANCE REQUIREMENTS FOR LIQUID APPLIED ROOF COATINGS

Physical Property	ASTM Test Procedure	Requirement
Initial percent elongation (break)	D2370	Minimum 200% @ 73° F (23° C)
Initial percent elongation (break) OR Initial Flexibility	D2370 D522, Test B	Minimum 60% @ 0° F (-18° C) Minimum pass 1” mandrel @ 0° F (-18° C)
Initial tensile strength (maximum stress)	D2370	Minimum 100 psi (1.38 Mpa) @ 73° F (23° C)
Initial tensile strength (maximum stress) OR Initial Flexibility	D2370 D522, Test B	Minimum 200 psi (2.76 Mpa) @ 0° F (-18° C) Minimum pass 1” mandrel @ 0° F (-18° C)
Final percent elongation (break) after accelerated weathering 1000 h	D2370	Minimum 100% @ 73° F (23° C)
Final percent elongation (break) after accelerated weathering 1000 h OR Flexibility after accelerated weathering 1000 h	D2370 D522, Test B	Minimum 40% @ 0° F (-18° C) Minimum pass 1” mandrel @ 0° F (-18° C)
Permeance	D1653	Maximum 50 perms
Accelerated weathering 1000 h	D4798	No cracking or checking[1]

1. Any cracking or checking visible to the eye fails the test procedure.

(j) **Radiant barrier.** A radiant barrier shall have an emittance of 0.05 or less, tested in accordance with ASTM C1371 or ASTM E408, and shall be certified to the Department of Consumer Affairs as required by Title 24, Part 12, Chapter 12-13, Standards for Insulating Material.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

SECTION 110.9 – MANDATORY REQUIREMENTS FOR LIGHTING CONTROLS

(a) All lighting control devices and systems and all light sources subject to the requirements of Section 110.9 shall meet the following requirements:

1. Shall be installed only if the lighting control or light source complies with all of the applicable requirements of Section 110.9.
2. Lighting controls may be individual devices or systems consisting of two or more components.

(b) **All lighting controls.** Lighting controls listed in Section 110.9(b) shall comply with the requirements listed below; and all components of the system considered together as installed shall meet all applicable requirements for the application for which they are installed as required in Sections 130.0 through 130.5, Sections 140.6 through 140.8, Section 141.0, and Section 150.0(k).

1. **Time-switch lighting controls.** All controls that provide time-switch functionality, including all automatic and astronomical time-switch controls, shall have program backup capabilities that prevent the loss of the device's schedule for at least 7 days, and the device's date and time for at least 72 hours if power is interrupted. In addition:
   A. Time-switch controls installed in nonresidential buildings shall:
      i. For each connected load, be capable of providing manual override to each connected load and of resuming normally scheduled operation after a manual override is initiated within 2 hours; and
      ii. Provide an automatic holiday shutoff feature that turns off all connected loads for at least 24 hours and then resumes normally scheduled operation.
   B. Astronomical time-switch controls shall:
      i. Have sunrise and sunset prediction accuracy within plus-or-minus 15 minutes and timekeeping accuracy within 5 minutes per year;
      ii. Be capable of displaying date, current time, sunrise time, sunset time, and switching times for each step during programming;
      iii. Be capable of automatically adjusting for daylight savings time; and
      iv. Have the ability to independently offset the on and off for each channel by at least 90 minutes before and after sunrise or sunset.
   C. Multilevel time-switch controls shall include at least two separately programmable steps per zone.
   D. Time-switch controls installed outdoors shall have setback functions that allow the lighting on each controlled channel to be switched or dimmed to lower levels. The setback functions shall be capable of being programmed by the user for at least one specific time of day.
2. **Daylighting controls.** Controls that provide automatic daylighting functionality shall:
   A. Automatically return to its most recent time delay settings within 60 minutes of the last received input when left in calibration mode;
   B. Have a set point control that easily distinguishes settings to within 10 percent of full-scale adjustment;
   C. Provide a linear response within 5 percent accuracy over the range of illuminance measured by the light sensor; and
   D. Be capable of being calibrated in a manner that the person initiating the calibration is remote from the sensor during calibration to avoid influencing calibration accuracy, for example by having a light sensor that is physically separated from where the calibration adjustments are made.
3. **Dimmers.** Controls that provide dimming functionality shall:
   A. Be capable of reducing lighting power consumption by a minimum of 65 percent when at its lowest setting;

B. Provide reduced flicker operation, meaning that directly controlled light sources shall be provided electrical power such that the light output has an amplitude modulation of less than 30 percent for frequencies less than 200 Hz without causing premature lamp failure;

C. Provide an offsetting that produces a zero lumen output; and

D. For wall box dimmers and associated switches designed for use in three way circuits, be capable of turning lights off, and on to the level set by the dimmer if the lights are off.

4. **Occupant sensing controls.** Occupant sensing controls include occupant sensors, motion sensors, and vacancy sensors, including those with a partial-ON or partial-OFF function. Occupant sensing controls shall:

   A. Be capable of automatically turning the controlled lights in the area either off or down no more than 20 minutes after the area has been vacated;

   B. For manual-on controls, have a grace period of no less than 15 seconds and no more than 30 seconds to turn on lighting automatically after the sensor has timed out; and

   C. Provide a visible status signal that indicates that the device is operating properly, or that it has failed or malfunctioned. The visible status signal may have an override that turns off the signal.

   Exception to Section 110.9(b)4: Occupant sensing control systems may consist of a combination of single or multilevel occupant, motion or vacancy sensor controls, provided that components installed to comply with manual-on requirements shall not be capable of conversion by occupants from manual-on to automatic-on functionality.

5. Reserved.

6. **Sensors used to detect occupants.** Sensors that are used by occupant sensing controls to detect occupants shall meet all of the following requirements:

   A. Sensors shall not incorporate switches or mechanical devices that allow the sensor to be disabled without changing the settings of the control.

   B. Sensors that utilize ultrasonic radiation for detection of occupants shall:

      i. comply with 21 C.F.R. part 1002.12;

      ii. not emit audible sound; and

      iii. not emit ultrasound in excess of the decibel levels shown in Table 110.9-A measured no more than 5 feet from the source, on axis.

   C. Sensors that utilize microwave radiation for detection of occupants shall:

      i. comply with 47 C.F.R. parts 2 and 15; and

      ii. not emit radiation in excess of 1 milliwatt per square centimeter measured at no more than 5 centimeters from the emission surface of the device.

7. **Indicator lights.** Indicator lights integral to lighting controls shall consume no more than 1 watt of power per indicator light.

(c) **Track lighting integral current limiter.** An integral current limiter for line-voltage track lighting shall be recognized for compliance with Part 6 only if it meets all of the following requirements:

1. Shall have the identical volt-ampere (VA) rating of the current limiter as installed and rated for compliance with Part 6 clearly marked as follows:

   A. So that it is visible for the enforcement agency's field inspection without opening coverplates, fixtures or panels; and

   B. Permanently marked on the circuit breaker; and

   C. On a factory-printed label that is permanently affixed to a nonremovable base-plate inside the wiring compartment.

2. Shall have a conspicuous factory installed label permanently affixed to the inside of the wiring compartment warning against removing, tampering with, rewiring or bypassing the device; and

3. Each electrical panel from which track lighting integral current limiters are energized shall have a factory printed label permanently affixed and prominently located, stating the following: "NOTICE: Current limiting devices installed in track lighting integral current limiters connected to this panel shall only be replaced with the same or lower amperage. Adding track or replacement of existing current limiters with higher continuous ampere rating will void the track lighting integral current limiter certification, and will require resubmittal of compliance documentation to the enforcement agency responsible for compliance with the California Title 24, Part 6 Building Energy Efficiency Standards."

(d) **Track lighting supplementary overcurrent protection panel.** A Track Lighting Supplementary Overcurrent Protection Panel shall be used only for line-voltage track lighting and shall be recognized for compliance with Part 6 only if it meets all of the following requirements:

1. Shall be listed as defined in Section 100.1; and

2. Shall have a permanently installed label that is prominently located stating the following: "NOTICE: This Panel for Track Lighting Energy Code Compliance Only." The overcurrent protection devices in this panel shall only be replaced with the same or lower amperage. No other overcurrent protective device shall be added to this panel. Adding to, or replacement of, existing overcurrent protective device(s) with higher continuous ampere rating will void the panel listing and require resubmittal of compliance documentation to the enforcement agency responsible for compliance with the California Title 24, Part 6 Building Energy Efficiency Standards.

TABLE 110.9-A - ULTRASOUND MAXIMUM DECIBEL VALUES

MID-FREQUENCY OF SOUND PRESSURE THIRD-OCTAVE BAND (IN kHz)	MAXIMUM DB LEVEL WITHIN THIRD-OCTAVE BAND (IN dB REFERENCE 20 MICROPASCALS)
Less than 20	80
20 or more to less than 25	105
25 or more to less than 31.5	110
31.5 or more	115

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 52943, Public Resources Code.

SECTION 110.10 – MANDATORY REQUIREMENTS FOR SOLAR READINESS

(a) **Covered occupancies.**

1. **Single-family residences.** Single-family residences located in subdivisions with ten or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete or approved by the enforcement agency, which do not have a photovoltaic system installed, shall comply with the requirements of Sections 110.10(b) through 110.10(e)
2. **Low-rise multifamily buildings.** Low-rise multifamily buildings that do not have a photovoltaic system installed shall comply with the requirements of Sections 110.10(b) through 110.10(d).
3. **Hotel/motel occupancies and high-rise multifamily buildings.** Hotel/motel occupancies and high-rise multifamily buildings with ten habitable stories or fewer, that do not have a photovoltaic system installed, shall comply with the requirements of Sections 110.10(b) through 110.10(d).
4. **Nonresidential buildings.** Nonresidential buildings with three habitable stories or fewer, other than I-2 and I-2.1 buildings, that do not have a photovoltaic system installed, shall comply with the requirements of Sections 110.10(b) through 110.10(d).

(b) **Solar zone.**

1. **Minimum solar zone area.** The solar zone shall have a minimum total area as described below. The solar zone shall comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area shall be comprised of areas that have no dimension less than five feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet.

   A. **Single-family residences.** The solar zone shall be located on the roof or overhang of the building and have a total area no less than 250 square feet.

      Exception 1 to Section 110.10(b)1A: Single-family residences with a permanently installed domestic solar water-heating system meeting the installation criteria specified in the Reference Residential Appendix RA4 and with a minimum solar savings fraction of 0.50.

      Exception 2 to Section 110.10(b)1A: Single-family residences with three habitable stories or more and with a total floor area less than or equal to 2000 square feet and having a solar zone total area no less than 150 square feet.

      Exception 3 to Section 110.10(b)1A: Single-family residences located in the Wildland-Urban Interface Fire Area as defined in Title 24, Part 2 and having a whole house fan and having a solar zone total area no less than 150 square feet.

      Exception 4 to Section 110.10(b)1A: Buildings with a designated solar zone area that is no less than 50 percent of the potential solar zone area. The potential solar zone area is the total area of any low-sloped roofs where the annual solar access is 70 percent or greater and any steep-sloped roofs oriented between 90 degrees and 300 degrees of true north where the annual solar access is 70 percent or greater. Solar access is the ratio of solar insolation including shade to the solar insolation without shade. Shading from obstructions located on the roof or any other part of the building shall not be included in the determination of annual solar access.

      Exception 5 to Section 110.10(b)1A: Single-family residences having a solar zone total area no less than 150 square feet and where all thermostats are demand responsive controls and comply with Section 110.12(a), and are capable of receiving and responding to Demand Response Signals prior to granting of an occupancy permit by the enforcing agency.

      Exception 6 to Section 110.10(b)1A: Single-family residences meeting the following conditions:

A. All thermostats are demand responsive controls that comply with Section 110.12(a), and are capable of receiving and responding to Demand Response Signals prior to granting of an occupancy permit by the enforcing agency.

B. Comply with one of the following measures:

i. Install a dishwasher that meets or exceeds the ENERGY STAR® Program requirements with a refrigerator that meets or exceeds the ENERGY STAR Program requirements, a whole house fan driven by an electronically commutated motor, or an SAE J1772 Level 2 Electric Vehicle Supply Equipment (EVSE or EV charger) with a minimum of 40 amperes; or

ii. Install a home automation system capable of, at a minimum, controlling the appliances and lighting of the dwelling and responding to demand response signals; or

iii. Install alternative plumbing piping to permit the discharge from the clothes washer and all showers and bathtubs to be used for an irrigation system in compliance with the *California Plumbing Code* and any applicable local ordinances; or

iv. Install a rainwater catchment system designed to comply with the *California Plumbing Code* and any applicable local ordinances, and that uses rainwater flowing from at least 65 percent of the available roof area.

B. **Multifamily buildings, hotel/motel occupancies and nonresidential buildings.** The solar zone shall be located on the roof or overhang of the building or on the roof or overhang of another structure located within 250 feet of the building or on covered parking installed with the building project, and shall have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.

Exception 1 to Section 110.10(b)1B: High-rise multifamily buildings, hotel/motel occupancies, and nonresidential buildings with a permanently installed solar electric system having a nameplate DC power rating, measured under Standard Test Conditions, of no less than one watt per square foot of roof area.

Exception 2 to Section 110.10(b)1B: High-rise multifamily buildings, hotel/motel occupancies with a permanently installed domestic solar water-heating system complying with Section 150.1(c)8Biii.

Exception 3 to Section 110.10(b)1B: Buildings with a designated solar zone area that is no less than 50 percent of the potential solar zone area. The potential solar zone area is the total area of any low-sloped roofs where the annual solar access is 70 percent or greater and any steep-sloped roofs oriented between 90 degrees and 300 degrees of true north where the annual solar access is 70 percent or greater. Solar access is the ratio of solar insolation including shade to the solar insolation without shade. Shading from obstructions located on the roof or any other part of the building shall not be included in the determination of annual solar access.

Exception 4 to Section 110.10(b)1B: Low-rise and high-rise multifamily buildings with all thermostats in each dwelling unit are demand response controls that comply with Section 110.12(a), and are capable of receiving and responding to Demand Response Signals prior to granting of an occupancy permit by the enforcing agency. In addition, either A or B below:

A. In each dwelling unit, comply with one of the following measures:

i. Install a dishwasher that meets or exceeds the ENERGY STAR Program requirements with either a refrigerator that meets or exceeds the ENERGY STAR Program requirements or a whole house fan driven by an electronically commutated motor; or

ii. Install a home automation system that complies with Section 110.12(a) and is capable of, at a minimum, controlling the appliances and lighting of the dwelling and responding to demand response signals; or

iii. Install alternative plumbing piping to permit the discharge from the clothes washer and all showers and bathtubs to be used for an irrigation system in compliance with the *California Plumbing Code* and any applicable local ordinances; or

iv. Install a rainwater catchment system designed to comply with the *California Plumbing Code* and any applicable local ordinances, and that uses rainwater flowing from at least 65 percent of the available roof area.

B. Meet the Title 24, Part 11, Section A4.106.8.2 requirements for electric vehicle charging spaces.

Exception 5 to Section 110.10(b)1B: Buildings where the roof is designed and approved to be used for vehicular traffic or parking or for a heliport.

2. **Azimuth range.** All sections of the solar zone located on steep-sloped roofs shall have an azimuth range between 90 degrees and 300 degrees of true north.

3. **Shading.**

A. No obstructions, including but not limited to, vents, chimneys, architectural features and roof mounted equipment, shall be located in the solar zone.

B. Any obstruction, located on the roof or any other part of the building that projects above a solar zone shall be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.

Exception to Section 110.10(b)3: Any roof obstruction, located on the roof or any other part of the building, that is oriented north of all points on the solar zone.

4. **Structural design loads on construction documents.** For areas of the roof designated as solar zone, the structural design loads for roof dead load and roof live load shall be clearly indicated on the construction documents.

Note: Section 110.10(b)4 does not require the inclusion of any collateral loads for future solar energy systems.

(c) **Interconnection pathways.**

1. The construction documents shall indicate a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service.

2. For single-family residences and central water-heating systems, the construction documents shall indicate a pathway for routing of plumbing from the solar zone to the water-heating system.

(d) **Documentation.** A copy of the construction documents or a comparable document indicating the information from Sections 110.10(b) through 110.10(c) shall be provided to the occupant.

(e) **Main electrical service panel.**

1. The main electrical service panel shall have a minimum busbar rating of 200 amps.

2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space shall be permanently marked as "For Future Solar Electric".

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402, 25402.1, and 25605, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, 25605, and 25943, Public Resources Code.

SECTION 110.11 – MANDATORY REQUIREMENTS FOR ELECTRICAL POWER DISTRIBUTION SYSTEM

Certification by Manufacturers. Any electrical power distribution system equipment listed in this section may be installed only if the manufacture has certified to the Commission that the equipment complies with all the applicable requirements of this section.

(a) **Low-voltage dry-type distribution transformer** shall be certified by the Manufacturer as required by the Title 20 Appliance Efficiency Regulations.

EXCEPTION to Section 110.11(a):

1. autotransformer;
2. drive (isolation) transformer;
3. grounding transformer;
4. machine-tool (control) transformer;
5. nonventilated transformer;
6. rectifier transformer;
7. regulating transformer;
8. sealed transformer;
9. special-impedance transformer;
10. testing transformer;
11. transformer with tap range of 20 percent or more;
12. uninterruptible power supply transformer; or
13. welding transformer.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 110.12 – MANDATORY REQUIREMENTS FOR DEMAND MANAGEMENT

Buildings, other than healthcare facilities, that install or are required to install demand responsive controls shall comply with the applicable demand responsive control requirements of Sections 110.12(a) through 110.12(e).

(a) **Demand responsive controls.**

1. All demand responsive controls shall be either:

   A. A certified OpenADR 2.0a or OpenADR 2.0b Virtual End Node (VEN), as specified under Clause 11, Conformance, in the applicable OpenADR 2.0 Specification; or

   B. Certified by the manufacturer as being capable of responding to a demand response signal from a certified OpenADR 2.0b Virtual End Node by automatically implementing the control functions requested by the Virtual End Node for the equipment it controls.

2. All demand responsive controls shall be capable of communicating with the VEN using a wired or wireless bidirectional communication pathway.

3. RESERVED

4. When communications are disabled or unavailable, all demand responsive controls shall continue to perform all other control functions provided by the control.

5. Demand responsive control thermostats shall comply with Reference Joint Appendix 5 (JA5), Technical Specifications for Occupant Controlled Smart Thermostats.

(b) **Demand Responsive Zonal HVAC Controls.** Nonresidential HVAC systems with DDC to the Zone level shall be programmed to allow centralized demand shed for noncritical zones as follows:

1. The controls shall have a capability to remotely increase the operating cooling temperature set points by 4 degrees or more in all noncritical zones on signal from a centralized contact or software point within an Energy Management Control System (EMCS).

2. The controls shall have a capability to remotely decrease the operating heating temperature set points by 4 degrees or more in all noncritical zones on signal from a centralized contact or software point within an EMCS.

3. The controls shall have capabilities to remotely reset the temperatures in all noncritical zones to original operating levels on signal from a centralized contact or software point within an EMCS.

4. The controls shall be programmed to provide an adjustable rate of change for the temperature increase, decrease, and reset.

5. The controls shall have the following features:

   A. Disabled. Disabled by authorized facility operators; and

   B. Manual control. Manual control by authorized facility operators to allow adjustment of heating and cooling set points globally from a single point in the EMCS; and

   C. Automatic Demand Shed Control. Upon receipt of a demand response signal, the space-conditioning systems shall conduct a centralized demand shed, as specified in Sections 110.12(b)1 and 110.12(b)2, for noncritical zones during the demand response period.

(c) **Demand Responsive Lighting Controls.** Buildings with nonresidential lighting systems having a total installed lighting power of 4,000 watts or greater that are subject to the requirements of Section 130.1(b) shall install controls that are capable of automatically reducing lighting power in response to a Demand Response Signal.

1. For compliance testing, the lighting controls shall demonstrate a 15-percent or greater reduction in lighting power as described in NA7.6.3. The controls may provide additional demand responsive functions or abilities.

2. For buildings where demand response controls are required, demand responsive controls shall control the general lighting that is subject to the requirements of Section 130.1(b) and may control additional lighting.
3. General lighting shall be reduced in a manner consistent with the uniform level of illumination requirements in Table 130.1-A.

Exception to Section 110.12(c): Spaces where a health or life safety statute, ordinance, or regulation does not permit the general lighting to be reduced are not required to install demand responsive controls and do not count toward the 4,000-watt threshold.

(d) **Demand Responsive Electronic Message Center Control.** Controls for electronic message centers greater than 15 kW shall be capable of reducing the lighting power by a minimum of 30 percent when receiving a demand response signal.

Exception to Section 110.12(d): Electronic message centers that are not permitted by a health or life safety statute, ordinance, or regulation to be reduced.

(e) **Demand Responsive Controlled Receptacles.** Controlled receptacles in buildings shall be capable of automatically turning off all loads connected to the receptacle in response to a demand response signal.

Exception 1 to Section 110.12(e): Buildings not required to have demand responsive lighting controls.

Exception 2 to Section 110.12(e): Spaces where a health or life safety statute, ordinance or regulation does not permit the receptacles to be automatically controlled.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SUBCHAPTER 3
NONRESIDENTIAL, HOTEL/MOTEL OCCUPANCIES, AND COVERED PROCESSES—MANDATORY REQUIREMENTS

SECTION 120.0— GENERAL

Sections 120.1 through 120.10 establish requirements for the design and installation of building envelopes, ventilation, space-conditioning and service water-heating systems and equipment in nonresidential and hotel/motel buildings as well as covered processes that are within the scope of Section 100.0(a).

NOTE: The requirements of Sections 120.1 through 120.10 apply to newly constructed buildings. Section 141.0 specifies which requirements of Sections 120.1 through 120.10 also apply to additions or alterations to existing buildings.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 120.1 – REQUIREMENTS FOR VENTILATION AND INDOOR AIR QUALITY

(a) **General requirements.**

1. All occupiable spaces in hotel/motel buildings, and nonresidential buildings other than healthcare facilities shall comply with the applicable requirements of Section 120.1(a) through 120.1(g). Healthcare facilities shall be ventilated in accordance with Chapter 4 of the California Mechanical Code.
2. The required outdoor air-ventilation rate and the air-distribution system design shall be clearly identified on the plans in accordance with Section 10-103 of Title 24, Part 1.

(b) Reserved**.**

(c) **Nonresidential and hotel/motel buildings.** All occupiable spaces shall meet the requirements of Section 120.1(c)1, and shall also comply with either Section 120.1(c)2 or Section 120.1(c)3.

1. **Air filtration.**

A. Mechanical system types specified in Subsections i, ii and iii below shall be designed to ensure that all recirculated air and all outdoor air supplied to the occupiable space is filtered before passing through any system thermal conditioning components. Air filters shall conform to the requirements of Sections 120.1(c)1B, 120.1(c)1C and 120.1(c)1D.

i. Mechanical space-conditioning systems that supply air to an occupiable space through ductwork exceeding 10 ft (3 m) in length.

ii. Mechanical supply-only ventilation systems and makeup air systems that provide outside air to an occupiable space.

iii. The supply side of mechanical balanced ventilation systems, including heat recovery ventilation systems and energy recovery ventilation systems that provide outside air to an occupiable space.

Exception to Section 120.1(c)1A: For heat recovery ventilators and energy recovery ventilators, the location of the filters required by Section 120.1(c)1A may be downstream of a system thermal conditioning component, provided the system is equipped with ancillary filtration upstream of the system's thermal conditioning component.

B. Air filter efficiency. The filters shall have a designated efficiency equal to or greater than MERV 13 when tested in accordance with ASHRAE Standard 52.2, or a particle size efficiency rating equal to or greater than 50 percent in the 0.30–1.0 µm range, and equal to or greater than 85 percent in the 1.0–3.0 µm range when tested in accordance with AHRI Standard 680; and

C. Systems shall be equipped with air filters that meet either Subsection i or ii below.

i. Nominal 2-inch minimum depth filter(s); or

ii. Nominal one inch minimum depth filter(s) shall be allowed if the filter(s) are sized according to Equation 120.1-A, based on a maximum face velocity of 150 feet per minute.

$$A_{face} = Q_{filter} / V_{face} \quad \text{(Equation 120.1-A)}$$

Where:

A_{face} = air filter face area, the product of air filter nominal length × nominal width, ft^2

Q_{filter} = design airflow rate for the air filter, ft^3/min

V_{face} = air filter face velocity £ 150, ft/min

D. Filter racks or grilles shall use gaskets, sealing or other means to close gaps around inserted filters and prevent air from bypassing the filter.

2. **Natural ventilation.** Naturally ventilated spaces shall be designed in accordance with 120.1(c)2A through 120.1(c)2C and include a mechanical ventilation system designed in accordance with 120.1(c)3:

   A. Floor area to be ventilated. Spaces or portions of spaces to be naturally ventilated shall be located within a distance based on the ceiling height, as specified in i, ii and iii. The ceiling height (H) to be used in i, ii or iii shall be the minimum ceiling height in the space, or for ceilings that are increasing in height as distance from the operable openings is increased, the ceiling height shall be determined as the average height of the ceiling within 20 feet from the operable opening. [ASHRAE 62.1:6.4.1]

      i. Single side opening. For spaces with operable opening on one side of the space, the maximum distance from the operable opening shall be not more than 2H. [ASHRAE 62.1:6.4.1.1]

      ii. Double side opening. For spaces with operable openings on two opposite sides of the space, the maximum distance from the operable opening shall be not more than 5H. [ASHRAE 62.1:6.4.1.2]

      iii. Corner opening. For spaces with operable openings on two adjacent sides of a space, the maximum distance from the operable openings shall be not more than 5H along a line drawn between the two openings that are the farthest apart. Floor area outside that line shall comply with i or ii. [ASHRAE 62.1:6.4.1.3]

      iv. Ceiling height. The ceiling height (H) to be used in Section 120.1(c)2Ai through 120.1(c)2Aiii shall be the minimum ceiling height in the space.

      Exception to Section 120.1(c)2Aiv: For ceilings that are increasing in height as distance from the opening is increased, the ceiling height shall be determined as the average height of the ceiling within 20 feet from the operable openings. [ASHRAE 62.1:6.4.1.4]

   B. Location and size of openings. Spaces or portions of spaces to be naturally ventilated shall be permanently open to operable wall openings directly to the outdoors. The openable area shall be not less than 4 percent of the net occupiable floor area. Where openings are covered with louvers or otherwise obstructed, the openable area shall be based on the net free unobstructed area through the opening. Where interior rooms, or portions of rooms, without direct openings to the outdoors are ventilated through adjoining rooms, the opening between rooms shall be permanently unobstructed and have a free area of not less than 8 percent of the area of the interior room or less than 25 square feet. [ASHRAE 62.1:6.4.2]

   C. Control and accessibility. The means to open the required operable opening shall be readily accessible to building occupants whenever the space is occupied. Controls shall be designed to coordinate operation of the natural and mechanical ventilation systems. [ASHRAE 62.1:6.4.3]

   Exception 1 to Section 120.1(c)2: The mechanical ventilation system shall not be required where natural ventilation openings complying with 120.1(c)2 are either permanently open or have controls that prevent the openings from being closed during periods of expected occupancy.

   Exception 2 to Section 120.1(c)2: The mechanical ventilation system shall not be required where the zone is not served by a space-conditioning system.

3. **Mechanical ventilation.** Occupiable spaces shall be ventilated with a mechanical ventilation system capable of providing an outdoor airflow rate to the zone (V_z) no less than Equation 120.1-F as described below:

   $$V_z = R_t \times A_z \qquad \text{(Equation 120.1-F)}$$

   Where:

   R_t = Total outdoor airflow rate required per unit area as determined from Table 120.1-A.

   A_z = Zone floor area, meaning the net occupiable floor area of the ventilation zone in square feet.

Exception 1 to Section 120.1(c)3: Designed occupancy. For spaces designed for an expected number of occupants per the Exception to Section 1004.5 of the CBC, or spaces with fixed seating per Section 1004.6 of the CBC, the outdoor airflow rate to the zone (V_z) shall be determined in accordance with Equation 120.1-G;

V_z = The larger of $R_p \times P_z$ or $R_a \times A_z$ (Equation 120.1-G)

Where:

R_p = 15 cubic feet per minute of outdoor airflow per person

P_z = The expected number of occupants. The expected number of occupants shall be the expected number specified by the building designer. For spaces with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.

R_a = The minimum ventilation airflow rate allowed for DCV in Table 120.1-A. If R_a is not defined for an occupancy category, $R_a = 0$.

A_z = Zone floor area, meaning the net occupiable floor area of the ventilation zone in square feet.

Exception 2 to Section 120.1(c)3: Transfer air. The rate of outdoor air required by Section 120.1(c)3 may be provided with air transferred from other ventilated space if:

A. Use of transfer air is in accordance with Section 120.1(g); and

B. The outdoor air that is supplied to all spaces combined, is sufficient to meet the requirements of Section 120.1(c)3 for each space individually.

4. **Exhaust ventilation.** The design exhaust airflow shall be determined in accordance with the requirements in Table 120.1-B. Exhaust makeup air shall be permitted to be any combination of outdoor air, recirculated air, or transfer air. [ASHRAE 62.1:6.5.1]

(d) **Operation and control requirements for minimum quantities of outdoor air.**

1. **Times of occupancy.** The minimum rate of outdoor air required by Section 120.1(c) shall be supplied to each space at all times when the space is usually occupied.

   Exception 1 to Section 120.1(d)1: Demand control ventilation. In intermittently occupied spaces that do not have processes or operations that generate dusts, fumes, mists, vapors or gasses and are not provided with local exhaust ventilation (such as indoor operation of internal combustion engines or areas designated for unvented food service preparation), the rate of outdoor air may be reduced if the ventilation system serving the space is controlled by a demand control ventilation device complying with Section 120.1(d)4 or by an occupant sensor ventilation control device complying with Section 120.1(d)5.

   Exception 2 to Section 120.1(d)1: Temporary reduction. The rate of outdoor air provided to a space may be reduced below the level required by Section 120.1(c) for up to 30 minutes at a time if the average rate for each hour is equal to or greater than the required ventilation rate.

2. **Pre-occupancy.** The lesser of the minimum rate of outdoor air required by Section 120.1(c) or three complete air changes shall be supplied to the entire building during the one-hour period immediately before the building is normally occupied.

3. **Required demand control ventilation.** Demand ventilation controls complying with Section 120.1(d)4 are required for a space with a design occupant density, or a maximum occupant load factor for egress purposes in the CBC, greater than or equal to 25 people per 1,000 square feet (40 square feet or less per person) if the ventilation system serving the space has one or more of the following:

   A. an air economizer; or

   B. modulating outside air control; or

   C. design outdoor airflow rate > 3,000 cfm

Exception 1 to Section 120.1(d)3: Where space exhaust is greater than the design ventilation rate specified in Section 120.1(c)3 minus 0.2 cfm per square foot of conditioned area.

Exception 2 to Section 120.1(d)3: Spaces that have processes or operations that generate dusts, fumes, mists, vapors or gases and are not provided with local exhaust ventilation, such as indoor operation of internal combustion engines or areas designated for unvented food service preparation, daycare sickrooms, science labs, barber shops or beauty and nail salons shall not install demand control ventilation.

Exception 3 to Section 120.1(d)3: Spaces with an area of less than 150 square feet, or a design occupancy of less than 10 people as specified by Section 120.1(c)3.

4. **Demand control ventilation devices.**

   A. For each system with demand control ventilation (DCV), CO_2 sensors shall be installed in each room that meets the criteria of Section 120.1(d)3 with no less than one sensor per 10,000 square feet of floor space. When a zone or a space is served by more than one sensor, a signal from any sensor indicating that CO_2 is near or at the setpoint within the zone or space, shall trigger an increase in ventilation.

   B. CO_2 sensors shall be located in the room between 3 feet and 6 feet above the floor or at the anticipated height of the occupants' heads.

   C. Demand ventilation controls shall maintain CO_2 concentrations less than or equal to 600 ppm plus the outdoor air CO_2 concentration in all rooms with CO_2 sensors.

      Exception to Section 120.1(d)4C: The outdoor air ventilation rate is not required to be larger than the design outdoor air ventilation rate required by Section 120.1(c)3 regardless of CO_2 concentration.

   D. Outdoor air CO_2 concentration shall be determined by one of the following:

      i. CO_2 concentration shall be assumed to be 400 ppm without any direct measurement; or

      ii. CO_2 concentration shall be dynamically measured using a CO_2 sensor located within 4 feet of the outdoor air intake.

   E. When the system is operating during hours of expected occupancy, the controls shall maintain system outdoor air ventilation rates no less than the rate listed in Table 120.1-A for DCV, times the conditioned floor area for spaces with CO_2 sensors, plus the rate required by Section 120.1(c)3 for other spaces served by the system, or the exhaust air rate, whichever is greater.

   F. CO_2 sensors shall be certified by the manufacturer to be accurate within plus or minus 75 ppm at a 600 and 1000 ppm concentration when measured at sea level and 25°C, factory calibrated and certified by the manufacturer to require calibration no more frequently than once every 5 years. Upon detection of sensor failure, the system shall provide a signal which resets to supply the minimum quantity of outside air to levels required by Section 120.1(c)3 to the zone serviced by the sensor at all times that the zone is occupied.

   G. The CO_2 sensor(s) reading for each zone shall be displayed continuously, and shall be recorded on systems with DDC to the zone level.

5. **Occupant sensor ventilation control devices.** Occupant sensing or ventilation controls are required for space-conditioning zones that are both permitted to have their ventilation air reduced to zero while in occupied-standby mode per Table 120.1-A and required to install occupant sensors to comply with Section 130.1(c)5, 6 and 7. Occupant sensor ventilation control devices used to reduce the rate of outdoor air flow when occupants are not present shall comply with the following:

   A. Occupant sensors shall have suitable coverage and placement to detect occupants in the entire space ventilated. In 20 minutes or less after no occupancy is detected by any sensors covering the room, occupant sensing controls shall indicate a room is vacant.

B. When occupant sensors controlling lighting are also used for ventilation, the ventilation signal shall be independent of daylighting, manual lighting overrides or manual control of lighting.

C. When a single zone damper or a single zone system serves multiple rooms, there shall be an occupant sensor in each room and the zone shall not be considered vacant until all rooms in the zone are vacant.

D. One hour prior to normal scheduled occupancy, the occupant sensor ventilation control shall allow pre-occupancy purge as described in Section 120.1(d)2.

E. When the zone is scheduled to be occupied and occupant sensing controls in all rooms and areas served by the zone indicate the spaces are unoccupied, the zone shall be placed in occupied-standby mode.

F. In 5 minutes or less after entering occupied-standby mode, mechanical ventilation to the zone shall be shut off until the space becomes occupied or until ventilation is needed to provide space heating or conditioning. When mechanical ventilation is shut off to the zone, the ventilation system serving the zone shall reduce the system outside air rate by the amount of outside air required for the zone.

G. Where the system providing space conditioning also provides ventilation to the zone, in 5 minutes or less after entering occupied-standby mode, space-conditioning zone setpoints shall be reset in accordance with Section 120.2(e)3.

(e) **Ducting for zonal heating and cooling units.** Where a return plenum is used to distribute outdoor air to a zonal heating or cooling unit, which then supplies the air to a space in order to meet the requirements of Section 120.1(c)3, the outdoor air shall be ducted to discharge either:

1. Within 5 feet of the unit; or

2. Within 15 feet of the unit, substantially toward the unit, and at a velocity not less than 500 feet per minute.

(f) **Design and control requirements for quantities of outdoor air.**

1. All mechanical ventilation and space-conditioning systems shall be designed with and have installed ductwork, dampers and controls that allow design minimum outside air rates to be operated at no less than the larger of (1) the minimum levels specified in Section 120.1(c)3; or (2) the rate required for make-up of exhaust systems that are required for an exempt or covered process, for control of odors, or for the removal of contaminants within the space.

2. All variable air volume mechanical ventilation and space-conditioning systems shall include dynamic controls that are capable of maintaining measured outside air ventilation rates within 10 percent of the design minimum outside air ventilation rate at both full and reduced supply airflow conditions. Fixed minimum damper position is not considered to be dynamic and is not an allowed control strategy.

3. All mechanical ventilation and space-conditioning systems shall be tested to confirm their ability to operate within 10 percent of the design minimum outside air rate.

(g) **Air classification and recirculation limitations.** Air classification and recirculation limitations of air shall be based on the air classification as listed in Table 120.1-A or Table 120.1-C, and in accordance with the requirements of Sections 120.1(g)1 through 4.

Note: Air class definitions are taken directly from ASHRAE 62.1 and are duplicated here for convenience.

1. **Class 1 Air** is air with low contaminant concentration, low sensory-irritation intensity or inoffensive odor. Recirculation or transfer of Class 1 air to any space shall be permitted; [ASHRAE 62.1:5.16.3.1]

2. **Class 2 Air** is air with moderate contaminant concentration, mild sensory-irritation intensity or mildly offensive odors (Class 2 air also includes air that is not necessarily harmful or objectionable but that is inappropriate for transfer or recirculation to spaces used for different purposes). Recirculation or transfer of Class 2 air shall be permitted in accordance with Sections 120.1(g)2A through 120.1(g)2E:

A. Recirculation of Class 2 air within the space of origin shall be permitted [ASHRAE 62.1:5.16.3.2.1];

B. Recirculation or transfer of Class 2 to other Class 2 or Class 3 spaces shall be permitted, provided that the other spaces are used for the same or similar purpose or task and involve the same or similar pollutant sources as the Class 2 space [ASHRAE 62.1:5.16.3.2.2]; or

C. Transfer of Class 2 air to toilet rooms [ASHRAE 62.1:5.16.3.2.3]; or

D. Recirculation or transfer of Class 2 air to Class 4 spaces [ASHRAE 62.1:5.16.3.2.4]; or

E. Class 2 air shall not be recirculated or transferred to Class 1 spaces. [ASHRAE 62.1:5.16.3.2.5]

Exception to Section 120.1(g)2E: When using any energy recovery device, recirculation from leakage, carryover, or transfer from the exhaust side of the energy recovery device is permitted. Recirculated Class 2 air shall not exceed 10 percent of the outdoor air intake flow.

3. **Class 3 Air** is air with significant contaminant concentration, significant sensory-irritation intensity or offensive odor. Recirculation or transfer of Class 3 air shall be permitted in accordance with 120.1(g)3A and B:

   A. Recirculation of Class 3 air within the space of origin shall be permitted. [ASHRAE 62.1:5.16.3.3.1]

   B. Class 3 air shall not be recirculated or transferred to any other space. [ASHRAE 62.1:5.16.3.3.2].

   Exception to Section 120.1(g)3B: When using any energy recovery device, recirculation from leakage, carryover, or transfer from the exhaust side of the energy recovery device is permitted. Recirculated Class 3 air shall not exceed 5 percent of the outdoor air intake flow.

4. **Class 4 Air** is air with highly objectionable fumes or gases or with potentially dangerous particles, bioaerosols, or gases at concentrations high enough to be considered as harmful. Class 4 air shall not be recirculated or transferred to any space or recirculated within the space of origin. [ASHRAE 62.1:5.16.3.4]

5. **Ancillary spaces.** Redesignation of Class 1 air to Class 2 air shall be permitted for Class 1 spaces that are ancillary to Class 2 spaces. [ASHRAE 62.1:5.16.2.3]

6. **Transfer.** A mixture of air that has been transferred through or returned from spaces or locations with different air classes shall be redesignated with the highest classification among the air classes mixed. [ASHRAE 62.1:5.16.2.2]

7. **Classification.** Air leaving each space or location shall be designated at an expected air-quality classification not less than that shown in Tables 120.1-A, 120.1-B or 120.1-C. Air leaving spaces or locations that are not listed in Tables 120.1-A, 120.1-B or 120.1-C shall be designated with the same classification as air from the most similar space or location listed in terms of occupant activities and building construction.

(h) **Ventilation only mechanical systems.** HVAC systems without mechanical cooling or mechanical heating shall meet the requirements of Section 120.2(f).

TABLE 120.1-A– Minimum Ventilation Rates

Occupancy Category	Total Outdoor Air Rate[1] R_t (cfm/ft^2)	Min Ventilation Air Rate for DCV R_a (cfm/ft^2)	Air Class	Notes
Educational Facilities				
Daycare (through age 4)	0.21	0.15	2	
Daycare sickroom	0.15		3	
Classrooms (ages 5-8)	0.38	0.15	1	
Classrooms (age 9 -18)	0.38	0.15	1	
Lecture/postsecondary classroom	0.38	0.15	1	F
Lecture hall (fixed seats)	-	0.15	1	F
Art classroom	0.15		2	
Science laboratories	0.15		2	
University/college laboratories	0.15		2	
Wood/metal shop	0.15		2	
Computer lab	0.15		1	
Media center	0.15		1	A
Music/theater/dance	1.07	0.15	1	F
Multiuse assembly	0.5	0.15	1	F

Occupancy Category	Total Outdoor Airflow Rate[1] R_t cfm/ft²	Min Ventilation Air Rate for DCV R_a (cfm/ft²)	Air Class	Notes
Food and Beverage Service				
Restaurant dining rooms	0.5	0.15	2	
Cafeteria/fast-food dining	0.5	0.15	2	
Bars, cocktail lounges	0.5	0.2	2	
Kitchen (cooking)	0.15		2	
General				
Break rooms	0.5	0.15	1	F
Coffee Stations	0.5	0.15	1	F
Conference/meeting	0.5	0.15	1	F
Corridors	0.15		1	F
Occupiable storage rooms for liquids or gels	0.15		2	B
Hotels, Motels, Resorts, Dormitories				
Bedroom/living room	0.15		1	F
Barracks sleeping areas	0.15		1	F
Laundry rooms, central	0.15		2	
Laundry rooms within dwelling units	0.15		1	
Lobbies/pre-function	0.5	0.15	1	F
Multipurpose assembly	0.5		1	F
Office Buildings				
Breakrooms	0.5	0.15	1	
Main entry lobbies	0.5	0.15	1	F
Occupiable storage rooms for dry materials	0.15		1	
Office space	0.15		1	F
Reception areas	0.15		1	F
Telephone/data entry	0.15		1	F
Miscellaneous Spaces				
Bank vaults/safe deposit	0.15		2	F
Banks or bank lobbies	0.15		1	F
Computer (not printing)	0.15		1	F
Freezer and refrigerated spaces (<50oF)	-		2	E
General manufacturing (excludes heavy industrial and process using chemicals)	0.15		3	

Occupancy Category	Total Outdoor Airflow Rate[1] R_t cfm/ft^2	Min Ventilation Air Rate for DCV R_a (cfm/ft^2)	Air Class	Notes
Pharmacy (prep. Area)	0.15		2	
Photo studios	0.15		1	
Shipping/receiving	0.15		2	B
Sorting, packing, light assembly	0.15		2	
Telephone closets	0.15		1	
Transportation waiting	0.5	0.15	1	F
Warehouses	0.15		2	B
All others	0.15		2	
Public Assembly Spaces				
Auditorium seating area	1.07	0.15	1	F
Places of religious worship	1.07	0.15	1	F
Courtrooms	0.19	0.15	1	F
Legislative chambers	0.19	0.15	1	F
Libraries (reading rooms and stack areas)	0.15		1	
Lobbies	0.5	0.15	1	F
Museums (children's)	0.25	0.15	1	
Museums/galleries	0.25	0.15	1	F
Residential				
Common corridors	0.15		1	F
Retail				
Sales (except as below)	0.25	0.2	2	
Mall common areas	0.25	0.15	1	F
Barbershop	0.4		2	
Beauty and nail salons	0.4		2	
Pet shops (animal areas)	0.25	0.15	2	
Supermarket	0.25	0.2	1	F
Coin-operated laundries	0.3		2	
Sports and Entertainment				
Gym, sports arena (play area)	0.5	0.15	2	E
Spectator areas	0.5	0.15	1	F
Swimming (pool)	0.15		2	C

Occupancy Category	Total Outdoor Airflow Rate[1] R_t cfm/ft²	Min Ventilation Air Rate for DCV R_a (cfm/ft²)	Air Class	Notes
Swimming (deck)	0.5	0.15	2	C
Disco/dance floors	1.5	0.15	2	F
Health club/aerobics room	0.15		2	
Health club/weight rooms	0.15		2	
Bowling alley (seating)	1.07	0.15	1	
Gambling casinos	0.68	0.15	1	
Game arcades	0.68	0.15	1	
Stages, studios	0.5	0.15	1	D, F

General footnotes for Table 120.1-A:

[1] R_t is determined as being the larger of the area method and the default per person method. The occupant density used in the default per person method is one half of the maximum occupant load assumed for egress purposes in the CBC.

Specific Notes:

A – For high-school and college libraries, the values shown for "Public Assembly Spaces – Libraries" shall be used.

B – Rate may not be sufficient where stored materials include those having potentially harmful emissions.

C – Rate does not allow for humidity control. "Deck area" refers to the area surrounding the pool that is capable of being wetted during pool use or when the pool is occupied. Deck area that is not expected to be wetted shall be designated as an occupancy category.

D – Rate does not include special exhaust for stage effects such as dry ice vapors and smoke.

E – Where combustion equipment is intended to be used on the playing surface or in the space, additional dilution ventilation, source control, or both shall be provided.

F – Ventilation air for this occupancy category shall be permitted to be reduced to zero when the space is in occupied-standby mode.

Table 120.1-B – Minimum Exhaust Rates

[ASHRAE 62.1: Table 6.5]

Occupancy Category	Exhaust Rate, cfm/unit	Exhaust Rate, cfm/ft^2	Air Class	Notes
Arenas	-	0.50	1	B
Art classrooms	-	0.70	2	
Auto repair rooms	-	1.5	2	A
Barber shops	-	0.50	2	
Beauty and nail salons	-	0.60	2	
Cells with toilet	-	1.00	2	
Copy, printing rooms	-	0.50	2	
Darkrooms	-	1.00	2	
Educational science laboratories	-	1.00	2	
Janitor closets, trash rooms, recycling	-	1.00	3	
Kitchenettes	-	0.30	2	
Kitchens – commercial	-	0.70	2	
Locker rooms for athletic or industrial facilities	-	0.50	2	
All other locker rooms	-	0.25	2	
Shower rooms	20/50	-	2	G,H
Paint spray booths	-	-	4	F
Parking garages	-	0.75	2	C
Pet shops (animal areas)	-	0.90	2	
Refrigerating machinery rooms	-	-	3	F
Soiled laundry storage rooms	-	1.00	3	F
Storage rooms, chemical	-	1.50	4	F
Toilets – private	25/50	-	2	E
Toilets – public	50/70	-	2	D
Woodwork shop/classrooms	-	0.50	2	

Notes:
A – Stands where engines are run shall have exhaust systems that directly connect to the engine exhaust and prevent escape of fumes.
B – Where combustion equipment is intended to be used on the playing surface, additional dilution ventilation, source control, or both shall be provided.
C – Exhaust shall not be required where two or more sides comprise walls that are at least 50% open to the outside.
D – Rate is per water closet, urinal, or both. Provide the higher rate where periods of heavy use are expected to occur. The lower rate shall be permitted to be used otherwise.
E – Rate is for a toilet room intended to be occupied by one person at a time. For continuous systems operation during hours of use, the lower rate shall be permitted to be used. Otherwise the higher rate shall be used.
F – See other applicable standards for exhaust rate.
G – For continuous system operation, the lower rate shall be permitted to be used. Otherwise the higher rate shall be used.
H – Rate is per showerhead

Table 120.1-C – Airstreams or Sources

[ASHRAE 62.1:Table 5.16.1]

Description	Air Class
Diazo printing equipment discharge	4
Commercial kitchen grease hoods	4
Commercial kitchen hoods other than grease	3
Laboratory hoods	4[a]
Hydraulic elevator machine room	2

a. Air Class 4 unless determined otherwise by the Environmental Health and Safety professional responsible to the owner or to the owner's designee.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 120.2 – REQUIRED CONTROLS FOR SPACE-CONDITIONING SYSTEMS

Nonresidential and hotel/motel buildings shall comply with the applicable requirements of Sections 120.2(a) through 120.2(k).

(a) **Thermostatic controls for each zone.** The supply of heating and cooling energy to each space-conditioning zone or dwelling unit shall be controlled by an individual thermostatic control that responds to temperature within the zone and that meets the applicable requirements of Section 120.2(b). An Energy Management Control System (EMCS) may be installed to comply with the requirements of one or more thermostatic controls if it complies with all applicable requirements for each thermostatic control.

Exception to Section 120.2(a): An independent perimeter heating or cooling system may serve more than one zone without individual thermostatic controls if:

1. All zones are also served by an interior cooling system; and
2. The perimeter system is designed solely to offset envelope heat losses or gains; and
3. The perimeter system has at least one thermostatic control for each building orientation of 50 feet or more; and
4. The perimeter system is controlled by at least one thermostat located in one of the zones served by the system.

(b) **Criteria for zonal thermostatic controls.** The individual thermostatic controls required by Section 120.2(a) shall meet the following requirements as applicable:

1. Where used to control comfort heating, the thermostatic controls shall be capable of being set, locally or remotely, down to 55°F or lower.
2. Where used to control comfort cooling, the thermostatic controls shall be capable of being set, locally or remotely, up to 85°F or higher.
3. Where used to control both comfort heating and comfort cooling, the thermostatic controls shall meet Items 1 and 2 and shall be capable of providing a temperature range or dead band of at least 5°F within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum.

   Exception 1 to Section 120.2(b)3: Systems with thermostats that require manual changeover between heating and cooling modes.

   Exception 2 to Section 120.2(b)3: Systems serving healthcare facilities.
4. Thermostatic controls for all single zone, air conditioners and heat pumps shall comply with the requirements of Sections 110.2(c) and 110.12(a) and, if equipped with DDC to the Zone level, with the Automatic Demand Shed Controls of Section 110.12(b).

   Exception 1 to Section 120.2(b)4: Systems serving exempt process loads that must have constant temperatures to prevent degradation of materials, a process, plants or animals.

   Exception 2 to Section 120.2(b)4: Package terminal air conditioners, package terminal heat pumps, room air conditioners and room air conditioner heat pumps.

   Exception **3 to Section 120.2(b)4:** Systems serving healthcare facilities.

(c) **Hotel/motel guest room thermostats.**

1. Hotel/motel guest room thermostats shall:
   A. Have numeric temperature setpoints in °F and °C; and
   B. Have setpoint stops, which are accessible only to authorized personnel, such that guest room occupants cannot adjust the setpoint more than ±5°F (±3°C); and
   C. Meet the requirements of Section 110.2(c).

Exception to Section 120.2(c)1: Thermostats that are integrated into the room heating and cooling equipment.

(d) **Heat pump controls.** All heat pumps with supplementary electric resistance heaters shall be installed with controls that comply with Section 110.2(b).

(e) **Shut-off and reset controls for space-conditioning systems.** Each space-conditioning system shall be installed with controls that comply with the following:

1. The control shall be capable of automatically shutting off the system during periods of nonuse and shall have:

   A. An automatic time switch control device complying with Section 110.9 with an accessible manual override that allows operation of the system for up to 4 hours; or

   B. An occupancy sensor; or

   C. A 4-hour timer that can be manually operated.

   Exception to Section 120.2(e)1: Mechanical systems serving retail stores and associated malls, restaurants, grocery stores, churches and theaters equipped with 7-day programmable timers.

2. The control shall automatically restart and temporarily operate the system as required to maintain:

   A. A setback heating thermostat setpoint if the system provides mechanical heating; and

      Exception to Section 120.2(e)2A: Thermostat setback controls are not required in nonresidential buildings in areas where the Winter Median of Extremes outdoor air temperature determined in accordance with Section 140.4(b)3 is greater than 32°F.

   B. A setup cooling thermostat setpoint if the system provides mechanical cooling.

      Exception to Section 120.2(e)2B: Thermostat setup controls are not required in nonresidential buildings in areas where the Summer Design Dry Bulb 0.5 percent temperature determined in accordance with Section 140.4(b)3 is less than 100°F.

3. **Occupant sensing zone controls.** Where the system providing space conditioning also provides the ventilation required by Section 120.1 and includes occupant sensor ventilation control as specified in Section 120.1(d)5, the occupant sensing zone controls shall additionally comply with the following:

   A. In 5 minutes or less after entering occupied-standby mode as described in Section 120.1(d).

      i. Automatically set up the operating cooling temperature set point by 2°F or more and set back the operating heating temperature set point by 2°F or more; or

      ii. For multiple zone systems with Direct Digital Controls (DDC) to the zone level, setup the operating cooling temperature setpoint by 0.5°F or more and setback the operating heating temperature setpoint by 0.5°F or more.

   B. In 5 minutes or less after entering occupied-standby mode, mechanical ventilation to the zone shall remain off whenever the space temperature is between the active heating and cooling setpoints.

   Exception 1 to Sections 120.2(e)1, 2, 3: Where it can be demonstrated to the satisfaction of the enforcing agency that the system serves an area that must operate continuously.

   Exception 2 to Sections 120.2(e)1, 2, 3: Systems with full load demands of 2 kW or less, if they have a readily accessible manual shut-off switch.

   Exception 3 to Sections 120.2(e) 1 and 2: Systems serving hotel/motel guest rooms, if they have a readily accessible manual shut-off switch.

4. Hotel and motel guest rooms shall have captive card key controls, occupancy sensing controls or automatic controls such that, no longer than 30 minutes after the guest room has been vacated, setpoints are set up at least +5°F (+3°C) in cooling mode and set down at least -5°F (-3°C) in heating mode.

Exception **to Section 120.2(e):** Systems serving healthcare facilities.

(f) **Dampers for air supply and exhaust equipment.** Outdoor air supply and exhaust equipment shall be installed with dampers that automatically close upon fan shutdown.

Exception 1 to Section 120.2(f): Equipment that serves an area that must operate continuously.

Exception 2 to Section 120.2(f): Gravity and other nonelectrical equipment that has readily accessible manual damper controls.

Exception 3 to Section 120.2(f): At combustion air intakes and shaft vents.

Exception 4 to Section 120.2(f): Where prohibited by other provisions of law.

(g) **Isolation area devices.** Each space-conditioning system serving multiple zones with a combined conditioned floor area of more than 25,000 square feet shall be designed, installed, and controlled to serve isolation areas.

1. Each zone, or any combination of zones not exceeding 25,000 square feet, shall be a separate isolation area.
2. Each isolation area shall be provided with isolation devices, such as valves or dampers, that allow the supply of heating or cooling to be reduced or shut off independently of other isolation areas.
3. Each isolation area shall be controlled by a device meeting the requirements of Section 120.2(e)1.

Exception to Section 120.2(g): Zones designed to be conditioned continuously.

(h) **Automatic demand shed controls.** See Section 110.12 for requirements for automatic demand shed controls.

(i) **Economizer fault detection and diagnostics (FDD).** All newly installed air handlers with a mechanical cooling capacity over 33,000 Btu/hr and an installed air economizer shall include a stand-alone or integrated Fault Detection and Diagnostics (FDD) system in accordance with Subsections 120.2(i)1 through 120.2(i)8.

1. The following temperature sensors shall be permanently installed to monitor system operation: outside air, supply air, and when required for differential economizer operation a return air sensor, and
2. Temperature sensors shall have an accuracy of ±2°F over the range of 40°F to 80°F; and
3. The controller shall have the capability of displaying the value of each sensor; and
4. The controller shall provide system status by indicating the following conditions:
    A. Free cooling available;
    B. Economizer enabled;
    C. Compressor enabled;
    D. Heating enabled, if the system is capable of heating; and
    E. Mixed-air low limit cycle active.
5. The unit controller shall allow manual initiation of each operating mode so that the operation of cooling systems, economizers, fans and heating system can be independently tested and verified; and
6. Faults shall be reported in one of the following ways:
    A. Reported to an Energy Management Control System regularly monitored by facility personnel.
    B. Annunciated locally on one or more zone thermostats, or a device within five (5) feet of zone thermostat(s), clearly visible, at eye level, and meeting the following requirements:
        i. On the thermostat, device, or an adjacent written sign, display instructions to contact appropriate building personnel or an HVAC technician; and
            ii. In buildings with multiple tenants, the annunciation shall either be within property management offices or in a common space accessible by the property or building manager.

C. Reported to a fault management application which automatically provides notification of the fault to a remote HVAC service provider.

7. The FDD system shall detect the following faults:

   A. Air temperature sensor failure/fault;

   B. Not economizing when it should;

   C. Economizing when it should not;

   D. Damper not modulating; and

   E. Excess outdoor air.

8. The FDD System shall be certified by the Energy Commission as meeting requirements of Subsections 120.2(i)1 through 120.2(i)7 in accordance with Section 110.0 and JA6.3.

   Exception to Section 120.2(i)8: FDD algorithms based in direct digital control systems are not required to be certified to the Energy Commission.

(j) **Direct Digital Controls (DDC)**. Direct Digital Controls to the zone shall be provided as specified by Table 120.2-A. The provided DDC system shall meet the control logic requirements of Sections 120.1(d), 110.12(a) and 110.12(b), and be capable of the following:

1. Monitoring zone and system demand for fan pressure, pump pressure, heating and cooling;
2. Transferring zone and system demand information from zones to air distribution system controllers and from air distribution systems to heating and cooling plant controllers;
3. Automatically detecting the zones and systems that may be excessively driving the reset logic and generate an alarm or other indication to the system operator;
4. Readily allow operator removal of zone(s) from the reset algorithm;
5. For new buildings, trending and graphically displaying input and output points; and
6. Resetting heating and cooling setpoints in all noncritical zones upon receipt of a signal from a centralized contact or software point as described in Section 110.12(b).

Table 120.2-A DDC Applications and Qualifications

Building Status	Applications	Qualifications
Newly Constructed Buildings	Air-handling system and all zones served by the system	Individual systems supplying more than three zones and with design heating or cooling capacity of 300 kBtu/h and larger
Newly Constructed Buildings	Chilled water plant and all coils and terminal units served by the system	Individual plants supplying more than three zones and with design cooling capacity of 300 kBtu/h (87.9 kW) and larger
Newly Constructed Buildings	Hot water plant and all coils and terminal units served by the system	Individual plants supplying more than three zones and with design heating capacity of 300 kBtu/h (87.9 kW) and larger
Additions or Alterations	Zone terminal unit such as VAV box	Where existing zones served by the same air-handling, chilled water, or hot water systems that have DDC
Additions or Alterations	Air-handling system or fan coil	Where existing air-handling system(s) and fan coil(s) served by the same chilled or hot water plant have DDC
Additions or Alterations	New air-handling system and all new zones served by the system	Individual systems with design heating or cooling capacity of 300 kBtu/h and larger and supplying more than three zones and more than 75 percent of zones are new
Additions or Alterations	New or upgraded chilled water plant	Where all chillers are new and plant design cooling capacity is 300 kBtu/h (87.9 kW) and larger
Additions or Alterations	New or upgraded hot water plant	Where all boilers are new and plant design heating capacity is 300 kBtu/h (87.9 kW) and larger

(k) **Optimum start/stop controls.** Space conditioning systems with DDC to the zone level shall have optimum start/stop controls. The control algorithm shall, as a minimum, be a function of the difference between space temperature and occupied setpoint, the outdoor air temperature, and the amount of time prior to scheduled occupancy. Mass radiant floor slab systems shall incorporate floor temperature onto the optimum start algorithm.

Exception to Section 120.2(k): Systems that must operate continuously.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 120.3 – REQUIREMENTS FOR PIPE INSULATION

Nonresidential and hotel/motel buildings shall comply with the applicable requirements of Sections 120.3(a) through 120.3(c).

(a) **General requirements.** The piping conditions listed below for space-conditioning and service water-heating systems with fluid normal operating temperatures listed in Table 120.3-A, shall have at least the amount of insulation specified in Subsection (c):

1. **Space cooling systems.** All refrigerant suction, chilled water, and brine fluid distribution systems.
2. **Space heating systems.** All refrigerant, steam, steam condensate and hot water fluid distribution systems.
3. **Service water-heating systems.**
   A. Recirculating system piping, including the supply and return piping to the water heater.
   B. The first 8 feet of hot and cold outlet piping, including piping between a storage tank and a heat trap, for a nonrecirculating storage system.
   C. Pipes that are externally heated.

Insulation conductivity shall be determined in accordance with ASTM C335 at the mean temperature listed in Table 120.3-A, and shall be rounded to the nearest 1/100 Btu-inch per hour per square foot per °F. Fluid distribution systems include all elements that are in series with the fluid flow, such as pipes, pumps, valves, strainers, coil u-bends, and air separators, but not including elements that are not in series with the fluid flow, such as expansion tanks, fill lines, chemical feeders, and drains.

Exception to Section 120.3(a)2: Heat pump refrigerant vapor line shall be installed with a minimum of 0.5 inch thick or R-3.0 insulation for nonresidential buildings and 0.75 inch thick or R-6.0 insulation for residential buildings. No insulation is required on the refrigerant liquid line.

(b) **Insulation protection.** Pipe insulation shall be protected from damage due to sunlight, moisture, equipment maintenance and wind. Protection shall, at minimum, include the following:

1. Pipe insulation exposed to weather shall be protected by a cover suitable for outdoor service. The cover shall be water retardant and provides shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be used to provide this protection.
2. Pipe insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall include, or be protected by, a Class I or Class II vapor retarder. All penetrations and joints shall be sealed.
3. Pipe insulation buried below grade must be installed in a water proof and noncrushable casing or sleeve.

(c) **Insulation thickness**

1. For insulation with a conductivity in the range shown in Table 120.3-A for the applicable fluid temperature range, the insulation shall have the applicable minimum thickness or R-value shown in Table 120.3-A.
2. For insulation with a conductivity outside the range shown in Table 120.3-A for the applicable fluid temperature range, the insulation shall have a minimum R-value shown in Table 120.3-A or thickness as calculated:

MINIMUM INSULATION THICKNESS EQUATION

$$T = PR\left[\left(1 + \frac{t}{PR}\right)^{\frac{K}{k}} - 1\right]$$

WHERE:

T = insulation thickness for material with conductivity K, inches.

PR = actual outside radius, inches.

t = Insulation thickness from Table 120.3-A, inches.

K = Conductivity of alternate material at the mean rating temperature indicated in Table 120.3-A for the applicable fluid temperature range, in Btu-inch per hour per square foot per °F.

k = The lower value of the conductivity range listed in Table 120.3-A for the applicable fluid temperature range, Btu-inch per hour per square foot per °F.

Table 120.3-A PIPE INSULATION THICKNESS

Fluid Operating Temperature Range (°F)	Insulation Conductivity			Nominal Pipe Diameter (in inches)				
	Conductivity (in Btu·in/h·ft²·°F)	Mean Rating Temperature (°F)		< 1	1 to <1.5	1.5 to < 4	4 to < 8	8 and larger
Space heating and Service Water Heating Systems (Steam, Steam Condensate, Refrigerant, Space Heating, Service Hot Water)				**Minimum Pipe Insulation Required (Thickness in inches or R-value)**				
Above 350	0.32-0.34	250	Inches	4.5	5.0	5.0	5.0	5.0
			R-value	R 37	R 41	R 37	R 27	R 23
251-350	0.29-0.32	200	Inches	3.0	4.0	4.5	4.5	4.5
			R-value	R 24	R 34	R 35	R 26	R 22
201-250	0.27-0.30	150	Inches	2.5	2.5	2.5	3.0	3.0
			R-value	R 21	R 20	R 17.5	R 17	R 14.5
141-200	0.25-0.29	125	Inches	1.5	1.5	2.0	2.0	2.0
			R-value	R 11.5	R 11	R 14	R 11	R 10
105-140	0.22-0.28	100	Inches	1.0	1.5	1.5	1.5	1.5
			R-value	R 7.7	R 12.5	R 11	R 9	R 8
Fluid Operating Temperature Range (°F)	**Insulation Conductivity**			**Nominal Pipe Diameter (in inches)**				
	Conductivity (in Btu·in/h·ft2·°F)	**Mean Rating Temperature (°F)**		**< 1**	**1 to <1.5**	**1.5 to < 4**	**4 to < 8**	**8 and larger**
Space cooling systems (chilled water, refrigerant and brine)				**Minimum Pipe Insulation Required (Thickness in inches or R-value)[1]**				
40-60	0.21-0.27	75	Inches	Nonres 0.5 / Res 0.75	Nonres 0.5 / Res 0.75	1.0	1.0	1.0
			R-value	Nonres R 3 / Res R 6	Nonres R 3 / Res R 5	R 7	R 6	R 5
Below 40	0.20-0.26	50	Inches	1.0	1.5	1.5	1.5	1.5
			R-value	R 8.5	R 14	R 12	R 10	R 9

Footnote to Table 120.3-A:

1. These thickness are based on energy efficiency considerations only. Issues such as water vapor permeability or surface condensation sometimes require vapor retarders or additional insulation.

Exception 1 to Section 120.3: Factory-installed piping within space-conditioning equipment certified under Section 110.1 or 110.2.

Exception 2 to Section 120.3: Piping that conveys fluids with a design operating temperature range between 60°F and 105°F.

Exception 3 to Section 120.3: Where the heat gain or heat loss to or from piping without insulation will not increase building source energy use.

Exception 4 to Section 120.3: Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Metal piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 120.4 – REQUIREMENTS FOR AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS

Nonresidential and hotel/motel buildings shall comply with the applicable requirements of Sections 120.4(a) through 120.4(g).

Exception **to Section 120.4:** Systems serving healthcare facilities shall comply with the applicable requirements of the California Mechanical Code.

(a) **CMC compliance.** All air distribution system ducts and plenums, including but not limited to building cavities, mechanical closets, air-handler boxes and support platforms used as ducts or plenums, shall meet the requirements of the CMC Sections 601.0, 602.0, 603.0, 604.0, and 605.0, and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible, 3rd Edition incorporated herein by reference. Connections of metal ducts and the inner core of flexible ducts shall be mechanically fastened. Openings shall be sealed with mastic, tape, aerosol sealant or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used.

Portions of supply-air and return-air ducts conveying heated or cooled air located in one or more of the following spaces shall be insulated to a minimum installed level of R-8:

1. Outdoors; or
2. In a space between the roof and an insulated ceiling; or
3. In a space directly under a roof with fixed vents or openings to the outside or unconditioned spaces; or
4. In an unconditioned crawlspace; or
5. In other unconditioned spaces.

Portions of supply-air ducts that are not in one of these spaces, including ducts buried in concrete slab, shall be insulated to a minimum installed level of R-4.2 or be enclosed in directly conditioned space.

(b) **Duct and plenum materials.**

1. **Factory-fabricated duct systems.**
   A. All factory-fabricated duct systems shall comply with UL 181 for ducts and closure systems, including collars, connections and splices, and be labeled as complying with UL 181. UL 181 testing may be performed by UL laboratories or a laboratory approved by the Executive Director.
   B. All pressure-sensitive tapes, heat-activated tapes, and mastics used in the manufacture of rigid fiberglass ducts shall comply with UL 181 and UL 181A.
   C. All pressure-sensitive tapes and mastics used with flexible ducts shall comply with UL 181 and UL 181B.
   D. All ductwork and plenums with pressure class ratings shall be constructed to Seal Class A. Joints and seams of duct systems and their components shall not be sealed with cloth-back rubber adhesive duct tapes unless such tape is used in combination with mastic and drawbands.

      Exception to Section 120.4(b)1D: Ductwork located in occupied space and exposed to view is not required to meet Seal Class A.

2. **Field-fabricated duct systems.**
   A. Factory-made rigid fiberglass and flexible ducts for field-fabricated duct systems shall comply with UL 181. All pressure-sensitive tapes, mastics, aerosol sealants or other closure systems used for installing field-fabricated duct systems shall meet the applicable requirements of UL 181, UL 181A and UL 181B.
   B. **Mastic sealants and mesh.**

i. Sealants shall comply with the applicable requirements of UL 181, UL 181A and UL 181B, and be nontoxic and water resistant.

ii. Sealants for interior applications shall pass ASTM C731 (extrudability after aging) and D2202 (slump test on vertical surfaces), incorporated herein by reference.

iii. Sealants for exterior applications shall pass ASTM tests C731, C732 (artificial weathering test), and D2202, incorporated herein by reference.

iv. Sealants and meshes shall be rated for exterior use.

C. **Pressure-sensitive tape.** Pressure-sensitive tapes shall comply with the applicable requirements of UL 181, UL 181A and UL 181B.

D. All ductwork and plenums with pressure class ratings shall be constructed to Seal Class A. Joints and seams of duct systems and their components shall not be sealed with cloth-back rubber adhesive duct tapes unless such tape is used in combination with mastic and drawbands.

Exception to Section 120.4(b)2D: Ductwork located in occupied space and exposed to view is not required to meet Seal Class A.

E. **Drawbands used with flexible duct.**

i. Drawbands shall be either stainless-steel worm-drive hose clamps or UV-resistant nylon duct ties.

ii. Drawbands shall have a minimum tensile strength rating of 150 pounds.

iii. Drawbands shall be tightened as recommended by the manufacturer with an adjustable tensioning tool.

F. **Aerosol-sealant closures.**

i. Aerosol sealants shall meet the requirements of UL 723 and be applied according to manufacturer specifications.

ii. Tapes or mastics used in combination with aerosol sealing shall meet the requirements of this section.

(c) All duct insulation product R-values shall be based on insulation only (excluding air films, vapor retarders or other duct components) and tested C-values at 75°F mean temperature at the installed thickness, in accordance with ASTM C518 or ASTM C177, incorporated herein by reference, and certified pursuant to Section 110.8.

(d) The installed thickness of duct insulation used to determine its R-value shall be determined as follows:

1. For duct board, duct liner and factory-made rigid ducts not normally subjected to compression, the nominal insulation thickness shall be used.

2. For duct wrap, installed thickness shall be assumed to be 75 percent (25 percent compression) of nominal thickness.

3. For factory-made flexible air ducts, the installed thickness shall be determined by dividing the difference between the actual outside diameter and nominal inside diameter by two.

(e) Insulated flexible duct products installed to meet this requirement must include labels, in maximum intervals of 3 feet, showing the thermal performance R-value for the duct insulation itself (excluding air films, vapor retarder or other duct components), based on the tests in Section 120.4(c) and the installed thickness determined by Section 120.4(d)3.

(f) **Protection of insulation.** Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance and wind, but not limited to the following:

Insulation exposed to weather shall be suitable for outdoor service, e.g., protected by aluminum, sheet metal, painted canvas or plastic cover. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.

(g) **Duct sealing.** Duct systems shall comply with Subsection 1 or 2 below:

1. New duct systems that meet the criteria in Subsections A, B, C and D below shall be sealed to a leakage rate not to exceed 6 percent of the nominal air handler airflow rate as confirmed through HERS field verification and diagnostic testing, in accordance with Reference Nonresidential Appendix NA7.5.3;
    A. The duct system does not serve a healthcare facility; and
    B. The duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system; and
    C. The space-conditioning system serves less than 5,000 square feet of conditioned floor area; and
    D. The combined surface area of the ducts located outdoors or in unconditioned space is more than 25 percent of the total surface area of the entire duct system.
2. New duct systems that are not subject to testing under Section 120.4(g)1 shall instead meet the duct leakage testing requirements of CMC Section 603.10.1.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 120.5 – REQUIRED NONRESIDENTIAL MECHANICAL SYSTEM ACCEPTANCE

Nonresidential and hotel/motel buildings shall comply with the applicable requirements of Sections 120.5(a) through 120.5(b).

Exception **to Section 120.5:** Systems serving healthcare facilities.

(a) Before an occupancy permit is granted, the following equipment and systems shall be certified as meeting the Acceptance Requirements for Code Compliance, as specified by the Reference Nonresidential Appendix NA7. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements:

1. Outdoor air ventilation systems shall be tested in accordance with NA7.5.1.
2. Constant volume, single zone air conditioning and heat pump unit controls shall be tested in accordance with NA7.5.2.
3. Duct systems that are subject to testing under Section 120.4(g)1, Section 141.0(b)2Di or Section 141.0(b)2Dii shall be tested in accordance with NA7.5.3.
4. Air economizers shall be tested in accordance with NA7.5.4.

   Exception to Section 120.5(a)4: Air economizers installed by the HVAC system manufacturer and certified to the Commission as being factory calibrated and tested are exempt from the Functional Testing section of the air economizer controls acceptance test as described in NA7.5.4.2.
5. Demand control ventilation systems required by Section 120.1(c)3 shall be tested in accordance with NA7.5.5.
6. Supply fan variable flow controls shall be tested in accordance with NA7.5.6.
7. Hydronic system variable flow controls shall be tested in accordance with NA7.5.7 and NA7.5.9.
8. Boiler or chillers that require isolation controls as specified by Section 140.4(k)2 or 140.4(k)3 shall be tested in accordance with NA7.5.7.
9. Hydronic systems with supply water temperature reset controls shall be tested in accordance with NA7.5.8.
10. Automatic demand shed controls shall be tested in accordance with NA7.5.10.
11. Fault Detection and Diagnostics (FDD) for Packaged Direct-Expansion Units shall be tested in accordance with NA7.5.11.
12. Automatic fault detection and diagnostics (FDD) for air handling units and zone terminal units shall be tested in accordance with NA7.5.12.
13. Distributed Energy Storage DX AC Systems shall be tested in accordance with NA7.5.13.
14. Thermal Energy Storage (TES) Systems shall be tested in accordance with NA7.5.14.
15. Supply air temperature reset controls shall be tested in accordance with NA7.5.15.
16. Water-cooled chillers served by cooling towers with condenser water reset controls shall be tested in accordance with NA7.5.16.
17. When an energy management control system is installed, it shall functionally meet all of the applicable requirements of Part 6.
18. Occupant sensing zone controls shall be tested in accordance with NA7.5.17.

(b) When certification is required by Title 24, Part 1, Section 10-103.2, the acceptance testing specified by Section 120.5(a) shall be performed by a certified mechanical acceptance test technician (CMATT). If the CMATT is operating as an employee, the CMATT shall be employed by a certified mechanical acceptance test employer. The CMATT shall disclose on the certificate of acceptance a valid CMATT certification identification number issued by an approved acceptance test technician certification provider. The CMATT shall complete all certificate of acceptance documentation in accordance with the applicable requirements in Section 10-103(a)4.

Note: Authority cited: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, 25943, Public Resources Code.

SECTION 120.6 – MANDATORY REQUIREMENTS FOR COVERED PROCESSES

Nonresidential and hotel/motel buildings shall comply with the applicable requirements of Sections 120.6(a) through 120.6(g).

(a) **Mandatory requirements for refrigerated warehouses.**

Refrigerated warehouses that are greater than or equal to 3,000 square feet and refrigerated spaces with a sum total of 3,000 square feet or more that are served by the same refrigeration system shall meet the requirements of Section 120.6(a).

Refrigerated spaces that are less than 3,000 square feet shall meet the requirements of the Appliance Efficiency Regulations for walk-in coolers or freezers contained in the Appliance Efficiency Regulations (California Code of Regulations, Title 20, Sections 1601 through 1608).

1. **Insulation requirements.** Exterior surfaces of refrigerated warehouses shall be insulated at least to the R-values in Table 120.6-A.

TABLE 120.6-A REFRIGERATED WAREHOUSE INSULATION

SPACE	SURFACE	MINIMUM R-VALUE (ºF·hr·sf/Btu)
Freezers	Roof/Ceiling	R-40
Freezers	Wall	R-36
Freezers	Floor	R-35
Freezers	Floor with all heating from productive refrigeration capacity[1]	R-20
Coolers	Roof/Ceiling	R-28
Coolers	Wall	R-28

Footnote to TABLE 120.6-A:

[1]All underslab heating is provided by a heat exchanger that provides refrigerant subcooling or other means that result in productive refrigeration capacity on the associated refrigerated system.

2. **Underslab heating.** Electric resistance heat shall not be used for the purposes of underslab heating.

Exception to Section 120.6(a)2: Underslab heating systems controlled such that the electric resistance heat is thermostatically controlled and disabled during the summer on-peak period defined by the local electric utility.

3. **Evaporators.** New fan-powered evaporators used in coolers and freezers shall conform to the following:

A. Single phase fan motors less than 1 hp and less than 460 Volts in newly installed evaporators shall be electronically-commutated motors or shall have a minimum motor efficiency of 70 percent when rated in accordance with NEMA Standard MG 1-2006 at full load rating conditions.

B. Evaporator fans served either by a suction group with multiple compressors or by a single compressor with variable capacity capability shall be variable speed and the speed shall be controlled in response to space temperature or humidity.

Exception 1 to Section 120.6(a)3B: Addition, alteration or replacement of less than all of the evaporators in an existing refrigerated space that does not have speed-controlled evaporators.

Exception 2 to Section 120.6(a)3B: Coolers within refrigerated warehouses that maintain a controlled atmosphere for which a licensed engineer has certified that the types of products stored will require constant operation at 100 percent of the design airflow.

Exception 3 to Section 120.6(a)3B: Areas within refrigerated warehouses that are designed solely for the purpose of quick chilling/freezing of products, including but not limited to spaces with design cooling capacities of greater than 240 Btu/hr-ft^2 (2 tons per 100 square feet).

C. Evaporator fans served by a single compressor that does not have variable capacity shall utilize controls to reduce airflow by at least 40 percent for at least 75 percent of the time when the compressor is not running.

Exception to Section 120.6(a)3C: Areas within refrigerated warehouses that are designed solely for the purpose of quick chilling/freezing of products (space with design cooling capacities of greater than 240 Btu/hr-ft^2 (2 tons per 100 ft^2)).

4. **Condensers.** New fan-powered condensers on new refrigeration systems shall conform to the following:

A. Design saturated condensing temperatures for evaporative-cooled condensers and water-cooled condensers served by fluid coolers or cooling towers shall be less than or equal to:

i. The design wetbulb temperature plus 20°F in locations where the design wetbulb temperature is less than or equal to 76°F;

ii. The design wetbulb temperature plus 19°F in locations where the design wetbulb temperature is between 76°F and 78°F; or

iii. The design wetbulb temperature plus 18°F in locations were the design wetbulb temperature is greater than or equal to 78°F.

Exception 1 to Section 120.6(a)4A: Compressors and condensers on a refrigeration system for which more than 20 percent of the total design refrigeration cooling load is for quick chilling/freezing of products (space with design cooling capacities of greater than 240 Btu/hr-ft^2), or process refrigeration cooling for other than a refrigerated space.

B. Design saturated condensing temperatures for air-cooled condensers shall be less than or equal to:

i. The design drybulb temperature plus 10°F for systems serving freezers;

ii. The design drybulb temperature plus 15°F for systems serving coolers.

Exception 1 to Section 120.6(a)4B: Condensing units with a total compressor horsepower less than 100 HP.

Exception 2 to Section 120.6(a)4B: Compressors and condensers on a refrigeration system for which more than 20 percent of the total design refrigeration cooling load is for quick chilling/freezing of products (space with design cooling capacities of greater than 240 Btu/hr-ft^2), or process refrigeration cooling for other than a refrigerated space.

C. The saturated condensing temperature necessary for adiabatic condensers to reject the design total heat of rejection of a refrigeration system assuming dry mode performance shall be less than or equal to:

i. The design drybulb temperature plus 20°F for systems serving freezers;

ii. The design drybulb temperature plus 30°F for systems serving coolers.

Exception 1 to Section 120.6(a)4C: Compressors and condensers on a refrigeration system for which more than 20 percent of the total design refrigeration cooling load is for quick chilling/freezing of products (space with design cooling capacities of greater than 240 Btu/hr-ft^2 (2 tons per 100 ft^2)), or process refrigeration cooling for other than a refrigerated space.

D. All condenser fans for air-cooled condensers, evaporative-cooled condensers, adiabatic condensers, gas coolers, air or water fluid coolers or cooling towers shall be continuously variable speed, with the speed of all fans serving a common condenser high side controlled in unison.

E. The minimum condensing temperature setpoint shall be less than or equal to 70°F for systems utilizing air-cooled condensers, evaporative-cooled condensers, adiabatic condensers, gas coolers, air or water-cooled fluid coolers or cooling towers for heat rejection.

F. Condensing temperature reset. The condensing temperature set point of systems served by air-cooled condensers shall be reset in response to ambient drybulb temperature. The condensing temperature

set point of systems served by evaporative-cooled condensers or water-cooled condensers (via cooling towers or fluid coolers) shall be reset in response to ambient wetbulb temperatures. The condensing temperature set point for systems served by adiabatic condensers shall be reset in response to ambient drybulb temperature while operating in dry mode.

Exception 1 to Section 120.6(a)4F: Condensing temperature control strategies approved by the Executive Director that have been demonstrated to provide at least equal energy savings.

Exception 2 to Section 120.6(a)4F: Systems served by adiabatic condensers in Climate Zones 1, 3, 5, 12, 14 and 16.

G. Fan-powered condensers shall meet the condenser efficiency requirements listed in Table 120.6-B. Condenser efficiency is defined as the total heat of rejection (THR) capacity divided by all electrical input power including fan power at 100 percent fan speed, and power of spray pumps for evaporative condensers.

Exception to Section 120.6(a)4G: Adiabatic condensers with ammonia as refrigerant.

H. Air-cooled condensers shall have a fin density no greater than 10 fins per inch.

Exception to Section 120.6(a)4H: Micro-channel condensers.

Exception to Section 120.6(a)4: Transcritical CO_2 refrigeration systems.

Table 120.6-B FAN-POWERED CONDENSERS – MINIMUM EFFICIENCY REQUIREMENTS

CONDENSER TYPE	REFRIGERANT TYPE	MINIMUM EFFICIENCY	RATING CONDITION
Outdoor Evaporative-Cooled with THR Capacity > 8,000 MBH	All	350 Btuh/watt	100°F Saturated Condensing Temperature (SCT), 70°F Outdoor Wetbulb Temperature
Outdoor Evaporative-Cooled with THR Capacity < 8,000 MBH and Indoor Evaporative-Cooled	All	160 Btuh/watt	100°F Saturated Condensing Temperature (SCT), 70°F Outdoor Wetbulb Temperature
Outdoor Air-Cooled	Ammonia	75 Btuh/watt	105°F Saturated Condensing Temperature (SCT), 95°F Outdoor Drybulb Temperature
Outdoor Air-Cooled	Halocarbon	65 Btuh/watt	105°F Saturated Condensing Temperature (SCT), 95°F Outdoor Drybulb Temperature
Adiabatic Dry Mode	Halocarbon	45 Btuh/watt	105°F Saturated Condensing Temperature (SCT), 95°F Outdoor Drybulb Temperature
Indoor Air-Cooled	All	Exempt	Exempt

5. **Compressors.** Compressor systems utilized in refrigerated warehouses shall conform to the following:

A. Compressors serving refrigeration systems that are not transcritical CO_2 shall be designed to operate at a minimum condensing temperature of 70°F or less.

B. Compressors for transcritical CO_2 refrigeration systems shall be designed to operate at a minimum condensing temperature of 60°F or less.

Exception to Section 120.6(a)5B: Compressors with a design saturated suction temperature greater than or equal to 30°F shall be designed to operate at a minimum condensing temperature of 70°F or less.

C. New open-drive screw compressors in new refrigeration systems with a design saturated suction temperature (SST) of 28°F or lower that discharges to the system condenser pressure shall control compressor speed in response to the refrigeration load.

Exception 1 to Section 120.6(a)5C: Refrigeration plants with more than one dedicated compressor per suction group.

Exception 2 to Section 120.6(a)5C: Compressors and condensers on a refrigeration system for which more than 20 percent of the total design refrigeration cooling load is for quick chilling/ freezing of products (space with design cooling capacities of greater than 240 Btu/hr-ft^2 (2 tons per 100 ft^2)) or process refrigeration cooling for other than a refrigerated space.

D. New screw compressors with nominal electric motor power greater than 150 HP shall include the ability to automatically vary the compressor volume ratio (Vi) in response to operating pressures.

6. **Infiltration barriers.** Passageways between freezers and higher-temperature spaces, and passageways between coolers and nonrefrigerated spaces, shall have an infiltration barrier consisting of strip curtains, an automatically-closing door or an air curtain designed by the manufacturer for use in the passageway and temperature for which it is applied.

Exception 1 to Section 120.6(a)6: Openings with less than 16 square feet of opening area.

Exception 2 to Section 120.6(a)6: Dock doorways for trailers.

7. **Refrigerated warehouse acceptance.** Before an occupancy permit is granted for a new refrigerated warehouse, or before a new refrigeration system serving a refrigerated warehouse is operated for normal use, the following equipment and systems shall be certified as meeting the acceptance requirements for code compliance, as specified by the Reference Nonresidential Appendix NA7. A certificate of acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements:

A. Electric resistance underslab heating systems shall be tested in accordance with NA7.10.1.

B. Evaporators fan motor controls shall be tested in accordance with NA7.10.2.

C. Evaporative condensers shall be tested in accordance with NA7.10.3.1.

D. Air-Cooled condensers shall be tested in accordance with NA7.10.3.2.

E. Adiabatic condensers shall be tested in accordance with NA7.10.3.3.

F. Variable speed compressors shall be tested in accordance with NA7.10.4.

G. Transcritical CO_2 refrigeration systems shall be tested in accordance with NA7.20.1.

8. **Transcritical CO_2 gas coolers.** New fan-powered gas coolers on all new transcritical CO_2 refrigeration systems shall conform to the following:

A. Air-cooled gas coolers are prohibited in Climate Zones 9 through 15.

B. Design leaving gas temperature for air-cooled gas coolers shall be less than or equal to the design dry-bulb temperature plus 6°F.

Exception to Section 120.6(a)8B: Design leaving gas temperature for air-cooled gas coolers in Climate Zones 2, 4 and 8 shall be less than or equal to the design dry-bulb temperature plus 8°F.

C. Design leaving gas temperature for adiabatic gas coolers necessary to reject the design total heat of rejection of a refrigeration system assuming dry mode performance shall be less than or equal to the design dry-bulb temperature plus 15°F.

D. All gas cooler fans shall be continuously variable speed, with the speed of all fans serving a common condenser high side controlled in unison.

E. While operating below the critical point, the gas cooler pressure shall be controlled in accordance with Section 120.6(a)4F.

F. While operating above the critical point, the gas cooler pressure setpoint shall be reset based on ambient conditions such that the system efficiency is maximized.

G. The minimum condensing temperature setpoint shall be less than or equal to 60°F for systems utilizing air-cooled gas coolers, evaporative-cooled gas coolers, adiabatic gas coolers, air or water-cooled fluid coolers or cooling towers for heat rejection.

Exception to Section 120.6(a)8G: Transcritical CO_2 refrigeration systems with a design intermediate saturated suction temperature greater than or equal to 30°F shall have a minimum condensing temperature setpoint of 70°F or less.

H. Fan-powered gas coolers shall meet the gas cooler efficiency requirements listed in Table 120.6-C. Gas cooler efficiency is defined as the Total Heat of Rejection (THR) capacity divided by all electrical input power (fan power at 100 percent fan speed).

Table 120.6-C TRANSCRITICAL CO_2 FAN-POWERED GAS COOLERS – MINIMUM EFFICIENCY REQUIREMENTS

CONDENSER TYPE	REFRIGERANT TYPE	MINIMUM EFFICIENCY	RATING CONDITION
Outdoor Air-Cooled	Transcritical CO_2	160 Btuh/watt	1400 psig, 100°F Outlet Gas Temperature, 90°F Outdoor Dry bulb Temperature
Adiabatic Dry Mode	Transcritical CO_2	90 Btuh/watt	1100 psig, 100°F Outlet Gas Temperature, 90°F Outdoor Dry bulb Temperature

9. **Automatic door closers.** Doors designed for the passage of people that are between freezers and higher-temperature spaces, or between coolers and nonrefrigerated spaces, shall have automatic door closers.

(b) **Mandatory requirements for commercial refrigeration.**

Retail food or beverage stores with 8,000 square feet or more of conditioned floor area, and that utilize either refrigerated display cases, or walk-in coolers or freezers shall meet all applicable state and federal appliance and equipment standards consistent with Section 110.0 and 110.1 or, for equipment not subject to such standards, the requirements of Subsections 1 through 4.

1. **Condensers serving refrigeration systems.** Fan-powered condensers shall conform to the following requirements:

A. All condenser fans for air-cooled condensers, evaporative-cooled condensers, adiabatic condensers, gas coolers, air- or water-cooled fluid coolers or cooling towers shall be continuously variable speed, with the speed of all fans serving a common condenser high side controlled in unison.

B. The refrigeration system condenser controls for systems with air-cooled condensers shall use variable-setpoint control logic to reset the condensing temperature setpoint in response to ambient drybulb temperature.

C. The refrigeration system condenser controls for systems with evaporative-cooled condensers shall use variable-setpoint control logic to reset the condensing temperature setpoint in response to ambient wetbulb temperature.

D. The refrigeration system condenser controls for systems with adiabatic condensers shall use variable setpoint control logic to reset the condensing temperature setpoint in response to ambient drybulb temperature while operating in dry mode.

Exception 1 to Section 120.6(b)1B, C and D: Condensing temperature control strategies approved by the executive director that have been demonstrated to provide equal energy savings.

Exception 2 to Section 120.6(b)1D: Systems served by adiabatic condensers in Climate Zone 16.

E. The saturated condensing temperature necessary for adiabatic condensers to reject the design total heat of rejection of a refrigeration system assuming dry mode performance shall be less than or equal to:

   i. The design drybulb temperature plus 20°F for systems serving freezers;

   ii. The design drybulb temperature plus 30°F for systems serving coolers.

F. The minimum condensing temperature setpoint shall be less than or equal to 70°F.

G. Fan-powered condensers shall meet the specific efficiency requirements listed in Table 120.6-D.

Table 120.6-D FAN-POWERED CONDENSERS –SPECIFIC EFFICIENCY REQUIREMENTS

CONDENSER TYPE	MINIMUM SPECIFIC EFFICIENCY[a]	RATING CONDITION
Evaporative-Cooled	160 Btuh/watt	100°F Saturated Condensing Temperature (SCT), 70°F Entering Wetbulb Temperature
Air-Cooled	65 Btuh/watt	105°F Saturated Condensing Temperature (SCT), 95°F Entering Drybulb Temperature
Adiabatic Dry Mode	45 Btu/watt (halocarbon)	105°F Saturated Condensing Temperature (SCT), 95°F Entering Drybulb Temperature

[a]See Section 100.1 for definition of condenser specific efficiency.

Exception 1 to Section 120.6(b)1G: Condensers with a total heat rejection capacity of less than 150,000 Btuh at the specific efficiency rating condition.

Exception 2 to Section 120.6(b)1G: Stores located in Climate Zone 1.

Exception 3 to Section 120.6(b)1G: Existing condensers that are reused for an addition or alteration.

H. Air-cooled condensers shall have a fin density no greater than 10 fins per inch.

Exception 1 to Section 120.6(b)1H: Microchannel condensers.

Exception 2 to Section 120.6(b)1H: Existing condensers that are reused for an addition or alteration.

Exception to Section 120.6(b)1B, 1C, 1D, 1E, 1F, 1G: Transcritical CO_2 refrigeration systems.

Exception to Section 120.6(b)1: New condensers replacing existing condensers when the attached compressor system total heat of rejection does not increase and less than 25 percent of both the attached compressors and the attached display cases are new.

2. **Compressor systems.** Refrigeration compressor systems and condensing units shall conform to the following requirements:

A. Compressors and multiple-compressor suction groups shall include control systems that use floating suction pressure logic to reset the target saturated suction temperature based on the temperature requirements of the attached refrigeration display cases or walk-ins.

Exception 1 to Section 120.6(b)2A: Single compressor systems that do not have continuously variable capacity capability.

Exception 2 to Section 120.6(b)2A: Suction groups that have a design saturated suction temperature of 30°F or higher, or suction groups that comprise the high stage of a two-stage or cascade system or that primarily serve chillers for secondary cooling fluids.

B. Liquid subcooling shall be provided for all low temperature compressor systems with a design cooling capacity equal or greater than 100,000 Btu/hr with a design saturated suction temperature of -10°F or lower, with the subcooled liquid temperature maintained continuously at 50°F or less at the exit of the subcooler, using compressor economizer port(s) or a separate medium or high temperature suction group operating at a saturated suction temperature of 18°F or higher.

Exception 1 to Section 120.6(b)2B: Low temperature cascade systems that condense into another refrigeration system rather than condensing to ambient temperature.

Exception 2 to Section 120.6(b)2B: Transcritical CO_2 refrigeration systems.

C. Compressors for transcritical CO_2 refrigeration systems shall be designed to operate at a minimum condensing temperature of 60°F or less.

Exception to Section 120.6(b)2C: Compressors with a design saturated suction temperature greater than or equal to 30°F shall be designed to operate at a minimum condensing temperature of 70°F or less.

Exception to Section 120.6(b)2: Existing compressor systems that are reused for an addition or alteration.

3. **Refrigerated display cases.** Lighting in refrigerated display cases, and lights on glass doors installed on walk-in coolers and freezers shall be controlled by one of the following:

   A. Automatic time switch controls to turn off lights during nonbusiness hours. Timed overrides for any line-up or walk-in case may only be used to turn the lights on for up to one hour. Manual overrides shall time-out automatically to turn the lights off after one hour.

   B. Motion sensor controls on each case that reduce display case lighting power by at least 50 percent within 30 minutes after the area near the case is vacated.

4. **Refrigeration heat recovery.**

   A. HVAC systems shall utilize heat recovery from refrigeration system(s) for space heating, using no less than 25 percent of the sum of the design total heat of rejection of all refrigeration systems that have individual total heat of rejection values of 150,000 Btu/h or greater at design conditions.

   Exception 1 to Section 120.6(b)4A: Stores located in Climate Zone 15.

   Exception 2 to Section 120.6(b)4A: HVAC systems or refrigeration systems that are reused for an addition or alteration.

   Exception 3 to Section 120.6(b)4A: Stores where the design total heat of rejection of all refrigeration systems is less than or equal to 500,000 Btu/h.

   B. The increase in hydrofluorocarbon refrigerant charge associated with refrigeration heat recovery equipment and piping shall be no greater than 0.35 lbs per 1,000 Btu/h of heat recovery heating capacity.

5. **Transcritical CO_2 Gas Coolers.** New fan-powered gas coolers on all new transcritical CO_2 refrigeration systems shall conform to the following:

   A. Air-cooled gas coolers are prohibited in Climate Zones 10 through 15.

   B. Design leaving gas temperature for air-cooled gas coolers shall be less than or equal to the design dry-bulb temperature plus 6°F.

   C. Design leaving gas temperature for adiabatic gas coolers necessary to reject the design total heat of rejection of a refrigeration system assuming dry mode performance shall be less than or equal to the design dry-bulb temperature plus 15°F.

   D. All gas cooler fans shall be continuously variable speed, with the speed of all fans serving a common condenser high side controlled in unison.

   E. While operating below the critical point, the gas cooler pressure shall be controlled in accordance with Section 120.6(b)1A.

   F. While operating above the critical point, the gas cooler pressure setpoint shall be reset based on ambient conditions such that the system efficiency is maximized.

   G. The minimum condensing temperature setpoint shall be less than or equal to 60°F for air-cooled gas coolers, evaporative-cooled gas coolers, adiabatic gas coolers, air or water-cooled fluid coolers or cooling towers.

   Exception to Section 120.6(b)5G: Transcritical CO_2 refrigeration systems with a design intermediate saturated suction temperature greater than or equal to 30°F shall have a minimum condensing temperature setpoint of 70°F or less.

H. Fan-powered gas coolers shall meet the condenser efficiency requirements listed in Table 120.6-E. Gas cooler efficiency is defined as the total heat of rejection (THR) capacity divided by all electrical input power (fan power at 100-percent fan speed).

Table 120.6-E TRANSCRITICAL CO_2 FAN-POWERED GAS COOLERS – MINIMUM EFFICIENCY REQUIREMENTS

CONDENSER TYPE	REFRIGERANT TYPE	MINIMUM EFFICIENCY	RATING CONDITION
Outdoor Air-Cooled	Transcritical CO_2	160 Btuh/watt	1400 psig, 100°F Outlet Gas Temperature, 90°F Outdoor Dry bulb Temperature
Adiabatic Dry Mode	Transcritical CO_2	90 Btuh/watt	1100 psig, 100°F Outlet Gas Temperature, 90°F Outdoor Dry bulb Temperature

6. **Commercial refrigeration acceptance.** Before an occupancy permit is granted for a new retail food or beverage store, or before a new refrigeration system serving a retail food or beverage store is operated for normal use, the following equipment and systems shall be certified as meeting the Acceptance Requirements for Code Compliance, as specified by the Reference Nonresidential Appendix NA7. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements. Transcritical CO_2 refrigeration systems shall be tested in accordance with NA7.20.1.

(c) **Mandatory requirements for enclosed parking garages. Enclosed Parking Garages.** Mechanical ventilation systems for enclosed parking garages where the total design exhaust rate for the garage is greater than or equal to 10,000 cfm shall conform to all of the following:

1. Automatically detect contaminant levels and stage fans or modulate fan airflow rates to 50 percent or less of design capacity, provided acceptable contaminant levels are maintained.
2. Have controls and/or devices that will result in fan motor demand of no more than 30 percent of design wattage at 50 percent of design airflow.
3. CO shall be monitored with at least one sensor per 5,000 square feet, with the sensor located in the highest expected concentration locations, with at least two sensors per proximity zone. A proximity zone is defined as an area that is isolated from other areas either by floor or other impenetrable obstruction.
4. CO concentration at all sensors is maintained at £ 25 ppm or less at all times.
5. The ventilation rate shall be at least 0.15 cfm/ft^2 when the garage is scheduled to be occupied.
6. The system shall maintain the garage at negative or neutral pressure relative to other occupiable spaces when the garage is scheduled to be occupied.
7. CO sensors shall be:
   A. Certified by the manufacturer to be accurate within plus or minus 5 percent of measurement.
   B. Factory calibrated.
   C. Certified by the manufacturer to drift no more than 5 percent per year.
   D. Certified by the manufacturer to require calibration no more frequently than once a year.
   E. Monitored by a control system. The system shall have logic that automatically checks for sensor failure by the following means. Upon detection of a failure, the system shall reset to design ventilation rates and transmit an alarm to the facility operators.
      i. If any sensor has not been calibrated according to the manufacturer's recommendations within the specified calibration period, the sensor has failed.

ii. During unoccupied periods the system compares the readings of all sensors, e.g., if any sensor is more than 15 ppm above or below the average of all sensors for longer than four hours, the sensor has failed.

iii. During occupied periods the system compares the readings of sensors in the same proximity zone, e.g., if the 30 minute rolling average for any sensor in a proximity zone is more than 15 ppm above or below the 30 minute rolling average for other sensor(s) in that proximity zone, the sensor has failed.

8. **Parking garage ventilation system acceptance.** Before an occupancy permit is granted for a parking garage system subject to Section 120.6(c), the following equipment and systems shall be certified as meeting the acceptance requirements for code compliance, as specified by the Reference Nonresidential Appendix NA7. A certificate of acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA7.12.

Exception 1 to Section 120.6(c): Any garage, or portion of a garage, where more than 20 percent of the vehicles expected to be stored have nongasoline combustion engines.

Exception 2 to Section 120.6(c): Additions and alterations to existing garages where less than 10,000 cfm of new exhaust capacity is being added.

(d) **Mandatory requirements for process boilers.**

1. Combustion air positive shut-off shall be provided on all newly installed process boilers as follows:

   A. All process boilers with an input capacity of 2.5 MMBtu/h (2,500,000 Btu/h) and above, in which the boiler is designed to operate with a nonpositive vent static pressure.

   B. All process boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h (2,500,000 Btu/h).

2. Process boiler combustion air fans with motors 10 horsepower or larger shall meet one of the following for newly installed boilers:

   A. The fan motor shall be driven by a variable speed drive; or.

   B. The fan motor shall include controls that limit the fan motor demand to no more than 30 percent of the total design wattage at 50 percent of design air volume.

3. Newly installed process boilers with an input capacity greater than 5 MMBtu/h (5,000,000 Btu/h) shall maintain stack-gas oxygen concentrations at less than or equal to 3.0 percent by volume on a dry basis over firing rates of 20 to 100 percent. Combustion air volume shall be controlled with respect to measured flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

   Exception to Section 120.6(d)3: Boilers with steady state full-load combustion efficiency 90 percent or higher.

(e) **Mandatory requirements for compressed air systems.**

All new compressed air systems, and all additions or alterations of compressed air systems where the total combined horsepower (hp) of the compressor(s) is 25 hp or more shall meet the requirements of Subsections 1 through 5. These requirements apply to the compressors, related piping systems and related controls that provide compressed air and do not apply to any equipment or controls that use or process the compressed air.

Exception 1 to Section 120.6(e): Medical gas compressed air systems serving healthcare facilities.

1. **Trim compressor and storage.** The compressed air system shall be equipped with an appropriately sized trim compressor and primary storage to provide acceptable performance across the range of the system and to avoid control gaps. The compressed air system shall comply with Subsection A or B below.

   A. The compressed air system shall include one or more variable speed drive (VSD) compressors. For systems with more than one compressor, the total combined capacity of the VSD compressor(s) acting

as trim compressors must be at least 1.25 times the largest net capacity increment between combinations of compressors. The compressed air system shall include primary storage of at least one gallon per actual cubic feet per minute (acfm) of the largest trim compressor; or

B. The compressed air system shall include a compressor or set of compressors with total effective trim capacity at least the size of the largest net capacity increment between combinations of compressors, or the size of the smallest compressor, whichever is larger. The total effective trim capacity of single compressor systems shall cover at least the range from 70 to 100 percent of rated capacity. The effective trim capacity of a compressor is the size of the continuous operational range where the specific power of the compressor (kW/100 acfm) is within 15 percent of the specific power at its most efficient operating point. The total effective trim capacity of the system is the sum of the effective trim capacity of the trim compressors. The system shall include primary storage of at least 2 gallons per acfm of the largest trim compressor.

Exception 1 to Section 120.6(e)1: Alterations where the total combined added or replaced compressor horsepower is less than the average per-compressor horsepower of all compressors in the system.

Exception 2 to Section 120.6(e)1: Alterations where all added or replaced compressors are variable speed drive (VSD) compressors and compressed air system includes primary storage of at least one gallon per actual cubic foot per minute (acfm) of the largest trim compressor.

Exception 3 to Section 120.6(e)1: Compressed air systems that have been approved by the Energy Commission Executive Director as having demonstrated that the system serves loads for which typical air demand fluctuates less than 10 percent.

Exception 4 to Section 120.6(e)1: Alterations of existing compressed air systems that include one or more centrifugal compressors.

2. **Controls.** Compressed air systems with three or more compressors and a combined horsepower rating of more than 100 hp shall operate with controls that are able to choose the most energy efficient combination and loading of compressors within the system based on the current compressed air demand.
3. **Monitoring.** Compressed air systems having a combined horsepower rating equal to or greater than 100 hp shall have an energy and air demand monitoring system with the following minimum requirements:
   A. Measurement of system pressure.
   B. Measurement of amps or power of each compressor.
   C. Measurement or determination of total airflow from compressors in cfm.
   D. Data logging of pressure, power in kW, airflow in cfm and compressed air system specific efficiency in kW/100 cfm at intervals of 5 minutes or less.
   E. Maintained data storage of at least the most recent 24 months.
   F. Visual trending display of each recorded point, load and specific energy.
4. **Leak testing of compressed air piping.** Compressed air system piping greater than 50 adjoining feet in length shall be pressure tested after being isolated from the compressed air supply and end uses. The piping shall be pressurized to the design pressure and test pressures shall be held for a length of time at the discretion of the authority having jurisdiction, but in no case for less than 30 minutes, with no perceptible drop in pressure.

   If dial gauges are used for conducting this test, these gauges must conform with California Plumbing Code Sections 318.3, 318.4 and 318.5.

   Piping less than or equal to 50 adjoining feet in length shall be pressurized and inspected. Connections shall be tested with a noncorrosive leak-detecting fluid or other leak-detecting methods at the discretion of the authority having jurisdiction.

5. **Pipe sizing.** Compressed air piping greater than 50 adjoining feet in length shall be designed and installed to minimize frictional losses in the distribution network. These piping installations shall meet the requirements of Section 120.6(e)5A and either Section 120.6(e)5B or 120.6(e)5C:

   A. Service line piping shall have inner diameters greater than or equal to ¾ inch. Service line piping are pipes that deliver compressed air from distribution piping to end uses.

   B. Piping section average velocity. Compressor room interconnection and main header piping shall be sized so that at coincident peak flow conditions, the average velocity in the segment of pipe is no greater than 20 ft/sec. Compressor room interconnection and main header piping are the pipes that deliver compressed air from the compressor outlets to the inlet to the distribution piping. Each segment of distribution and service piping shall be sized so that at coincident peak flow conditions, the average velocity in the segment of pipe is no greater than 30 ft/sec. Distribution piping are pipes that deliver compressed air from the compressor room interconnection piping or main header piping to the service line piping.

   C. Piping total pressure drop. Piping shall be designed such that piping frictional pressure loss at coincident peak loads is less than 5 percent of operating pressure between the compressor and end use or end use regulator.

6. **Compressed air system acceptance.** Before an occupancy permit is granted for a compressed air system subject to Section 120.6(e), the equipment and systems shall be certified as meeting the acceptance requirements for code compliance, as specified by the Reference Nonresidential Appendix NA7. A certificate of acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA 7.13.

(f) **Mandatory requirements for elevators.** Elevators shall meet the following requirements:

1. The light power density for the luminaires inside the elevator cab shall be no greater than 0.6 watts per square foot.

   Exception to Section 120.6(f)1: Interior signal lighting and interior display lighting are not included in the calculation of lighting power density.

2. Elevator cab ventilation fans for cabs without space conditioning shall not exceed 0.33 watts per cfm as measured at maximum speed.

3. When the elevator cab is stopped and unoccupied with doors closed for over 15 minutes, the cab interior lighting and ventilation fans shall be switched off until elevator cab operation resumes.

4. Lighting and ventilation shall remain operational in the event that the elevator cabin gets stuck when passengers are in the cabin.

5. Elevator Lighting and Ventilation Control Acceptance. Before an occupancy permit is granted for elevators subject to 120.6(f), the following equipment and systems shall be certified as meeting the Acceptance Requirement for Code Compliance, as specified by the Reference Nonresidential Appendix NA7. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA7.14.

Exception to Section 120.6(f): Elevators located in healthcare facilities.

(g) **Mandatory requirements for escalators and moving walkways**.

1. Escalators and moving walkways located in airports, hotels, and transportation function areas shall automatically slow to the minimum permitted speed in accordance with ASME A17.1/CSA B44 when not conveying passengers.

2. Escalators and Moving Walkways Acceptance. Before an occupancy permit is granted for escalators and moving walkways subject to 120.6(g), the following equipment and systems shall be certified as meeting the Acceptance Requirement for Code Compliance, as specified by the Reference Nonresidential Appendix NA7. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA7.15.

(h) **Mandatory requirements for Controlled Environment Horticulture (CEH) spaces.**

1. **Indoor growing, dehumidification.** Dehumidification equipment shall be one of the following:
   A. Dehumidifiers subject to regulation under federal appliance standards tested in accordance with 10 CFR 430.23(z) and Appendix X or X1 to Subpart B of 10 CFR Part 430 as applicable, and complying with 10 CFR 430.32(v)2;
   B. Integrated HVAC system with on-site heat recovery designed to fulfill at least 75 percent of the annual energy for dehumidification reheat;
   C. Chilled water system with on-site heat recovery designed to fulfill at least 75 percent of the annual energy for dehumidification reheat; or
   D. Solid or liquid desiccant dehumidification system for system designs that require dewpoint of 50°F or less.
2. **Indoor growing, horticultural lighting.** In a building with CEH spaces and with more than 40 kW of aggregate horticultural lighting load, the electric lighting systems used for plant growth and plant maintenance shall meet all of the following requirements:
   A. The horticultural lighting systems shall have a photosynthetic photon efficacy (PPE) rated in accordance with ANSI/ASABE S640 for wavelengths from 400 to 700 nanometers and meet one of the following requirements:
      i. Integrated, nonserviceable luminaires shall have a rated PPE of at least 1.9 micromoles per joule; or
      ii. Luminaires with removable or serviceable lamps shall have lamps with a rated PPE of at least 1.9 micromoles per joule.
   B. Time-switch lighting controls shall be installed and comply with Section 110.9(b)1, Section 130.4(a)4 and applicable sections of NA7.6.2.
   C. Multilevel lighting controls shall be installed and comply with Section 130.1(b).
3. **Indoor growing, electrical power distribution systems.** Electrical power distribution systems serving CEH spaces shall be designed so that a measurement device is capable of monitoring the electrical energy usage of aggregate horticultural lighting load.
4. **Conditioned greenhouses, building envelope.** Conditioned greenhouses shall meet the following requirements:
   A. Opaque wall and opaque roof assembly shall meet the requirements of Section 120.7; and
   B. Nonopaque envelopes shall have two or more glazings separated by either air or gas fill.
5. **Conditioned greenhouses, space-conditioning systems.** Space-conditioning systems used for plant production shall comply with all applicable requirements.
6. **Greenhouses, horticultural lighting.** In a greenhouse with more than 40 kW of aggregate horticultural lighting load, the electric lighting system used for plant growth and plant maintenance shall meet the following requirements:
   A. The horticultural lighting systems shall have a photosynthetic photon efficacy (PPE) rated in accordance with ANSI/ASABE S640 for wavelengths from 400 to 700 nanometers and meet one of the following requirements:
      i. Integrated, nonserviceable luminaires shall have a rated PPE of at least 1.7 micromoles per joule; or
      ii. Luminaires with removable or serviceable lamps shall have lamps with a rated PPE of at least 1.7 micromoles per joule.
   B. Time-switch lighting controls shall be installed and comply with Section 110.9(b)1, Section 130.4(a)4 and applicable sections of Reference Nonresidential Appendix NA7.6.2.
   C. Multilevel lighting controls shall be installed and comply with Section 130.1(b).

(i) **Mandatory requirements for steam traps.** Steam traps in new industrial facilities and new steam traps added to support new, nonreplacement, process equipment in existing industrial facilities where the installed steam trap operating pressure, which is the steam pressure entering the steam trap during normal design operating conditions, is greater than 15 psig and the total combined connected boiler input rating is greater than 5 million Btu/hr shall meet the following requirements:

1. **Central steam trap fault detection and diagnostics monitoring.** Steam trap systems shall be equipped with a central steam trap monitoring system that:
   A. Provides a status update of all steam trap fault detection sensors at no greater than 8-hour intervals.
   B. Automatically displays an alarm that identifies which steam trap has a fault once the system has detected a fault.
2. **Steam trap fault detection.** Steam traps shall be equipped with automatic fault detection sensors that shall communicate their operational state to the central steam trap monitoring system as described in Section 120.6(i)1.
3. **Steam trap strainer installation.** Steam traps shall either:
   A. Be equipped with an integral strainer and blow-off valve; or
   B. Be installed downstream within 3 feet of a strainer and blow-off valve.
4. **Steam trap system acceptance.** Before an occupancy permit is granted for steam trap systems subject to Section 120.6(i), the equipment and systems shall be certified as meeting the Acceptance Requirement for Code Compliance, as specified by the Reference Nonresidential Appendix NA7.19. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA7.19.

Exception 1 to Section 120.6(i): Steam traps where steam is diverted to a steam system of lower pressure for use when the steam trap fails open.

(j) **Mandatory requirements for computer rooms.** Space-conditioning systems serving a computer room shall meet the following requirements:

1. **Reheat.** Each computer room zone shall have controls that prevent reheating, recooling and simultaneous provisions of heating and cooling to the same zone, such as mixing or simultaneous supply of air that has been previously mechanically heated and air that has been previously cooled, either by cooling equipment or by economizer systems.
2. **Humidification.** Humidification shall be adiabatic. Nonadiabatic humidification, including but not limited to steam and infrared, is prohibited.
3. **Fan control.** Each unitary air conditioner with mechanical cooling capacity exceeding 60,000 Btu/hr and each chilled water fan system shall be designed to vary the airflow rate as a function of actual load. Fan motor demand shall not exceed 50 percent of design wattage at 66 percent of design fan speed.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 120.7 – MANDATORY INSULATION REQUIREMENTS

Nonresidential and hotel/motel buildings shall comply with the applicable requirements in Sections 120.7(a) through 120.7(c).

(a) **Roof/Ceiling insulation.** The opaque portions of the roof/ceiling that separates conditioned spaces from unconditioned spaces or ambient air shall meet the applicable requirements of Items 1 through 3 below:

1. **Metal building.** The weighted average U-factor of the roof assembly shall not exceed 0.098.
2. **Wood framed and others.** The weighted average U-factor of the roof assembly shall not exceed 0.075.
3. **Insulation placement.** Insulation installed to limit heat loss and gain from conditioned spaces to unconditioned spaces shall comply with all of the following:
   A. Insulation shall be installed in direct contact with a roof or ceiling that is sealed to limit infiltration and exfiltration as specified in Section 110.7. This may include, but is not limited to, placing insulation either above or below the roof deck or on top of the finished ceiling.
   B. When insulation is installed at the roof in nonresidential buildings, fixed vents or openings to the outdoors or to unconditioned spaces shall not be installed. When the space between the ceiling and the roof is either directly or indirectly conditioned space, it shall not be considered an attic for the purposes of complying with CBC attic ventilation requirements.
   C. Insulation placed on top of a suspended ceiling with removable ceiling panels shall not be used to meet the Roof/Ceiling requirement of Sections 140.3 and 141.0.

   Exception to Section 120.7(a)3: When there are conditioned spaces with a combined floor area no greater than 2,000 square feet in an otherwise unconditioned building, and when the average height of the space between the ceiling and the roof over these spaces is greater than 12 feet, insulation placed in direct contact with a suspended ceiling with removable ceiling panels shall be an acceptable method of reducing heat loss from a conditioned space and shall be accounted for in heat loss calculations.

NOTE: Vents that do not penetrate the roof deck and are instead designed for wind resistance for roof membranes are not within the scope of Section 120.7(a)3B.

(b) **Wall insulation.** The opaque portions of walls that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable requirements of Items 1 through 7 below:

1. **Metal building.** The weighted average U-factor of the wall assembly shall not exceed 0.113.
2. **Metal framed.** The weighted average U-factor of the wall assembly shall not exceed 0.151.
3. **Light mass walls.** A 6-inch or greater hollow core concrete masonry unit shall have a U-factor not to exceed 0.440.
4. **Heavy mass walls.** An 8-inch or greater hollow core concrete masonry unit shall have a U-factor not to exceed 0.690.
5. **Wood framed and others.** The weighted average U-factor of the wall assembly shall not exceed 0.110.
6. **Spandrel panels and curtain wall.** The weighted average U-factor of the spandrel panels and curtain wall assembly shall not exceed 0.280.
7. **Demising walls.** The opaque portions of framed demising walls shall meet the requirements of Item A or B below:
   A. Wood framed walls shall be insulated to meet a U-factor not greater than 0.099.
   B. Metal framed walls shall be insulated to meet a U-factor not greater than 0.151.

(c) **Floor and soffit insulation**. The opaque portions of floors and soffits that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable requirements of Items 1 and 2 below:

1. **Raised mass floors.** Shall have a minimum of 3 inches of lightweight concrete over a metal deck, or the weighted average U-factor of the floor assembly shall not exceed 0.269.
2. **Other floors.** The weighted average U-factor of the floor assembly shall not exceed 0.071.
3. **Heated slab on grade floor.** A heated slab on grade floor shall be insulated to meet the requirements of Section 110.8(g).

Exception to Section 120.7: A dedicated building used solely as a data center that has a total covered process load exceeding 750 kW.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 120.8 – NONRESIDENTIAL BUILDING COMMISSIONING

Nonresidential buildings other than healthcare facilities, with conditioned space of 10,000 square feet or more, shall comply with the applicable requirements of Sections 120.8(a) through 120.8(i) in the building design and construction processes. All building systems and components covered by Sections 110.0, 120.0, 130.0, and 140.0 shall be included in the scope of the commissioning requirements in this Section, excluding those related solely to covered processes.

Nonresidential buildings other than healthcare facilities, with conditioned space of less than 10,000 square feet shall comply with the design review requirements specified in Sections 120.8(d), and shall include any measures or requirements necessary for completing this review in the construction documents in a manner consistent with Section 120.8(e).

Healthcare facilities shall instead comply with the applicable requirements of Chapter 7 of the California Administrative Code (Title 24, Part 1).

NOTE: Nonresidential buildings include nonresidential spaces such as nonresidential function areas within hotel/motel and high-rise residential buildings. The requirements of Section 120.8 apply based on the square footage of the nonresidential spaces.

The commissioning described in this Section is in addition to any commissioning required by Title 24, Part 11, Section 5.410.2, 5.410.4 and subsections.

(a) **Summary of commissioning requirements.** Commissioning shall include completion of the following items:

1. Owner's or owner representative's project requirements;
2. Basis of design;
3. Design phase design review;
4. Commissioning measures shown in the construction documents;
5. Commissioning plan;
6. Functional performance testing;
7. Documentation and training; and
8. Commissioning report.

(b) **Owner's or Owner Representative's Project Requirements (OPR).** The energy-related expectations and requirements of the building shall be documented before the design phase of the project begins. This documentation shall include the following:

1. Energy efficiency goals;
2. Ventilation requirements;
3. Project documentation requirements, including facility functions, hours of operation~~,~~ and need for after-hours operation;
4. Equipment and systems expectations; and
5. Building envelope performance expectations.

(c) **Basis of design (BOD).** A written explanation of how the design of the building systems and components meets the OPR shall be completed at the design phase of the building project, and updated as necessary during the design and construction phases. The basis of design document shall cover the following systems and components:

1. Heating, ventilation, air conditioning (HVAC) systems and controls;
2. Indoor lighting system and controls;
3. Water heating systems and controls;

4. Any other building equipment or system listed in the OPR; and
5. Any building envelope component considered in the OPR.

(d) **Design phase design review.**

1. **Design reviewer requirements.** The design reviewer shall be the signer of the Design Review Kickoff Certificate(s) of Compliance and Construction Document Design Review Checklist Certificate(s) of Compliance as specified in Part 1 Section 10-103(a)1.
2. **Design review kickoff.** During the schematic design phase of the building project, the owner or owner's representative, design team and design reviewer must meet to discuss the project scope, schedule and how the design reviewer will coordinate with the project team. The building owner or owner's representative shall include the Design Review Kickoff Certificate of Compliance form in the certificate of compliance documentation (as specified in Part 1 Section 10-103).
3. **Construction documents design review.** The construction documents design review Checklist Certificate of Compliance shall list the items checked by the design reviewer during the construction document review. The completed form shall be returned to the owner and design team for review and sign-off. The building owner or owner's representative shall include this form in the certificate of compliance documentation (as specified in Part 1 Section 10-103).

(e) **Commissioning measures shown in the construction documents.** Complete descriptions of all measures or requirements necessary for commissioning shall be included in the construction documents (plans and specifications). Commissioning measures or requirements shall be clear, detailed and complete to clarify the commissioning process.

(f) **Commissioning plan.** Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned and shall be started during the design phase of the building project. The commissioning plan shall include the following:

1. General project information;
2. Commissioning goals;
3. Systems to be commissioned; and
4. Plans to test systems and components, which shall include:
   A. An explanation of the original design intent;
   B. Equipment and systems to be tested, including the extent of tests;
   C. Functions to be tested;
   D. Conditions under which the test shall be performed;
   E. Measurable criteria for acceptable performance;
   F. Commissioning team information; and
   G. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning requirements listed in Sections 120.8(g) through 120.8(i) shall be included.

(g) **Functional performance testing.** Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the acceptance test requirements in Sections 120.5, 130.4, 140.9, 160.3(d) and 160.5(e). Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.

Exception to Section 120.8(g): Healthcare facilities.

(h) **Documentation and training.** A systems manual and systems operations training shall be completed.

1. **Systems manual.** Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative and facilities operator. The systems manual shall include the following:
   A. Site information, including facility description, history and current requirements;
   B. Site contact information;
   C. Instructions for basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, and a site events log;
   D. Description of major systems;
   E. Site equipment inventory and maintenance notes; and
   F. A copy of all special inspection verifications required by the enforcing agency or the standards.
2. **Systems operations training**. The training of the appropriate maintenance staff for each equipment type or system shall be documented in the commissioning report. Training materials shall include the following:
   A. System and equipment overview (i.e., what the equipment is, what it does and with what other systems or equipment it interfaces);
   B. Review and demonstration of operation, servicing and preventive maintenance procedures;
   C. Review of the information in the systems manual; and
   D. Review of the record drawings on the systems and equipment.

(i) **Commissioning report.** A complete report of commissioning process activities undertaken through the design, construction and reporting recommendations for post- construction phases of the building project shall be completed and provided to the owner or owner's representative.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 120.9 – MANDATORY REQUIREMENTS FOR COMMERCIAL BOILERS

(a) Combustion air positive shut-off shall be provided on all newly installed boilers as follows:

1. All boilers with an input capacity of 2.5 MMBtu/h (2,500,000 Btu/h) and above, in which the boiler is designed to operate with a nonpositive vent static pressure.
2. All boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h (2,500,000 Btu/h).

(b) Boiler combustion air fans with motors 10 horsepower or larger shall meet one of the following for newly installed boilers:

1. The fan motor shall be driven by a variable speed drive, or
2. The fan motor shall include controls that limit the fan motor demand to no more than 30 percent of the total design wattage at 50 percent of design air volume.

(c) Newly installed boilers with an input capacity 5 MMBtu/h (5,000,000 Btu/h) and greater shall maintain stack-gas oxygen concentrations at less than or equal to 5.0 percent by volume on a dry basis over firing rates of 20 to 100 percent. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

Exception to Section 120.9(c): Boilers with steady state full-load combustion efficiency 90 percent or higher.

Note**:** Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 120.10 – MANDATORY REQUIREMENTS FOR FANS

a) Each fan or fan array with a combined motor nameplate horsepower greater than 1.00 hp or with a combined fan nameplate electrical input power greater than 0.89 kW shall have a fan energy index (FEI) of 1.00 or higher at fan system design conditions. Each fan and fan array used for a variable-air-volume system that meets the requirements of Section 140.4(c)2 shall have an FEI of 0.95 or higher at fan system design conditions.

1. The FEI for fan arrays shall be calculated in accordance with ANSI/AMCA 208-18 Annex C.
2. All FEI values shall be provided by a manufacturer, where fan selection software and/or fan catalogs display third party verified FEI values in accordance with ANSI/AMCA 208-18.

   Exception to Section 120.10(a)2: FEI values for embedded fans do not need to be third-party verified.

Exception 1 to Section 120.10(a): Embedded fans that are part of the equipment listed under Section 110.1 or Section 110.2, computer room air conditioners (CRACs) as defined in 10 CFR 431, and DX-DOAS units.

Exception 2 to Section 120.10(a): Embedded fans and embedded fan arrays with a combined motor nameplate horsepower of 5 hp or less or with a fan system electrical input power of 4.1 kW or less.

Exception 3 to Section 120.10(a): Circulation fans, ceiling fans and air curtains.

Exception 4 to Section 120.10(a): Fans that are intended to operate only during emergency conditions.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8 and 25943, Public Resources Code.

SUBCHAPTER 4
NONRESIDENTIAL AND HOTEL/MOTEL OCCUPANCIES—MANDATORY REQUIREMENTS FOR LIGHTING SYSTEMS AND EQUIPMENT, AND ELECTRICAL POWER DISTRIBUTION SYSTEMS

SECTION 130.0 – LIGHTING SYSTEMS AND EQUIPMENT, AND ELECTRICAL POWER DISTRIBUTION SYSTEMS —GENERAL

(a) The design and installation of all lighting systems and equipment in nonresidential and hotel/motel buildings, outdoor lighting, and electrical power distribution systems within the scope of Section 100.0(a), shall comply with the applicable provisions of Sections 130.0 through 130.5.

NOTE: The requirements of Sections 130.0 through 130.5 apply to newly constructed buildings. Section 141.0 specifies which requirements of Sections 130.0 through 130.5 also apply to additions and alterations to existing buildings.

(b) **Functional areas where compliance with the residential lighting standards is required.** The design and installation of all lighting systems, lighting controls and equipment in the following functional areas shall comply with the applicable residential lighting requirements of Section 150.0(k). In buildings containing these functional areas, all other functional areas, such as common areas, shall comply with the applicable nonresidential lighting and controlled receptacle requirements.

1. **Reserved.**
2. Outdoor lighting attached to a hotel/motel building and separately controlled from the inside of a guest room.
3. Fire station dwelling accommodations.
4. Hotel and motel guest rooms. Additionally, hotel and motel guest rooms shall meet the requirements of Section 130.1(c)8 and Section 130.5(d)4.
5. **Reserved.**

NOTE: The requirements of Section 130.0(b) also apply to additions and alterations to functional areas of existing buildings as specified in Section 130.0(b).

(c) **Luminaire classification and power.** Luminaires shall be classified, and their wattage shall be determined as follows:

1. Luminaire wattage shall be labeled as follows:
   A. The maximum rated wattage or relamping rated wattage of a luminaire shall be listed on a permanent, preprinted, factory installed label, as specified by UL 1574, 1598, 2108 or 8750, as applicable; and
   B. The factory-installed maximum rated wattage or relamping rated wattage label shall not consist of peel-off or peel-down layers or other methods that allow the rated wattage to be changed after the luminaire has been shipped from the manufacturer.

      Exception to Section 130.0(c)1B: Peel-down labels may be used only for the following luminaires, when they can accommodate a range of lamp wattages without changing the luminaire housing, ballast, transformer or wiring. Qualifying luminaires shall have a single lamp, and shall have integrated

ballasts or transformers. Peel-down labels must be layered such that the rated wattage reduces as successive layers are removed.

i. High-intensity discharge luminaires, having an integral electronic ballast, with a maximum relamping rated wattage of 150 watts.

ii. Low-voltage luminaires (except low voltage track systems), £ 24 volts, with a maximum relamping rated wattage of 50 watts.

iii. Compact fluorescent luminaires, having an integral electronic ballast, with a maximum relamping rated wattage of 42 watts.

2. For luminaires with line voltage lamp holders not served by drivers, ballasts, or transformers; the wattage of such luminaires shall be determined as the maximum relamping rated wattage as labeled in accordance with Section 130.0(c)1.

3. For luminaires with permanently installed or remotely installed ballasts, the wattage of such luminaires shall be the operating input wattage of the rated lamp/ballast combination published in the ballast manufacturer's catalogs based on independent testing lab reports as specified by UL 1598.

4. For inseparable SSL luminaires and SSL luminaires with remotely mounted drivers, the maximum rated wattage shall be the maximum rated input wattage of the SSL luminaire as specified in Section 130.0(c)1 when tested in accordance with UL 1598, 2108 or 8750, or IES LM-79.

5. For LED tape lighting and LED linear lighting with LED tape lighting components, the maximum rated wattage shall be the sum of the installed length of the tape lighting times its rated linear power density in watts per linear feet, or the maximum rated input wattage of the driver or power supply providing power to the lighting system, with tape lighting tested in accordance with UL 2108 or 8750, or IES LM-79.

6. For modular lighting systems that allow the addition or relocation of luminaires without altering the wiring of the system, shall be determined as follows:

   A. The wattage shall be the greater of:

      i. 30 watts per linear foot of track or plug-in busway; or

      ii. the rated wattage of all of the luminaires included in the system, where the luminaire wattage is determined as specified in Section 130.0(c)1.

   B. For line-voltage lighting track and plug-in busway served by a track lighting integral current limiter or a dedicated track lighting supplementary overcurrent protection panel, the wattage shall be determined as follows:

      i. The volt-ampere rating of the current limiter as specified by UL 1077; or

      ii. The sum of the ampere (A) rating of all of the current protection devices times the branch circuit voltages for track lighting supplementary overcurrent protection panel.

   C. For other modular lighting systems with power supplied by a driver, power supply or transformer, including but not limited to low-voltage lighting systems, the wattage of the system shall be the maximum rated input wattage of the driver, power supply or transformer published in the manufacturer's catalogs, as specified by UL 2108 or 8750.

   Exception to Section 130.0(c)6: For power-over-Ethernet lighting systems, power provided to installed nonlighting devices may be subtracted from the total power rating of the power-over-Ethernet system.

7. For all other lighting equipment not addressed by Sections 130.0(c)2 through 6, the wattage of the lighting equipment shall be the maximum rated wattage of the lighting equipment, or operating input wattage of the system, labeled in accordance with Section 130.0(c)1, or published in manufacturer's catalogs, based on independent testing lab reports as specified by UL 1574, 1598, 2108 or 8750, or IES LM-79.

(d) **Lighting controls**. All lighting controls and equipment shall comply with the applicable requirements in Sections 110.9, 130.1 and 130.2, and shall be installed in accordance with any applicable manufacturer instructions.

(e) **Energy Management Control System (EMCS)**. An EMCS may be installed to comply with the requirements of one or more lighting controls if it meets the following minimum requirements:

1. Provides all applicable functionality for each specific lighting control or system for which it is installed in accordance with Sections 110.9, 130.1 and 130.2; and
2. Complies with all applicable lighting control installation requirements in accordance with Section 130.4 for each specific lighting control or system for which it is installed; and
3. Complies with all applicable application requirements for each specific lighting control or system for which it is installed, in accordance with Part 6.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 130.1 – MANDATORY INDOOR LIGHTING CONTROLS

Nonresidential and hotel/motel buildings shall comply with the applicable requirements of Sections 130.1(a) through 130.1(f), in addition to the applicable requirements of Sections 110.9 and 130.0.

(a) **Manual area controls.** Each area enclosed by ceiling-height partitions shall provide lighting controls that allow the lighting in that area to be manually turned on and off. The manual control shall:

1. Be readily accessible; and

   Exception to Section 130.1(a)1: Restrooms having two or more stalls, parking areas, stairwells, corridors and areas of the building intended for access or use by the public may use a manual control not accessible to unauthorized personnel.

2. Be located in the same enclosed area with the lighting it controls; and

   Exception 1 to Section 130.1(a)2: For malls and atria, main entry lobbies, auditorium areas, dining areas, retail merchandise sales areas, wholesale showroom areas, commercial and industrial storage areas, general commercial and industrial work areas, convention centers, arenas, psychiatric and secure areas in healthcare facilities, and other areas where placement of a manual area control poses a health and safety hazard, the manual area control may instead be located so that a person using the control can see the lights or area controlled by that control, or visually signal or display showing the current state of the controlled lighting.

   Exception 2 to Section 130.1(a)2: In healthcare facilities, for restrooms and bathing rooms intended for a single occupant, the lighting control may be located outside the enclosed area but directly adjacent to the door.

3. Provide separate control of general, floor display, wall display, window display, case display, ornamental, and special effects lighting, such that each type of lighting can be turned on or off without turning on or off other types of lighting. Scene controllers may comply with this requirement provided that at least one scene turns on general lighting only, and the control provides a means to manually turn off all lighting.

Exception to Section 130.1(a): Up to 0.1 watts per square foot of indoor lighting may be continuously illuminated to allow for means of egress illumination consistent with California Building Code Section 1008. Egress lighting complying with this wattage limitation is not required to comply with manual area control requirements if:

1. The area is designated for means of egress on the plans and specifications submitted to the enforcement agency under Section 10-103(a)2 of Part 1; and

2. The controls for the egress lighting are not accessible to unauthorized personnel.

(b) **Multilevel lighting controls.** The general lighting of any enclosed area 100 square feet or larger with a connected lighting load that exceeds 0.5 watts per square foot shall provide multilevel lighting controls that allow the level of lighting to be adjusted up and down. The multi-level controls shall:

1. Provide the number of control steps specified in Table 130.1-A; and

   Exception to Section 130.1(b)1: Classrooms with a connected general lighting load of 0.6 watts per square foot or less shall have a minimum of one control step between 30 and 70 percent of full rated power, regardless of luminaire type.

2. Meet the uniformity requirements specified in Table 130.1-A.

   Exception 1 to Section 130.1(b): An area enclosed by ceiling-height partitions that has only one luminaire with no more than two lamps or has only one inseparable SSL luminaire.

   Exception 2 to Section 130.1(b): Restrooms.

Exception 3 to Section 130.1(b): Healthcare facilities.

(c) **Shut-OFF Controls.** All installed indoor lighting shall be equipped with controls able to automatically reduce lighting power when the space is typically unoccupied.

Exception 1 to Section 130.1(c): Healthcare facilities.

1. In addition to lighting controls installed to comply with Sections 130.1(a) and (b), all installed indoor lighting shall be equipped with controls that meet the following requirements:

   A. Shall be controlled with an occupant sensing control, automatic time-switch control, or other control capable of automatically shutting OFF all of the lighting when the space is typically unoccupied; and

   B. Separate controls for the lighting on each floor, other than lighting in stairwells; and

   C. Separate controls for a space enclosed by ceiling height partitions not exceeding 5,000 square feet.

      Exception to Section 130.1(c)1C: The area controlled may not exceed 20,000 square feet in the following function areas: malls, auditoriums, single tenant retail, industrial, convention centers and arenas.

   Exception 1 to Section 130.1(c)1: Where the lighting is serving an area that is in continuous use, 24 hours per day/365 days per year.

   Exception 2 to Section 130.1(c)1: Lighting complying with Section 130.1(c)5 or 7.

   Exception 3 to Section 130.1(c)1: Up to 0.1watts per square foot of lighting in any area within a building may be continuously illuminated, provided that the area is designated for means of egress on the plans and specifications submitted to the enforcement agency under Section 10-103(a)2 of Part 1. Lighting providing means of egress illumination, as the term is used in the California Building Code, shall be configured to provide no less than the amount of light required by California Building Code Section 1008 while in the partial-off mode.

   Exception 4 to Section 130.1(c)1: Electrical equipment rooms subject to Article 110.26(D) of the California Electrical Code.

   Exception 5 to Section 130.1(c)1: Illumination provided by lighting equipment that is designated for emergency lighting, connected to an emergency power source or battery supply, and is intended to function in emergency mode only when normal power is absent.

2. Countdown timer switches may be used to comply with the automatic shut-OFF control requirements in Section 130.1(c)1 only in closets less than 70 square feet, and server aisles in server rooms. The maximum timer setting shall be 10 minutes for closets, and 30 minutes for server aisles.

3. If an automatic time-switch control, other than an occupant sensing control, is installed to comply with Section 130.1(c)1, it shall incorporate a manual override lighting control that:

   A. Complies with Section 130.1(a); and

   B. Allows the lighting to remain ON for no more than 2 hours when an override is initiated.

      Exception to Section 130.1(c)3B: In the following function areas, the override time may exceed 2 hours: Malls, auditoriums, single tenant retail, industrial, laboratories and arenas where captive-key override is utilized.

4. If an automatic time-switch control, other than an occupant sensing control, is installed to comply with Section 130.1(c)1, it shall incorporate an automatic holiday “shut-OFF” feature that turns OFF all loads for at least 24 hours, and then resumes the normally scheduled operation.

   Exception to Section 130.1(c)4: In retail stores and associated malls, restaurants, grocery stores, churches, and theaters, the automatic time-switch control is not required to incorporate an automatic holiday shut-OFF feature.

5. **Occupant sensing controls are required for specified offices, multipurpose rooms, classrooms, conference rooms and restrooms**. In offices 250 square feet or smaller, multipurpose rooms of less than 1,000 square feet, classrooms of any size, conference rooms of any size, and restrooms of any size, lighting shall be controlled with occupant sensing controls to automatically shut OFF all of the lighting in 20 minutes or less after the control zone is unoccupied.

   In areas required by Section 130.1(b) to have multi-level lighting controls, the occupant sensing controls shall function either as a:

   A. Partial-ON occupant sensing controls capable of automatically activating between 50 and 70 percent of controlled lighting power, or

   B. Vacancy sensing controls, where all lighting responds to a manual ON input only.

   In areas not required by Section 130.1(b) to have multilevel lighting controls, the occupant sensing controls shall function either as:

      A. Occupant sensing controls; or

      B. Partial-ON occupant sensing controls, or

      C. Vacancy sensing controls, where all lighting responds to a manual ON input only.

   In addition, controls shall be provided that allow the lights to be manually shut OFF in accordance with Section 130.1(a) regardless of the sensor status.

6. **Full or partial-OFF occupant sensing controls are required for aisle ways and open area in warehouses, library book stack aisles, corridors and stairwells, and offices greater than 250 square feet.** Lighting installed in the following areas shall meet the requirements below in addition to complying with Section 130.1(c)1.

   A. In aisle ways and open areas in warehouses, lighting shall be controlled with occupant sensing controls that automatically reduce lighting power by at least 50 percent when the areas are unoccupied. The occupant sensing controls shall independently control lighting in each aisle way, and shall not control lighting beyond the aisle way being controlled by the sensor.

      Exception 1 to Section 130.1(c)6A: In aisle ways and open areas in warehouses in which the installed lighting power is 80 percent or less of the value allowed under the area category method, occupant sensing controls shall reduce lighting power by at least 40 percent.

      Exception 2 to Section 130.1(c)6A: When metal halide lighting or high pressure sodium lighting is installed in warehouses, occupant sensing controls shall reduce lighting power by at least 40 percent.

   B. In library book stack aisles 10 feet or longer that are accessible from only one end, and library book stack aisles 20 feet or longer that are accessible from both ends, lighting shall be controlled with occupant sensing controls that automatically reduce lighting power by at least 50 percent when the areas are unoccupied. The occupant sensing controls shall independently control lighting in each aisle way, and shall not control lighting beyond the aisle way being controlled by the sensor.

   C. In corridors and stairwells, lighting shall be controlled by occupant sensing controls that separately reduce the lighting power in each space by at least 50 percent when the space is unoccupied. The occupant sensing controls shall be capable of automatically turning the lighting fully ON only in the separately controlled space, and shall be automatically activated from all designed paths of egress.

   D. In office spaces greater than 250 square feet, general lighting shall be controlled with occupant sensing controls that meet all of the following:

      i. The occupant sensing controls shall be configured so that lighting shall be controlled separately in control zones not greater than 600 square feet. For luminaires with an embedded occupant sensor that are capable of reducing power independently from other luminaires, each luminaire can be considered its own control zone; and

ii. In 20 minutes or less after the control zone is unoccupied, the occupant sensing controls shall uniformly reduce lighting power in the control zone by at least 80 percent of full power. Control functions that switch control zone lights completely off when the zone is vacant meet this requirement; and

iii. In 20 minutes or less after the entire office space is unoccupied, the occupant sensing controls shall automatically turn off lighting in all control zones in the space; and

iv. In each control zone, lighting shall be allowed to automatically turn on to any level up to full power upon occupancy within the control zone. When occupancy is detected in any control zone in the space, the lighting in other control zones that are unoccupied shall operate at no more than 20 percent of full power.

Exception to Section 130.1(c)6D: Under-shelf or furniture-mounted task lighting controlled by a local switch and either a time switch or an occupancy sensor.

7. **Partial-OFF occupant sensing controls.** Partial-OFF occupant sensing controls are required for specified stairwells and common area corridors, parking garages, parking areas and loading and unloading areas**.** Lighting installed in the following areas shall meet the requirements below instead of complying with Section 130.1(c)1.

   A. Lighting in stairwells and common area corridors that provide access to guestrooms of hotel/motels shall be controlled with occupant sensing controls that automatically reduce lighting power by at least 50 percent when the areas are unoccupied. The occupant sensing controls shall be capable of automatically turning the lighting fully ON only in the separately controlled space, and shall be automatically activated from all designed paths of egress.

   Exception to Section 130.1(c)7A: In corridors and stairwells in which the installed lighting power is 80 percent or less of the value allowed under the area category method, occupant sensing controls shall reduce power by at least 40 percent.

   B. In parking garages, parking areas and loading and unloading areas, general lighting shall be controlled by occupant sensing controls having at least one control step between 20 percent and 50 percent of design lighting power. No more than 500 watts of rated lighting power shall be controlled together as a single zone. A reasonably uniform level of illuminance shall be achieved in accordance with the applicable requirements in Table 130.1-A. The occupant sensing controls shall be capable of automatically turning the lighting fully ON only in the separately controlled space, and shall be automatically activated from all designed paths of egress.

   Interior areas of parking garages are classified as indoor lighting for compliance with Section 130.1(c)7B. Parking areas on the roof of a parking structure are classified as outdoor hardscape and shall comply with the applicable provisions in Section 130.2.

   Exception to Section 130.1(c)7B: Metal halide luminaires with a lamp plus ballast mean system efficacy of greater than 75 lumens per watt, used for general lighting in parking garages, parking areas and loading and unloading areas, shall be controlled by occupant sensing controls having at least one control step between 20 percent and 60 percent of design lighting power.

8. Hotel/motel guest rooms shall be controlled with one of the following such that, no longer than 20 minutes after the guest room has been vacated, lighting power is switched off:

   i. Captive card key controls; or

   ii. Occupant sensing controls; or

   iii. Other automatic controls.

   Exception to Section 130.1(c)8: One high-efficacy luminaire as defined in Table 150.0-A that is switched separately and where the switch is located within 6 feet of the entry door.

(d) **Automatic daylighting controls.** The general lighting in skylit daylit zones, primary sidelit daylit zones and secondary sidelit daylit zones, as well as the general lighting in the combined primary and secondary sidelit

daylit zones in parking garages, shall be provided with controls that automatically adjust the power of the installed lighting up and down to keep the total light level stable as the amount of incoming daylight changes. For skylight located in an atrium, the skylit daylit zone definition shall apply to the floor area directly under the atrium and the top floor area directly adjacent to the atrium.

1. All skylit daylit zones, primary sidelit daylit zones, secondary sidelit daylit zones, and the combined primary and secondary sidelit daylit zones in parking garages shall be shown on the plans.

   NOTE: Parking areas on the roof of a parking structure are outdoor hardscape, not skylit daylit areas.

2. The automatic daylighting controls shall provide separate control for general lighting in each type of daylit zone. General lighting in overlapping skylit daylit zone and sidelit daylit zone shall be controlled as part of the skylit daylit zone. General lighting in overlapping primary and secondary sidelit daylit zones shall be controlled as part of the primary sidelit daylit zone. Linear LED and other solid state lighting (SSL) light sources in linear form may be treated as linear lamps in increments of 4-foot segments or smaller, and each segment is separately controlled based on the type of the daylit zone in which the segment is primarily located.

3. The automatic daylighting controls shall:

   A. For spaces required to install multilevel controls under Section 130.1(b), adjust lighting via continuous dimming or the number of control steps provided by the multilevel controls;

   B. For each space, ensure the combined illuminance from the controlled lighting and daylight is not less than the illuminance from controlled lighting when no daylight is available;

   C. For areas other than parking garages, ensure that, when the daylight illuminance is greater than 150 percent of the illuminance provided by the controlled lighting when no daylight is available, the controlled lighting power in that daylight zone shall be reduced by a minimum of 90 percent; and

   D. For parking garages, ensure that when daylight illuminance levels measured at the farthest edge of the secondary sidelit zone away from the glazing or opening are greater than 150 percent of the illuminance provided by the controlled lighting when no daylight is available, the controlled lighting power in the combined primary and secondary sidelit daylit zones shall be reduced by 100 percent.

4. Photosensors shall be located so that they are not readily accessible to unauthorized personnel.

5. The location where calibration adjustments are made to the automatic daylighting controls shall be readily accessible to authorized personnel but may be inside a locked case or under a cover which requires a tool for access.

Exception 1 to Section 130.1(d): Areas under skylights where it is documented that existing adjacent structures or natural objects block direct sunlight for more than 1,500 daytime hours per year between 8 a.m. and 4 p.m.

Exception 2 to Section 130.1(d): Areas adjacent to vertical glazing below an overhang, where the overhang covers the entire width of the vertical glazing, no vertical glazing is above the overhang, and the ratio of the overhang projection to the overhang rise is greater than 1.5 for South, East and West orientations or greater than 1 for North orientations.

Exception 3 to Section 130.1(d): Rooms where the combined total installed wattage of the general lighting in the skylit and primary sidelit zones is less than 120 watts are not required to have daylighting controls for those zones. Rooms where the total installed wattage of the general lighting in the secondary sidelit zones is less than 120 watts are not required to have daylighting controls for that zone.

Exception 4 to Section 130.1(d): Parking garage areas where the total installed wattage of the general lighting in the primary and the secondary sidelit daylit zones is less than 60 watts do not require automatic daylighting controls in the daylit zones.

Exception 5 to Section 130.1(d): Rooms that have a total glazing area of less than 24 square feet, or parking garage areas with a combined total of less than 36 square feet of glazing or opening.

Exception 6 to Section 130.1(d): For parking garages, luminaires located in the daylight adaptation zone.

Exception 7 to Section 130.1(d): Luminaires in sidelit daylit zones in retail merchandise sales and wholesale showroom areas.

(e) **Demand responsive controls.** See Section 110.12 for requirements for demand responsive lighting controls.

(f) **Control interactions.** Each lighting control installed to comply with Section 130.1 (a) through (e) shall permit or incorporate the functions of the other lighting controls.

1. For general lighting, the manual area control shall permit the level or amount of light provided while the lighting is on to be set or adjusted by the controls specified in Section 130.1(b), (c), (d), and (e).
2. The manual area control shall permit the shutoff control to turn the lighting down or off.
3. The multilevel lighting control shall permit the automatic daylighting control to adjust the electric lighting level in response to changes in the amount of daylight in the daylit zone.
4. The multilevel lighting control shall permit the demand responsive control to adjust the lighting during a demand response event and to return it to the level set by the multilevel control after the event.
5. The shutoff control shall permit the manual area control to turn the lighting on. If the on request occurs while an automatic time switch control would turn the lighting off, then the on request shall be treated as an override request consistent with Section 130.1(c)3.
6. The automatic daylighting control shall permit the multilevel lighting control to adjust the level of lighting.
7. For lighting controlled by multilevel lighting controls and by occupant sensing controls that provide an automatic-on function, the controls shall provide a partial-on function that is capable of automatically activating between 50–70 percent of controlled lighting power.
8. **Reserved**.
9. For space-conditioning system zones serving only spaces that are required to have occupant sensing controls as specified in Section 130.1(c)5, 6 and 7, and where Table 120.1-A allows the ventilation air to be reduced to zero when the space is in occupied-standby mode, the space-conditioning system shall be controlled by occupancy sensing controls as specified in Section 120.2(e)3.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

TABLE 130.1-A MULTILEVEL LIGHTING CONTROLS AND UNIFORMITY REQUIREMENTS

Luminaire Type	**Minimum Required Control Steps (percent of full rated power[1])**	**Uniform level of illuminance shall be achieved by:**
LED luminaires and LED light source systems	Continuous dimming 10-100 percent	Continuous dimming 10-100 percent
Line-voltage sockets except GU-24	Continuous dimming 10-100 percent	Continuous dimming 10-100 percent
Low-voltage incandescent systems	Continuous dimming 10-100 percent	Continuous dimming 10-100 percent
Fluorescent luminaires	Continuous dimming 20-100 percent	Continuous dimming 20-100 percent
GU-24 sockets rated for fluorescent ≤ 20 watts; Pin-based compact fluorescent ≤ 20 watts[2] Linear fluorescent and U-bent fluorescent ≤ 13 watts	Minimum one step between 30-70 percent	Continuous dimming; or Stepped dimming; or Switching alternate lamps in a luminaire.
Track Lighting	Minimum one step between 30-70 percent	Continuous dimming; or Stepped dimming; or Separately switching circuits in multi-circuit track with a minimum of two circuits.
Linear fluorescent and U-bent fluorescent > 13 watts	Minimum one step in each range: 20 - 40 percent 50 - 70 percent 75 - 85 percent 100 percent	Stepped dimming; or Continuous dimming; or Switching alternate lamps in each luminaire, having a minimum of 4 lamps per luminaire illuminating the same area and in the same manner
Other light sources, including HID and Induction	Minimum one step between 50 - 70 percent	Stepped dimming; or Continuous dimming; or Switching alternate lamps in each luminaire, having a minimum of 2 lamps per luminaire, illuminating the same area and in the same manner.

1. Full rated input power of driver, ballast and lamp, corresponding to maximum ballast factor

2. Includes only pin based lamps: twin tube, multiple twin tube, and spiral lamps

SECTION 130.2 – OUTDOOR LIGHTING CONTROLS AND EQUIPMENT

Nonresidential and hotel/motel buildings shall comply with the applicable requirements of Sections 130.2(a) through 130.2(c).

(a) **Reserved.**

(b) **Luminaire shielding requirements.** All outdoor luminaires of 6,200 initial luminaire lumens or greater shall comply with backlight, uplight and glare (BUG) in accordance with ANSI/IES TM-15-20, Annex A requirements in accordance with Title 24, Part 11, Section 5.106.8.

Exception 1 to Section 130.2(b): Signs.

Exception 2 to Section 130.2(b): Lighting for building facades, public monuments, public art, statues and vertical surfaces of bridges.

Exception 3 to Section 130.2(b): Lighting not permitted by a health or life safety statute, ordinance or regulation to be a cutoff luminaire.

Exception 4 to Section 130.2(b): Temporary outdoor lighting**.**

Exception 5 to Section 130.2(b): Replacement of existing pole mounted luminaires in hardscape areas meeting all of the following conditions:

A. Where the existing luminaire does not meet the luminaire BUG requirements in Section 130.2(b); and

B. Spacing between existing poles is greater than six times the mounting height of the existing luminaires; and

C. Where no additional poles are being added to the site; and

D. Where new wiring to the luminaires is not being installed; and

E. Provided that the connected lighting power wattage is not increased.

Exception 6 to Section 130.2(b): Luminaires that illuminate the public right of way including publicly-maintained or utility-maintained roadways, sidewalks and bikeways.

Exception 7 to Section 130.2(b): Outdoor lighting attached to a hotel/motel building and separately controlled from the inside of a guest room.

(c) **Controls for outdoor lighting.** Outdoor lighting shall be independently controlled from other electrical loads, and the controls for outdoor lighting shall meet the following functional requirements:

Exception 1 to Section 130.2(c): Outdoor lighting not permitted by a health or life safety statute, ordinance or regulation to be turned OFF or reduced.

Exception 2 to Section 130.2(c): Lighting in tunnels required to be illuminated 24 hours per day and 365 days per year.

1. **Daylight availability.** All installed outdoor lighting shall be controlled by a photo control, astronomical time-switch control, or other control capable of automatically shutting OFF the outdoor lighting when daylight is available.

2. **Automatic scheduling controls.**

   A. Automatic scheduling controls shall be installed for all outdoor lighting. Automatic scheduling controls may be installed in combination with motion sensing controls or other outdoor lighting controls.

   B. Automatic scheduling controls shall be capable of reducing the outdoor lighting power by at least 50 percent and no more than 90 percent, and separately capable of turning the lighting OFF, during scheduled unoccupied periods.

C. Automatic scheduling controls shall allow scheduling of a minimum of two nighttime periods with independent lighting levels, and may include an override function that turns lighting ON during its scheduled dim or OFF state for no more than two hours when an override is initiated.

3. **Motion sensing controls.**

A. Motion sensing controls shall be installed for the following luminaires. Motion sensing controls may be installed for other outdoor lighting and in combination with other outdoor lighting controls.

i. Outdoor luminaires other than those providing building façade, ornamental hardscape, outdoor dining or outdoor sales frontage lighting, where the bottom of luminaire is mounted 24 feet above grade or lower; and

ii. Bilaterally symmetric outdoor wall-mounted luminaires (typically referred to as "wall packs") providing building façade, ornamental hardscape or outdoor dining lighting that are mounted 24 feet above grade or lower.

B. Motion sensing controls shall be capable of reducing the outdoor lighting power of each controlled luminaire by at least 50 percent and no more than 90 percent, and separately capable of turning the luminaire OFF, during unoccupied periods.

C. Motion sensing controls shall be capable of reducing the lighting to its dim or OFF state no longer than 15 minutes after the area has been vacated, and of returning the lighting to its ON state when the area becomes occupied.

D. No more than 1,500 watts of lighting power shall be controlled by a single sensor or as a single zone.

Exception 1 to Section 130.2(c)3: Luminaires with a maximum rated wattage of 40 watts each are not required to have motion sensing controls.

Exception 2 to Section 130.2(c)3: Applications listed as Exceptions to Section 140.7(a) are not required to have motion sensing controls.

Exception 3 to Section 130.2(c)3: Lighting subject to a health or life safety statute, ordinance, or regulation may have a minimum time-out period longer than 15 minutes or a minimum dimming level above 50 percent when necessary to comply with the applicable law.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 130.3 – SIGN LIGHTING CONTROLS

Nonresidential buildings other than healthcare facilities and hotel/motel buildings shall comply with the applicable requirements of Sections 130.3(a)1 through 130.3(a)3.

(a) **Controls for sign lighting.** All sign lighting shall meet the requirements below as applicable:

1. **Indoor signs.** All indoor sign lighting other than exit sign lighting shall be controlled with an automatic time-switch control or astronomical time-switch control.
2. **Outdoor signs.** Outdoor sign lighting shall meet the following requirements as applicable:
   A. All outdoor sign lighting shall be controlled with a photocontrol in addition to an automatic time-switch control, or an astronomical time-switch control.

      Exception to Section 130.3(a)2A: Outdoor signs in tunnels, and signs in large permanently covered outdoor areas that are intended to be continuously lit, 24 hours per day and 365 days per year.

   B. All outdoor sign lighting that is ON both day and night shall be controlled with a dimmer that provides the ability to automatically reduce sign lighting power by a minimum of 65 percent during nighttime hours. Signs that are illuminated at night and for more than 1 hour during daylight hours shall be considered ON both day and night.

      Exception to Section 130.3(a)2B: Outdoor signs in tunnels and large covered areas that are intended to be illuminated both day and night.
3. **Demand responsive Electronic Message Center (EMC) control.** See Section 110.12 for requirements for demand responsive EMC controls.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 130.4 –LIGHTING CONTROL ACCEPTANCE AND INSTALLATION CERTIFICATE REQUIREMENTS

Nonresidential buildings other than healthcare facilities and hotel/motel buildings shall comply with the applicable requirements of Sections 130.4(a) through 130.4(c). Healthcare facilities shall comply with the applicable acceptance and installation documentation requirements of OSHPD.

(a) **Lighting and receptacle control acceptance requirements.** Before an occupancy permit is granted, indoor and outdoor lighting and receptacle controls serving the building, area or site and installed to comply with Section 110.12, 130.1, 130.2, 130.5 or 140.6 shall be certified as meeting the Acceptance Requirements for Code Compliance as specified by the Reference Nonresidential Appendix NA7.6 and NA7.8. A Certificate of Acceptance shall be submitted to the enforcement agency under Section 10-103(a) of Part 1, that the equipment and systems meet the acceptance requirements:

1. **Reserved.**
2. **Reserved.**
3. Automatic daylight controls shall be tested in accordance with Reference Nonresidential Appendix NA7.6.1;
4. Lighting shut-OFF controls shall be tested in accordance with Reference Nonresidential Appendix NA7.6.2;
5. Demand responsive lighting controls shall be tested in accordance with Reference Nonresidential Appendix NA7.6.3; and
6. Outdoor lighting controls shall be tested in accordance with Reference Nonresidential Appendix NA7.8; and
7. Lighting systems receiving the Institutional Tuning Power Adjustment Factor shall be tested in accordance with Reference Nonresidential Appendix NA7.6.4.
8. Demand responsive controls required to control controlled receptacles shall be tested in accordance with Reference Nonresidential Appendix NA7.6.5.

(b) **Lighting control installation certificate requirements.** To be recognized for compliance with Part 6 an installation certificate shall be submitted in accordance with Section 10-103(a) for any lighting control system, energy management control system, interlocked lighting system, lighting power adjustment factor, or additional wattage available for a videoconference studio, in accordance with the following requirements, as applicable:

1. Certification that when a lighting control system is installed to comply with lighting control requirements in Part 6 it complies with the applicable requirements of Section 110.9; and complies with Reference Nonresidential Appendix NA7.7.1.
2. Certification that when an energy management control system is installed to function as a lighting control required by Part 6 it functionally meets all applicable requirements for each application for which it is installed, in accordance with Sections 110.9, 130.0 through 130.5, 140.6 through 150.0, and 150.2; and complies with Reference Nonresidential Appendix NA7.7.2.
3. **Reserved.**
4. **Reserved.**
5. Certification that interlocked lighting systems used to serve an approved area comply with Section 140.6(a)1; and comply with Reference Nonresidential Appendix NA7.7.4.
6. Certification that lighting controls installed to earn a lighting power adjustment factor (PAF) comply with Section 140.6(a)2; and comply with Reference Nonresidential Appendix NA7.7.5.
7. Certification that additional lighting wattage installed for a videoconference studio complies with Section 140.6(c)2Gvii; and complies with Reference Nonresidential Appendix NA7.7.6.

(c) When certification is required by Title 24, Part 1, Section 10-103.1, the acceptance testing specified by Section 130.4 shall be performed by a Certified Lighting Controls Acceptance Test Technician (CLCATT). If the CLCATT is operating as an employee, the CLCATT shall be employed by a Certified Lighting Controls Acceptance Test Employer. The CLCATT shall disclose on the Certificate of Acceptance a valid CLCATT certification identification number issued by an approved acceptance test technician certification provider. The CLCATT shall complete all certificate of acceptance documentation in accordance with the applicable requirements in Section 10-103(a)4.

Note: Authority cited: Sections 25402, 25402.1 and 25213, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 130.5 –ELECTRICAL POWER DISTRIBUTION SYSTEMS

Nonresidential and hotel/motel buildings shall comply with the applicable requirements of Sections 130.5(a) through 130.5(e).

(a) **Service electrical metering.** Each electrical service or feeder shall have a permanently installed metering system which measures electrical energy use in accordance with Table 130.5-A.

Exception 1 to Section 130.5(a): Service or feeder for which the utility company provides a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

Exception 2 to Section 130.5(a): Electrical power distribution systems subject to California Electrical Code Article 517.

(b) **Separation of electrical circuits for electrical energy monitoring**. Electrical power distribution systems shall be designed so that measurement devices can monitor the electrical energy usage of load types according to Table 130.5-B.

Exception 1 to Section 130.5(b): For each separate load type, up to 10 percent of the connected load may be of any type.

Exception 2 to Section 130.5(b): Electrical power distribution systems subject to California Electrical Code Article 517.

(c) **Voltage drop.** The maximum combined voltage drop on both installed feeder conductors and branch circuit conductors to the farthest connected load or outlet shall not exceed 5 percent.

Exception to Section 130.5(c): Voltage drop permitted by California Electrical Code Sections 647.4, 695.6 and 695.7.

(d) **Circuit controls for 120-volt receptacles and controlled receptacles**. In all buildings, both controlled and uncontrolled 120 volt receptacles shall be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces and copy rooms. Additionally, hotel/motel guest rooms shall comply with Section 130.5(d)4. Controlled receptacles shall meet the following requirements, as applicable:

1. Install a control capable of automatically shutting OFF the controlled receptacles when the space is typically unoccupied, either at the receptacle or circuit level. When an automatic time switch control is installed it shall incorporate an override control that allows the controlled receptacle to remain ON for no more than 2 hours when an override is initiated and an automatic holiday “shut-OFF” feature that turns OFF all loads for at least 24 hours and then resumes the normally scheduled operation. Countdown timer switches shall not be used to comply with the automatic time switch control requirements; and
2. Install at least one controlled receptacle within 6 feet from each uncontrolled receptacle or install a splitwired receptacle with at least one controlled and one uncontrolled receptacle. Where receptacles are installed in modular furniture in open office areas, at least one controlled receptacle shall be installed at each workstation; and
3. Provide a permanent and durable marking for controlled receptacles or circuits to differentiate them from uncontrolled receptacles or circuits; and
4. For hotel and motel guest rooms, install controlled receptacles for at least one-half of the 120-volt receptacles in each guestroom. Electric circuits serving controlled receptacles in guestrooms shall have captive card key controls, occupant sensing controls, or automatic controls so the power is switched OFF no longer than 30 minutes after the guestroom has been vacated.

Note: A hardwired power strip controlled by an occupant sensing control may be used to comply with Section 130.5(d). Plug-in strips and other plug-in devices shall not be used to comply with the requirements of Section 130.5(d).

Exception 1 to Section 130.5(d): Receptacles that are only for the following purposes:

i. Receptacles specifically for refrigerators and water dispensers in kitchen area.

ii. Receptacles located a minimum of six feet above the floor that are specifically for clocks.

iii. Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms.

iv. Receptacles on circuits rated more than 20 amperes.

v. Receptacles connected to an uninterruptible power supply (UPS) that are intended to be in continuous use, 24 hours per day/365 days per year, and are marked to differentiate them from other uncontrolled receptacles or circuits.

Exception 2 to Section 130.5(d): Receptacles in healthcare facilities.

(e) **Demand responsive controls and equipment.** See Section 110.12 for requirements for demand responsive controls and equipment, including demand responsive controls for controlled receptacles.

NOTE: Definitions of terms and phrases in Section 130.5 are determined as specified in Section 100.1(b). Terms and phrases not found in Section 100.1(b) shall be defined as specified in Title 24, Part 3, Article 100 of the California Electrical Code.

Note: *Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1,* Public Resources Code.

TABLE 130.5-A MINIMUM REQUIREMENTS FOR METERING OF ELECTRICAL LOAD

Metering Functionality	Electrical Services rated 50 kVA or less	Electrical Services rated more than 50kVA and less than or equal to 250 kVA	Electrical Services rated more than 250 kVA and less than or equal to 1000kVA	Electrical Services rated more than 1000kVA
Instantaneous (at the time) kW demand	Required	Required	Required	Required
Historical peak demand (kW)	Not required	Not required	Required	Required
Tracking kWh for a user-definable period.	Required	Required	Required	Required
kWh per rate period	Not required	Not required	Not required	Required

TABLE 130.5-B MINIMUM REQUIREMENTS FOR SEPARATION OF ELECTRICAL LOAD

ELECTRICAL LOAD TYPE	ELECTRICAL SERVICES RATED 50 kVA OR LESS	ELECTRICAL SERVICES RATED MORE THAN 50 kVA AND LESS THAN OR EQUAL TO 250 kVA	ELECTRICAL SERVICES RATED MORE THAN 250 kVA AND LESS THAN OR EQUAL TO 1000 kVA	ELECTRICAL SERVICES RATED MORE THAN 1000 kVA
Lighting including exit and egress lighting and exterior lighting	Not required	All lighting in aggregate	All lighting disaggregated by floor, type or area	All lighting disaggregated by floor, type or area
HVAC systems and components including chillers, fans, heaters, furnaces, package units, cooling towers and circulation pumps associated with HVAC	Not required	All HVAC in aggregate	All HVAC in aggregate and each HVAC load rated at least 50 kVA	All HVAC in aggregate and each HVAC load rated at least 50 kVA
Domestic and service water system pumps and related systems and components	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Plug load including appliances rated less than 25 kVA	Not required	All plug load in aggregate Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug load separated by floor, type or area Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug load separated by floor, type or area All groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf
Elevators, escalators, moving walks and transit systems	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Other individual non-HVAC loads or appliances rated 25 kVA or greater	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Industrial and commercial load centers 25 kVA or greater, including theatrical lighting installations and commercial kitchens	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Renewable power source (net or total)	Each group	Each group	Each group	Each group
Loads associated with renewable power source	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Charging stations for electric vehicles	All loads in aggregate	All loads in aggregate	All loads in aggregate	All loads in aggregate

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SUBCHAPTER 5
NONRESIDENTIAL AND HOTEL/MOTEL OCCUPANCIES—PERFORMANCE AND PRESCRIPTIVE COMPLIANCE APPROACHES FOR ACHIEVING ENERGY EFFICIENCY

SECTION 140.0 – PERFORMANCE AND PRESCRIPTIVE COMPLIANCE APPROACHES

Nonresidential and hotel/motel buildings shall comply with all of the following:

(a) The requirements of Sections 100.0 through 110.12 applicable to the building project (mandatory measures for all buildings).

(b) The requirements of Sections 120.0 through 130.5 (mandatory measures for nonresidential and hotel/motel buildings).

(c) Either the performance compliance approach (energy budgets) specified in Section 140.1 or the prescriptive compliance approach specified in Section 140.2 for the climate zone in which the building will be located. Climate zones are shown in Figure 100.1-A.

Note to Section 140.0(c): The Commission periodically updates, publishes and makes available to interested persons and local enforcement agencies precise descriptions of the climate zones, which is available by zip code boundaries depicted in the Reference Joint Appendices along with a list of the communities in each zone.

Note to Section 140.0: The requirements of Sections 140.1 through 140.10 apply to newly constructed buildings. Section 141.0 specifies which requirements of Sections 140.1 through 140.10 also apply to additions or alterations to existing buildings.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 140.1 – PERFORMANCE APPROACH: ENERGY BUDGETS

A building complies with the performance approach if the energy budget calculated for the proposed design building under Subsection (b) is no greater than the energy budget calculated for the standard design building under Subsection (a).

(a) **Energy budget for the standard design building.** The energy budget for the Standard Design Building is determined by applying the mandatory and prescriptive requirements to the proposed design building. The energy budget is the sum of the source energy and TDV energy for space-conditioning, indoor lighting, mechanical ventilation, photovoltaic (PV) and battery storage systems, service water heating and covered process loads.

(b) **Energy budget for the proposed design building.** The energy budget for a proposed design building is determined by calculating the source energy and TDV energy for the proposed design building. The energy budget is the sum of the source energy and TDV energy for space-conditioning, indoor lighting, mechanical ventilation, photovoltaic (PV) and battery storage systems, and service water heating and covered process loads.

EXCEPTION to Section 140.1(b). A community shared solar electric generation system, or other renewable electric generation system, and/or community shared battery storage system, which provides dedicated power, utility energy reduction credits, or payments for energy bill reductions, to the permitted building and is approved by the Energy Commission as specified in Title 24, Part 1, Section 10-115, may offset part or all of the solar electric generation system or battery storage system TDV energy required to comply with the Standards, as calculated according to methods established by the Commission in the Nonresidential ACM Reference Manual.

(c) **Calculation of energy budget.** The TDV energy for both the standard design building and the proposed design building shall be computed by compliance software certified for this use by the Commission. The processes for compliance software approval by the Commission are documented in the ACM Approval Manual.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 140.2 – PRESCRIPTIVE APPROACH

To comply using the prescriptive approach a building shall be designed with and shall have constructed and installed systems and components meeting the applicable requirements of Sections 140.3 through 140.10.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 140.3 – PRESCRIPTIVE REQUIREMENTS FOR BUILDING ENVELOPES

A building complies with this section by being designed with and constructed to meet all prescriptive requirements in Subsection (a) and the requirements of Subsection (c) and (d) where they apply.

(a) **Envelope component requirements.**

1. **Exterior roofs and ceilings.** Exterior roofs and ceilings shall comply with each of the applicable requirements in this subsection:

   A. **Roofing products.** Shall meet the requirements of Section 110.8 and the applicable requirements of Subsections i through ii:

      i. Nonresidential buildings:

         a. Low-sloped roofs in climate zones 1 through 16 shall have:

            1. A minimum aged solar reflectance of 0.63 and a minimum thermal emittance of 0.75; or

            2. A minimum solar reflectance index (SRI) of 75.

            Exception 1 to Section 140.3(a)1Aia: Wood-framed roofs in climate zones 3 and 5 are exempt from the requirements of Section 140.3(a)1Aia if the roof assembly has a U-factor of 0.034 or lower.

            Exception2 to Section 140.3(a)1Aia: Roof constructions with a weight of at least 25 lb/ft^2 over the roof membrane are exempt from the requirements of Section 140.3(a)1Aia.

            Exception 3 to Section 140.3(a)1Aia: An aged solar reflectance less than 0.63 is allowed provided the maximum roof/ceiling U-factor in Table 140.3 is not exceeded.

         b. Steep-sloped roofs:

            1. In Climate Zones 1 and 3 shall have a minimum aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or a minimum SRI of 16.

            2. In Climate Zones 2 and 4 through 16 shall have a minimum aged solar reflectance of 0.25 and a minimum thermal emittance of 0.80, or a minimum SRI of 23.

      ii. Guest rooms of hotel and motel buildings:

         a. Low-sloped roofs in Climate Zones 9, 10, 11, 13, 14 and 15 shall have a minimum aged solar reflectance of 0.55 and a minimum thermal emittance of 0.75, or a minimum SRI of 64.

            Exception to Section 140.3(a)1Aiia: Roof constructions with a weight of at least 25 lb/ft^2 over the roof membrane.

         b. Steep-sloped roofs in Climate Zones 2 through 15 shall have a minimum aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or a minimum SRI of 16.

TABLE 140.3 ROOF/CEILING INSULATION TRADEOFF FOR AGED SOLAR REFLECTANCE – NONRESIDENTIAL BUILDINGS

Aged Solar Reflectance	Metal Building Climate Zone 1-16 U-factor	Wood framed and Other Climate Zone 6 - 8 U-factor	Wood Framed and Other All Other Climate Zones U-factor
0.62-0.56	0.038	0.045	0.032
0.55-0.46	0.035	0.042	0.030
0.45-0.36	0.033	0.039	0.029
0.35-0.25	0.031	0.037	0.028

Exception to Section 140.3(a)1A: Roof area covered by building integrated photovoltaic panels and building integrated solar thermal panels are not required to meet the minimum requirements for solar reflectance, thermal emittance, or SRI.

B. **Roof insulation.** Roofs shall have an overall assembly U-factor no greater than the applicable value in Table 140.3-B, C or D, and where required by Section 110.8 and 120.7(a)3, insulation shall be placed in direct contact with a roof or drywall ceiling.

2. **Exterior walls.** Exterior walls shall have an overall assembly U-factor no greater than the applicable value in Table 140.3-B, C or D.

3. **Demising walls.** Demising walls shall meet the requirements of Section 120.7(b)7. Vertical windows in demising walls between conditioned and unconditioned spaces shall have an area-weighted average U-factor no greater than the applicable value in Table 140.3-B, C or D.

4. **Exterior floors and soffits.** Exterior floors and soffits shall have an overall assembly U-factor no greater than the applicable value in Table 140.3-B, C or D.

5. **Exterior Windows.** Vertical windows in exterior walls shall:

   A. Percent window area shall be limited in accordance with the applicable requirements of i and ii below:

      i. a west-facing area no greater than 40 percent of the gross west-facing exterior wall area, or 6 feet times the west-facing display perimeter, whichever is greater; and

      ii. a total area no greater than 40 percent of the gross exterior wall area, or 6 feet times the display perimeter, whichever is greater; and

      NOTE: Demising walls are not exterior walls, and therefore demising wall area is not part of the gross exterior wall area or display perimeter and windows in demising walls are not part of the window area.

      Exception to Section 140.3(a)5A: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

   B. Have an area-weighted average U-factor no greater than the applicable value in Table 140.3-B, C or D.

      Exception 1 to Section 140.3(a)5B: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

      Exception 2 to Section 140.3(a)5B: For vertical windows containing chromogenic type glazing:

i. The lower-rated labeled U-factor shall be used with automatic controls to modulate the amount of heat flow into the space in multiple steps in response to daylight levels or solar intensity; and

ii. Chromogenic glazing shall be considered separately from other glazing; and

iii. Area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

C. Have an area-weighted average relative solar heat gain coefficient, RSHGC, excluding the effects of interior shading, no greater than the applicable value in Table 140.3-B, C or D.

For purposes of this paragraph, the relative solar heat gain coefficient, RSHGC, of a vertical window is:

i. The solar heat gain coefficient of the windows; or

ii. Relative solar heat gain coefficient is calculated using Equation 140.3-A, if the window has an overhang or exterior horizontal slats that extend beyond each side of the window jamb by a distance equal to the overhang's horizontal projection.

Exception 1 to Section 140.3(a)5C: An area- weighted average relative solar heat gain coefficient of 0.56 or less shall be used for windows:

a. That are in the first story of exterior walls that form a display perimeter; and
b. For which codes restrict the use of overhangs to shade the windows.

Exception 2 to Section 140.3(a)5C: For vertical glazing containing chromogenic type glazing:

i. the lower-rate labeled RSHGC shall be used with automatic controls to modulate the amount of heat flow into the space in multiple steps in response to daylight levels or solar intensity; and

ii. chromogenic glazing shall be considered separately from other glazing; and

iii. area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

Exception 3 to Section 140.3(a)5C: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

NOTE: Demising walls are not exterior walls, and therefore windows in demising walls are not subject to SHGC requirements.

D. Have an area-weighted average Visible Transmittance (VT) no less than the applicable value in Tables 140.3-B and C, or Equation 140.3-B, as applicable.

Exception 1 to Section 140.3(a)5D: When the window's primary and secondary sidelit daylit zones are completely overlapped by one or more skylit daylit zones, then the window need not comply with Section 140.3(a)5D.

Exception 2 to Section 140.3(a)5D: If the window's VT is not within the scope of NFRC 200, or ASTM E972, then the VT shall be calculated according to Reference Nonresidential Appendix NA6.

Exception 3 to Section 140.3(a)5D: For vertical windows containing chromogenic type glazing:

i. The higher-rate labeled VT shall be used with automatic controls to modulate the amount of light transmitted into the space in multiple steps in response to daylight levels or solar intensity; and

ii. Chromogenic glazing shall be considered separately from other glazing; and

iii. Area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

Exception 4 to Section 140.3(a)5D: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

NOTE: Demising walls are not exterior walls, and therefore windows in demising walls are not subject to VT requirements.

EQUATION 140.3-A RELATIVE SOLAR HEAT GAIN COEFFICIENT, RSHGC

$RSHGC = SHGC \times [1 + a \times (2.72^{-PF} - 1) \times (\sin(b \times Az) + c]$

where:

	a	b	c
Overhang	0.150	0.008727	5.67
Exterior Horizonal Slat	0.144	0.008727	5.13

RSHGC = Relative Solar Heat Gain Coefficient.

SHGC = Solar Heat Gain Coefficient of the vertical fenestration.

Az = Azimuth of the vertical fenestration in degrees.

PF = Projection factor as calculated by Equation 140.3-C.

EQUATION 140.3-B VERTICAL FENESTRATION MINIMUM VT

$VT \geq 0.11/ WWR$

WHERE:

WWR = Window Wall Ratio, the ratio of (i) the total window area of the entire building to (ii) the total gross exterior wall area of the entire building. If the WWR is greater than 0.40, then 0.40 shall be used as the value for WWR in EQUATION 140.3-B.

VT = Visible Transmittance of framed window.

6. **Skylights.** Skylights shall:

   A. Have an area no greater than 5 percent of the gross exterior roof area Skylight Roof Ratio (SRR); and

      Exception 1 to Section 140.3(a)6A: Buildings with atria over 55 feet high shall have a skylight area no greater than 10 percent of the gross exterior roof area.

      Exception 2 to Section 140.3(a)6A: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

   B. Have an area-weighted performance rating U-factor no greater than the applicable value in Table 140.3-B, C or D.

Exception 1 to Section 140.3(a)6B: For skylights containing chromogenic type glazing:

i. the lower-rate labeled U-factor shall be used with automatic controls to modulate the amount of heat flow into the space in multiple steps in response to daylight levels or solar intensity; and

ii. chromogenic glazing shall be considered separately from other glazing; and

iii. area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

Exception 2 to Section 140.3(a)6B: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

C. Have an area-weighted performance rating solar heat gain coefficient no greater than the applicable value in Table 140.3-B, C or D.

Exception 1 to Section 140.3(a)6C: For skylights containing chromogenic type glazing:

i. the lower-rated labeled SHGC shall be used to demonstrate compliance with this section; and

ii. chromogenic glazing shall be considered separately from other glazing; and

iii. area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

Exception 2 to Section 140.3(a)6C: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

D. Have an area-weighted performance rating VT no less than the applicable value in Table 140.3-B or C; and

Exception 1 to Section 140.3(a)6D: For skylights containing chromogenic type glazing:

i. the higher-rated labeled VT shall be used with automatic controls to modulate the amount of light transmitted into the space in multiple steps in response to daylight levels or solar intensity and;

ii. chromogenic glazing shall be considered separately from other glazing; and

iii. area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

Exception 2 to Section 140.3(a)6D: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

E. Have a glazing material or diffuser that has a measured haze value greater than 90 percent, determined according to ASTM D1003 or other test method approved by the Energy Commission.

Exception 1 to Section 140.3(a)6E: Skylights designed and installed to exclude direct sunlight entering the occupied space by the use of fixed or automated baffles or the geometry of the skylight and light well.

Exception 2 to Section 140.3(a)6E: Conditioned greenhouses. The requirements of Section 120.6(h)4 apply.

7. **Exterior doors.** All exterior doors that separate conditioned space from unconditioned space or from ambient air shall have a U-factor not greater than the applicable value in Table 140.3-B, C or D. Doors that are more than one-quarter glass in area are considered glazed doors.

8. **Relocatable public school buildings.** In complying with Sections 140.3(a)1 to 7 shall meet the following:

A. Relocatable public school buildings shall comply with Table 140.3-B for a specific climate zone when the manufacturer or builder of the relocatable public school building certifies that the building is intended for use only in a specific climate zone; or

B. Relocatable public school buildings shall comply with Table 140.3-D for any climate zone when the manufacturer or builder of the relocatable public school building certifies that the building is intended for use in any climate zone; and

C. The manufacturer or builder of a relocatable public school building shall certify that components of the building comply with requirements of this section by:

i. The placement of two (2) metal identification labels on the building, one mechanically fastened and visible from the exterior and the other mechanically fastened to the interior frame above the ceiling at the end of the module, both labels stating (in addition to any other information by the Division of the State Architect or other law) "Complies with Title 24, Part 6 for all climate zones"; and

ii. Identification of the location of the two labels on the plans submitted to the enforcing agency.

9. **Air barrier**. To meet the requirement of Table 140.3-B, all buildings shall have a continuous air barrier that is designed and constructed to control air leakage into, and out of, the building's conditioned space.

Exception to Section 140.3(a)9: Relocatable public school buildings.

A. Design. Construction documents shall include air barrier boundaries, interconnections and penetrations, and associated square foot calculations for all sides of the air barrier.

B. Acceptable materials and assemblies. The air barrier shall be sealed at all joints for its entire length and shall be composed of:

i. Materials that have an air permeance not exceeding 0.004 cfm/ft^2, under a pressure differential of 0.3 in. of water (1.57 psf) (0.02 L/sec-m^2) at 75 Pa), when tested in accordance with ASTM E2178; or

ii. Assemblies of materials and components that have an average air leakage not exceeding 0.04 cfm/ft^2, under a pressure differential of 0.3 in. of water (1.57 psf) (0.2 L/m^2 at 75 pa), when tested in accordance with ASTM E2357, ASTM E1677, ASTM E1680 or ASTM E283.

Exception to Section 140.3(a)9 Bi: Materials in Table 140.3-A shall be deemed to comply with Section 140.3(a)9B provided that all joints are sealed, and all of the materials are installed as air barriers in accordance with the manufacturer's instructions.

Exception to Section 140.3(a)9Bii: The following materials shall be deemed to comply with Section 140.3(a)9B if all joints are sealed and all of the materials are installed as air barriers in accordance with the manufacturer's instructions:

a. Concrete masonry walls that have at least two coatings of paint or at least two coatings of sealer coating.

b. Concrete masonry walls with integral rigid board insulation.

c. Structurally insulated panels.

d. Portland cement or Portland sand parge, or stucco, or a gypsum plaster, each with a minimum 1/2 inch thickness.

C. Verification. Verification of the installed air barrier may be performed.

i. If verification is performed the entire building shall meet one of the following requirements:

a. An air leakage rate not exceeding 0.40 cfm/ft^2 at a pressure differential of 0.3 in. of water (1.57 psf) (2.0 L/m^2 at 75 Pa). when the entire building is tested, after completion of construction, in accordance with NA 5, or another test method approved by the Commission; or

b. For buildings that have more than 50,000 ft^2 of conditioned floor area, a sectional test method of co-pressurizing representative test floors and taking data from the specific floors

to achieve the requirement in Section 140.3(a)9Ci when following the procedures in Sections NA5.2 to NA5.7. Representative test floors must meet the following conditions:

I. The entire floor area of all stories that have any spaces directly under a roof.

II. The entire floor area of all stories that have a building entrance or loading dock.

III. Representative above grade wall sections of the building totaling at least 25 percent of the wall area enclosing the remaining conditioned space. Floor areas in Parts a and b above shall not be included in the 25 percent.

ii. If the air leakage requirements of either Section 140.3(a)9Cia or 140.3(a)9Cib are not met, a visual inspection and diagnostic evaluation shall be completed in accordance with NA5.7, all observed leaks shall be sealed where such sealing can be made without destruction of existing building components, and buildings where the tested leakage rate exceeded 0.6 cfm/ft^2 of building shell area at 75 Pa have been retested to confirm leakage is below 0.6 cfm/ft^2 of building shell at 75 Pa.

TABLE 140.3-A MATERIALS DEEMED TO COMPLY WITH SECTION 140.3(a)9B

	MATERIALS	**MINIMUM THICKNESS**
1	Plywood	Minimum 3/8inches thickness
2	Oriented strand board	Minimum 3/8 inches thickness
3	Extruded polystyrene insulation board	Minimum 1/2 inches thickness
4	Foil-backed polyisocyanurate insulation board	Minimum 1/2 inches thickness
5	Closed cell spray foam with a minimum density of 2.0 pcf	Minimum 2 inches thickness
6	Open cell spray foam with a density no less than 0.4 pcf and no greater than 1.5 pcf	Minimum 5-1/2 inches thickness
7	Exterior and interior gypsum board	Minimum 1/2 inches thickness
8	Cement board	Minimum 1/2 inches thickness
9	Built up roofing membrane	No minimum thickness
10	Modified bituminous roof membrane	No minimum thickness
11	Fully adhered single-ply roof membrane	No minimum thickness
12	A Portland cement or Portland sand parge, or a gypsum plaster	Each with Minimum 5/8 inches thickness
13	Cast-in-place concrete, or precast concrete	No minimum thickness
14	Fully grouted concrete block masonry	No minimum thickness
15	Sheet steel or sheet aluminum	No minimum thickness

TABLE 140.3-B – PRESCRIPTIVE ENVELOPE CRITERIA FOR NONRESIDENTIAL BUILDINGS (INCLUDING RELOCATABLE PUBLIC SCHOOL BUILDINGS (WHERE MANUFACTURER CERTIFIES USE ONLY IN SPECIFIC CLIMATE ZONE; NOT INCLUDING HIGH-RISE RESIDENTIAL BUILDINGS AND GUEST ROOMS OF HOTEL/MOTEL BUILDINGS)

					Climate Zone														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Envelope	**Maximum U-factor**	**Roofs/ Ceilings**		Metal Building	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041
				Wood Framed and Other	0.034	0.034	0.034	0.034	0.034	0.049	0.049	0.049	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034
		Walls		Metal Building	0.113	0.061	0.113	0.061	0.061	0.113	0.113	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.057	0.061
				Metal-framed	0.060	0.055	0.071	0.055	0.055	0.060	0.060	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055
				Mass Light[1]	0.196	0.170	0.278	0.227	0.440	0.440	0.440	0.440	0.440	0.170	0.170	0.170	0.170	0.170	0.170	0.170
				Mass Heavy[1]	0.253	0.650	0.650	0.650	0.650	0.690	0.690	0.690	0.690	0.650	0.184	0.253	0.211	0.184	0.184	0.160
				Wood-framed and Other	0.095	0.059	0.110	0.059	0.102	0.110	0.110	0.102	0.059	0.059	0.045	0.059	0.059	0.059	0.042	0.059
		Floors/ Soffits		Raised Mass	0.092	0.092	0.269	0.269	0.269	0.269	0.269	0.269	0.269	0.269	0.092	0.092	0.092	0.092	0.092	0.058
				Other	0.048	0.039	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.039	0.071	0.071	0.039	0.039	0.039
	Roofing Products	**Low-sloped**		Aged Solar Reflectance	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
				Thermal Emittance	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
		Steep-Sloped		Aged Solar Reflectance	0.20	0.25	0.20	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
				Thermal Emittance	0.75	0.80	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	Air Barrier				REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ
	Exterior Doors, Maximum U-factor			Non-Swinging	0.50	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	0.50
				Swinging	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70

CONTINUED: TABLE 140.3-B – PRESCRIPTIVE ENVELOPE CRITERIA FOR NONRESIDENTIAL BUILDINGS (INCLUDING RELOCATABLE PUBLIC SCHOOL BUILDINGS WHERE MANUFACTURER CERTIFIES USE ONLY IN SPECIFIC CLIMATE ZONE; NOT INCLUDING HIGH-RISE RESIDENTIAL BUILDINGS AND GUEST ROOMS OF HOTEL/MOTEL BUILDINGS)

					Climate Zone														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Envelope	**Fenestration**	**Vertical**			**Fixed Window**															
			Area-weighted Performance Rating	Max U-factor	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.34	0.36	0.34	0.34	0.34	0.34	0.34	0.36
				Max RSHGC	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.22	0.25	0.22	0.22	0.22	0.22	0.22	0.25
				Min VT	0.42															
					Curtainwall or Storefront															
				Max U-factor	0.38	0.41	0.41	0.41	0.41	0.41	0.38	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
				Max RSHGC	0.25	0.26	0.26	0.26	0.26	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
				Min VT	0.46															
					Operable Window															
				Max U-factor	0.46															
				Max RSHGC	0.22															
				Min VT	0.32															
					Glazed Doors															
				Max U-factor	0.45															
				Max RSHGC	0.23															
				Min VT	0.17															
			Max WWR%		40%															

					All Climate Zones			
		Skylights			Glass, Curb Mounted	Glass, Deck Mounted	Plastic, Curb Mounted	Tubular Daylighting Devices (TDDs)
			Area-Weighted Performance Rating	Max U-factor	0.58	0.46	0.88	0.88
				Max SHGC	0.25	0.25	NR	NR
				Min VT (Min VT_{annual} for TDDs)	0.49	0.49	0.64	0.38
			Maximum SRR%		5%			

TABLE 140.3-C – PRESCRIPTIVE ENVELOPE CRITERIA FOR GUEST ROOMS OF HOTEL/MOTEL BUILDINGS

				Climate Zone															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Envelope	**Maximum U-factor**	**Roofs / Ceilings**	Metal Building	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041
			Wood Framed and Other	0.028	0.028	0.034	0.028	0.034	0.034	0.039	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028
		Walls	Metal Building	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.057	0.057	0.057	0.057	0.057	0.057
			Metal-framed	0.069	0.069	0.069	0.069	0.069	0.069	0.105	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.048	0.069
			Mass, Light[1]	0.170	0.170	0.170	0.170	0.170	0.227	0.227	0.227	0.196	0.170	0.170	0.170	0.170	0.170	0.170	0.170
			Mass, Heavy[1]	0.160	0.160	0.160	0.184	0.211	0.690	0.690	0.690	0.690	0.690	0.184	0.253	0.211	0.184	0.184	0.160
			Wood-framed and Other	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.042	0.059	0.059	0.042	0.042	0.042
		Floors / Soffits	Raised Mass[1]	0.045	0.045	0.058	0.058	0.058	0.069	0.092	0.092	0.092	0.069	0.058	0.058	0.058	0.045	0.058	0.037
			Other	0.034	0.034	0.039	0.039	0.039	0.039	0.071	0.039	0.039	0.039	0.039	0.039	0.039	0.034	0.039	0.034
	Roofing Products	**Low-sloped**	Aged Solar Reflectance	NR	NR	NR	NR	NR	NR	NR	NR	0.55	0.55	0.55	NR	0.55	0.55	0.55	NR
			Thermal Emittance	NR	NR	NR	NR	NR	NR	NR	NR	0.75	0.75	0.75	NR	0.75	0.75	0.75	NR
		Steep- Sloped	Aged Solar Reflectance	NR	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	NR
			Thermal Emittance	NR	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0. 75	0.75	0.75	0.75	0.75	0.75	NR
	Air Barrier			REQ	REQ	REQ	REQ	REQ	REQ	NR	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ
	Exterior Doors, Maximum U-factor		Non-Swinging	0.50	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	0.50
			Swinging	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70

CONTINUED: TABLE 140.3-C – PRESCRIPTIVE ENVELOPE CRITERIA FOR GUEST ROOMS OF HOTEL/MOTEL BUILDINGS

				All Climate Zones			
				Fixed Window	Operable Window	Curtainwall/ Storefront	Glazed Doors[2]
Envelope	**Fenestration**	**Vertical**	Area-Weighted Performance Rating	Max U-factor	0.36	0.46	0.41	0.45
				Max RSHGC	0.25	0.22	0.26	0.23
			Area-Weighted Performance Rating	Min VT	0.42	0.32	0.46	0.17
			Maximum WWR%	40%				
		Skylights			Glass, Curb Mounted	Glass, Deck Mounted	Plastic, Curb Mounted	
			Area-Weighted Performance Rating	Max U-factor	0.58	0.46	0.88	
				Max SHGC	0.25	0.25	NR	
			Area-Weighted Performance Rating	Min VT	0.49	0.49	0.64	
			Maximum SRR%	5%				

Notes:

1. As defined in Section 100.1, light mass walls are walls with a heat capacity of at least 7.0 Btu/ft²-oF and less than 15.0 Btu/ft²-oF. Heavy mass walls are walls with a heat capacity of at least 15.0 Btu/ft²-oF.

2. Glazed Doors applies to both site-built and to factory-assembled glazed doors.

TABLE 140.3-D PRESCRIPTIVE ENVELOPE CRITERIA FOR RELOCATABLE PUBLIC SCHOOL BUILDINGS FOR USE IN ALL CLIMATE ZONES

Roofs/ Ceilings	**Metal Buildings**	Maximum U-factor	0.041
Roofs/ Ceilings	**Non-Metal Buildings**	Maximum U-factor	0.034
Walls	**Wood frame buildings**	Maximum U-factor	0.042
Walls	**Metal frame buildings**	Maximum U-factor	0.057
Walls	**Metal buildings**	Maximum U-factor	0.057
Walls	**Mass/7.0≤ HC**	Maximum U-factor	0.170
Walls	**All Other Walls**	Maximum U-factor	0.059
Floors and Soffits	**Floors and Soffits**	Maximum U-factor	0.048
Roofing Products	**Low-Sloped**	Aged Solar Reflectance	0.63
Roofing Products	**Low-Sloped**	Thermal Emittance	0.75
Roofing Products	**Steep-Sloped**	Aged Solar Reflectance	0.25
Roofing Products	**Steep-Sloped**	Thermal Emittance	0.80
Fenestration	**Windows**	Maximum U-factor	0.47
Fenestration	**Windows**	Maximum SHGC	0.26
Fenestration	**Glazed Doors (Site-Built and Factory Assembled)**	Maximum U-factor	0.45
Fenestration	**Glazed Doors (Site-Built and Factory Assembled)**	Maximum SHGC	0.23
Fenestration	**Skylights**	Glass with Curb Maximum U-factor	0.99
Fenestration	**Skylights**	Glass without Curb Maximum U-factor	0.57
Fenestration	**Skylights**	Plastic with Curb Maximum U-factor	0.87
Fenestration	**Skylights**	Glass Type 0-2% SRR Maximum SHGC	0.46
Fenestration	**Skylights**	Glass Type 2.1-5% SRR Maximum SHGC	0.36
Fenestration	**Skylights**	Plastic Type 0-2% SRR Maximum SHGC	0.69
Fenestration	**Skylights**	Plastic Type 2.1-5% SRR Maximum SHGC	0.57
Exterior Doors	**Non-Swinging doors**	Maximum U-factor	0.50
Exterior Doors	**Swinging doors**	Maximum U-factor	0.70

(b) **Reserved.**

(c) **Minimum daylighting requirement for large, enclosed spaces.** In climate zones 2 through 15, conditioned enclosed spaces, and unconditioned enclosed spaces that are greater than 5,000 square feet and that are directly under a roof with ceiling heights greater than 15 feet, shall meet the following requirements:

1. A combined total of at least 75 percent of the floor area, as determined in building floor plan (drawings) view, shall be within one or more of the following:
   A. Primary sidelit daylit zone in accordance with Section 130.1(d), or
   B. The total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights.
2. All skylit daylit zones and primary sidelit daylit zones shall be shown on building plans.
3. General lighting in daylit zones shall be controlled in accordance with Section 130.1(d).
4. The total skylight area is at least 3 percent of the total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights; or the product of the total skylight area and the average skylight visible transmittance is no less than 1.5 percent of the total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights.
5. All skylights shall have a glazing material or diffuser that has a measured haze value greater than 90 percent, tested according to ASTM D1003 (notwithstanding its scope) or other test method approved by the Commission.
6. Skylights for conditioned and unconditioned spaces shall have an area-weighted average Visible Transmittance (VT) no less than the applicable value required by Section 140.3(a)6D.

Exception 1 to Section 140.3(c): Auditoriums, churches, movie theaters, museums and refrigerated warehouses.

Exception 2 to Section 140.3(c): In buildings with unfinished interiors, future enclosed spaces for which there are plans to have:

A. A floor area of less than or equal to 5,000 square feet, or

B. Ceiling heights of less than or equal to 15 feet.

This exception shall not be used for S-1 or S-2 (storage), or for F-1 or F-2 (factory) occupancies.

Exception 3 to Section 140.3(c): Enclosed spaces having a designed general lighting system with a lighting power density less than 0.5 watts per square foot.

Exception 4 to Section 140.3(c): Enclosed spaces where it is documented that permanent architectural features of the building, existing structures or natural objects block direct beam sunlight on at least half of the roof over the enclosed space for more than 1500 daytime hours per year between 8 a.m. and 4 p.m.

(d) **Daylighting Design Power Adjustment Factors (PAFs).** To qualify for a Power Adjustment Factor (PAF) as specified in Section 140.6(a)2L, daylighting devices shall meet the following requirements:

1. **Clerestory fenestration.** To qualify for a PAF, clerestory fenestration shall meet the following requirements:
   A. Shall be installed on east-, west-, or south-facing facades.
   B. Shall have a head height that is at least 10 feet above the finished floor.
   C. Shall have a glazing height that is greater than or equal to 10 percent of the head height.
   D. If operable shading is installed on the clerestory fenestration, then the clerestory fenestration shading shall be controlled separately from shading serving other vertical fenestration.

2. **Interior and exterior horizontal slats.** To qualify for a PAF, horizontal slats shall meet the following requirements:

   A. Shall be installed adjacent to vertical fenestration on east- or west-facing facades with Window Wall Ratios between 20 and 30 percent.

   B. Exterior horizontal slats shall be level or sloped downwards from fenestration. Interior horizontal slats shall be level or sloped upwards from fenestration.

   C. Shall have a projection factor as specified in Table 140.3-E. The projection factor is calculated using Equation 140.3-C.

   D. Shall have a minimum distance factor of 0.3. The distance factor is calculated using Equation 140.3-C.

   Exception to Section 140.3(d)2D: Where it is documented that existing adjacent structures or natural objects within view of the vertical fenestration block direct sunlight onto the vertical fenestration between 8 a.m. and 5 p.m. for less than 500 daytime hours per year.

   E. Shall have a minimum Visible Reflectance of 0.50 when tested as specified in ASTM E903.

   F. Shall be opaque.

   Exception to Section 140.3(d)2F: Horizontal slats with a Visible Transmittance of 0.03 or less when tested as specified in ASTM E1175.

   G. Shall be permanently mounted and not adjustable.

   H. Shall extend the entire height of the vertical fenestration and beyond each side of the window jamb by a distance equal to or greater than their horizontal projection.

   Exception to Section 140.3(d)2H: Where the slats are located entirely within the vertical fenestration's rough opening or a fin is located at the window jambs and extends vertically the entire height of the window jamb and extends horizontally the entire depth of the projection.

   I. Shall be shown on the plans with the dimensions for the slat projection and slat spacing as specified in Equation 140.3-C.

   J. Shall have a conspicuous factory installed label permanently affixed and prominently located on an attachment point of the device to the building envelope, stating the following: "NOTICE: Removal of this device will require re-submittal of compliance documentation to the enforcement agency responsible for compliance with California Title 24, Part 6".

3. **Interior and Exterior Light Shelves.** To qualify for a PAF, light shelves shall meet the following requirements:

   A. Where there is vertical fenestration area below the light shelf, both interior and exterior light shelves shall be installed.

   B. Shall be installed adjacent to clerestory fenestration on south-facing facades with Window Wall Ratios greater than 30 percent. The head height of the light shelves shall be no more than one foot below the finished ceiling. The clerestory fenestration shall meet the requirements of Section 140.3(d)1.

   C. Exterior light shelves shall be level or sloped downwards from fenestration. Interior light shelves shall be level or sloped upwards from fenestration.

   D. Shall have a projection factor of the applicable value as specified in Table 140.3-E. The light shelf projection factor is calculated using Equation 140.3-C.

   E. Shall have a minimum Distance Factor of 0.3. The distance factor is calculated using Equation 140.3-C.

      Exception to Section 140.3(d)3E: Where it is documented that existing adjacent structures or natural objects within view of the vertical fenestration block direct sunlight onto the vertical fenestration between 8 a.m. and 5 p.m. for less than 750 daytime hours per year.

   F. Shall have a top surface with a minimum Visible Reflectance of 0.50 when tested as specified in ASTM E903.

Exception to Section 140.3(d)3F: Where an exterior light shelf is installed greater than two feet below the clerestory sill.

G. Shall extend beyond each side of the window jamb by a distance equal to or greater than their horizontal projection.

H. Shall be shown on the plans with the dimensions for the light shelf projection and light shelf spacing as specified in Equation 140.3-C.

TABLE 140.3-E Daylighting Devices

Daylighting Device	Orientation of the Vertical Fenestration	Projection Factor
Horizontal Slats	East or West	2.0 to 3.0
Interior Light Shelf	South	1.0 to 2.0
Exterior Light Shelf	South	0.25 to 1.25

EQUATION 140.3-C PROJECTION AND DISTANCE FACTOR CALCULATION

Projection Factor =	Projection / Spacing
Distance Factor =	D / (H_{AS} × Projection Factor)
WHERE:	
Projection =	The horizontal distance between the base edge and the projected edge of the overhang, slat, or light shelf.
Spacing =	For overhangs, the vertical distance between the projected edge of the overhang and sill of the vertical fenestration below it. For horizontal slats, the vertical distance between the projected edge of a slat to the base edge of the slat below it. For interior light shelves, the vertical distance between the projected edge of the light shelf and head of the clerestory fenestration above it. For exterior light shelves, the vertical distance between the projected edge of the light shelf and sill of the vertical fenestration below it.
D =	Distance between the existing structure or nature object and the fenestration
H_{AS} =	Height difference between the top of the existing structure or nature object and the bottom of the fenestration
NOTE:	The base edge is the edge of an overhang, slat, or light shelf that is adjacent to the vertical fenestration. The projected edge is the opposite edge from the base edge.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 140.4 – PRESCRIPTIVE REQUIREMENTS FOR SPACE CONDITIONING SYSTEMS

A building complies with this section by being designed with and having constructed and installed a space-conditioning system that meets the applicable prescriptive requirements of Subsections (a) through (q).

(a) **Sizing, equipment selection and type.**

1. **Sizing and equipment selection.** Mechanical heating and mechanical cooling equipment serving healthcare facilities shall be sized to meet the design heating and cooling loads as calculated according to the Subsection (b). Mechanical heating and mechanical cooling equipment serving > hotel/motel buildings and nonresidential buildings other than healthcare facilities shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building, as calculated according to Subsection (b).

   Exception 1 to Section 140.4(a)1: Where it can be demonstrated to the satisfaction of the enforcing agency that oversizing will not increase building TDV energy use.

   Exception 2 to Section 140.4(a)1: Standby equipment with controls that allow the standby equipment to operate only when the primary equipment is not operating.

   Exception 3 to Section 140.4(a)1: Multiple units of the same equipment type, such as multiple chillers and boilers, having combined capacities exceeding the design load, if they have controls that sequence or otherwise optimally control the operation of each unit based on load.

2. **Single zone space-conditioning system type.** Single zone space-conditioning systems with direct expansion cooling with rated cooling capacity 240,000 Btu/hr or less serving the following spaces shall meet the applicable requirements in Items A–H, or shall meet the performance compliance requirements of Section 140.1. All other system types, including systems with rated cooling capacity greater than 240,000 Btu/hr, multi-zone systems and systems using central boilers or chillers, shall comply with the applicable requirements of Section 140.

   A. Retail and grocery building spaces in Climate Zones 2 through 15. The space-conditioning system shall be a heat pump.

   B. Retail and grocery building spaces in Climate Zones 1 and 16 with cooling capacity less than 65,000 Btu/hr. The space-conditioning system shall be an air conditioner with furnace.

   C. Retail and grocery building spaces in Climate Zones 1 and 16 with cooling capacity 65,000 Btu/hr or greater. The space-conditioning system shall be a dual-fuel heat pump.

   D. School building spaces. For Climate Zones 2 through 15, the space-conditioning system shall be a heat pump. For Climate Zones 1 and 16, the space-conditioning system shall be a dual-fuel heat pump.

   E. Office, financial institution and library building spaces in Climate Zones 1 through 15. The space-conditioning system shall be a heat pump.

   F. Office, financial institution and library building spaces in Climate Zone 16 with cooling capacity less than 65,000 Btu/hr. The space-conditioning system shall be an air conditioner with furnace.

   G. Office, financial institution and library building spaces in Climate Zone 16 with cooling capacity 65,000 Btu/hr or greater. The space-conditioning system shall be a dual-fuel heat pump.

   H. Office spaces in warehouses. The space-conditioning system shall be a heat pump in all climate zones.

   Exception to Section 140.4(a)2: Systems utilizing recovered heat for space heating.

(b) **Calculations.** In making equipment sizing calculations under Subsection (a), all of the following rules shall apply:

1. **Heating and cooling loads.** Heating and cooling system design loads shall be determined in accordance with the procedures described in Subsection A or B below:

   A. For systems serving hotel/motel buildings~~,~~ and nonresidential buildings other than healthcare facilities, the method in the 2017 ASHRAE Handbook, Fundamentals shall be used or as specified in a method approved by the Commission.

   B. For system serving healthcare facilities the method in the California Mechanical Code shall be used.

2. **Indoor design conditions.** Indoor design temperature and humidity conditions for comfort applications shall be determined in accordance with Subsection A or B below:

   A. For systems serving hotel/motel buildings~~,~~ and nonresidential buildings other than healthcare facilities, ASHRAE Standard 55 or the 2017 ASHRAE Handbook, Fundamentals Volume, except that winter humidification and summer dehumidification shall not be required.

   B. For systems serving healthcare facilities the method in the California Mechanical Code shall be used.

3. **Outdoor design conditions.** Outdoor design conditions shall be selected in accordance with Subsection A or B below:

   A. For systems serving hotel/motel buildings~~,~~ and nonresidential buildings other than healthcare facilities the design conditions from Reference Joint Appendix JA2 shall be used, which is based on data from the ASHRAE Climatic Data for Region X. Heating design temperatures shall be no lower than the Heating Winter Median of Extremes values. Cooling design temperatures shall be no greater than the 0.5 percent Cooling Dry Bulb and Mean Coincident Wet Bulb values.

   B. For system serving healthcare facilities the method in Section 320.0 of the California Mechanical Code shall be used.

Exception to Section 140.4(b)3: Cooling design temperatures for cooling towers shall be no greater than the 0.5 percent cooling design wet bulb values.

4. **Ventilation.** Outdoor air ventilation loads shall be calculated using the ventilation rates required in Section 120.1(c)3.

5. **Envelope**. Envelope heating and cooling loads shall be calculated using envelope characteristics, including square footage, thermal conductance, Solar Heat Gain Coefficient or shading coefficient, and air leakage, consistent with the proposed design.

6. **Lighting.** Lighting heating and cooling loads shall be based on actual design lighting levels or power densities as specified in Section 140.6.

7. **People.** Occupant density shall be based on the expected occupancy of the building and shall be the same as determined under Section 120.1(c)3A, if used. Sensible and latent heat gains shall be as listed in the 2017 ASHRAE Handbook, Fundamentals, Chapter 18.

8. **Process loads.** Loads caused by a process shall be based upon actual information on the intended use of the building.

9. **Miscellaneous equipment.** Equipment loads other than process loads shall be calculated using design data compiled from one or more of the following sources:

   A. Actual information based on the intended use of the building; or

   B. Published data from manufacturer's technical publications or from technical societies, such as the ASHRAE Handbook, Applications Volume; or

   C. Other data based on the designer's experience of expected loads and occupancy patterns.

10. **Internal heat gains.** Internal heat gains may be ignored for heating load calculations.

11. **Safety factor.** Calculated design loads based on 140.4(b)1 through 10 may be increased by up to 10 percent to account for unexpected loads or changes in space usage.

12. **Other loads.** Loads such as warm-up or cool-down shall be calculated from principles based on the thermal capacity of the building and its contents, the degree of setback, and desired recovery time; or may be assumed to be no more than 30 percent for heating and 10 percent for cooling of the steady-state design loads. In addition, the steady-state load may include a safety factor in accordance with Section 140.4(b)11.

(c) **Fan systems.** Each fan system moving air into, out of or between conditioned spaces or circulating air for the purpose of conditioning air within a space shall meet the requirements of Items 1, 2 and 3 below.

1. **Fan power budget.** For each fan system that includes at least one fan or fan array with fan electrical input power ≥ 1 kW, fan system electrical input power (Fan $kW_{design,system}$) determined per Section 140.4(c)1(B) at the fan system design airflow shall not exceed Fan kW_{budget} as calculated per Section 140.4(c)1(A).

   A. **Calculation of fan power budget (Fan kW_{budget}).** For each fan system:

      i. Determine the fan system airflow and choose the appropriate table(s) for fan power allowance.

         a. For single-cabinet fan systems, use the fan system airflow and the power allowances in both Table 140.4-A and Table 140.4-B.

         b. For supply-only fan systems, use the fan system airflow and power allowances in Table 140.4-A.

         c. For relief fan systems, use the design relief airflow and the power allowances in Table 140.4-B.

         d. For exhaust, return and transfer fan systems, use the fan system airflow and the power allowances in Table 140.4-B.

         e. For complex fan systems, separately calculate the fan power allowance for the supply and return/exhaust systems and sum them. For the supply airflow, use supply airflow at the fan system design conditions, and the power allowances in Table 140.4-A. For the return exhaust airflow, use return/exhaust airflow at the fan system design conditions, and the power allowances in Table 140.4-B.

      ii. For each fan system determine the components included in the fan system and sum the fan power allowances of those components. All fan systems shall include the system base allowance. If, for a given component, only a portion of the fan system airflow passes through the component, calculate the fan power allowance for that component per Equation 140.4-A:

EQUATION 140.4-A FAN POWER ALLOWANCE

$$FPA_{adj} = \frac{Q_{comp}}{Q_{sys}} \text{ X } FPA_{comp}$$

Where

FPA_{adj} = The corrected fan power allowance for the component in w/cfm

Q_{comp} = The airflow through component in cfm

Q_{sys} = The fan system airflow in cfm

FPA_{comp} = The fan power allowance of the component from Table 140.4A or Table 140.4B

iii. Multiply the fan system airflow by the sum of the fan power allowances for the fan system.

iv. Divide by 1000 to convert to Fan kW_{budget}.

v. For building sites at elevations greater than 3,000 feet, multiply Fan kW_{budget} by the correction factor in Table 140.4-C.

B. Determining fan system electrical input power (Fan $kW_{design,system}$). Fan $kW_{design,system}$ is the sum of Fan kW_{design} for each fan or fan array included in the fan system with Fan $kW_{design} \geq 1$ kW. If variable speed drives are used, their efficiency losses shall be included. Fan input power shall be calculated with two times the clean filter pressure drop, which is the mean of the clean filter pressure drop and design final filter pressure drop. The Fan kW_{design} for each fan or fan array shall be determined using one of the following methods. There is no requirement to use the same method for all fans in a fan system:

i. Use the default Fan kW_{design} in Table 140.4-D for one or more of the fans. This method cannot be used for complex fan systems.

ii. Use the Fan kW_{design} at fan system design conditions provided by the manufacturer of the fan, fan array, or equipment that includes the fan or fan array calculated per a test procedure included in USDOE 10 CFR Part 430, USDOE 10 CFR Part 431, ANSI/AMCA Standard 208-2018, ANSI/AMCA Standard 210-2016, AHRI Standard 430-2020, AHRI Standard 440-2019 or ISO 5801-2017.

iii. Use the Fan kW_{design} provided by the manufacturer, calculated at fan system design conditions per one of the methods listed in Section 5.3 of ANSI/AMCA 208-2018.

iv. Determine the Fan kW_{design} by using the maximum electrical input power provided on the motor nameplate.

Table 140.4-A: Supply Fan Power Allowances (watts/ cfm)

Airflow	Multi-Zone VAV Systems ≤5,000 cfm[1]	Multi-Zone VAV Systems >5,000 and ≤10,000 cfm[1]	Multi-Zone VAV Systems >10,000 cfm[1]	All Other Fan Systems ≤5,000 cfm	All Other Fan Systems >5,000 and ≤10,000 cfm	All Other Fan Systems >10,000 cfm
Supply System Base Allowance for AHU serving spaces ≤ 6 floors away).	0.395	0.453	0.413	0.232	0.256	0.236
Supply system base allowance for AHU serving spaces > 6 floors away	0.508	0.548	0.501	0.349	0.356	0.325
MERV 13 to MERV 16 Filter upstream of thermal conditioning equipment (two times the clean filter pressure drop)[2]	0.136	0.114	0.105	0.139	0.120	0.107
MERV 13 to MERV 16 Final filter downstream of thermal conditioning equipment. (two times the clean filter pressure drop)[2]	0.225	0.188	0.176	0.231	0.197	0.177
Filtration allowance for > MERV 16 or HEPA Filter (two times the clean filter pressure drop) [2]	0.335	0.280	0.265	0.342	0.292	0.264
Central Hydronic heating coil allowance	0.046	0.048	0.052	0.046	0.050	0.054
Electric heat allowance	0.046	0.038	0.035	0.046	0.040	0.036

Gas heat allowance	0.069	0.057	0.070	0.058	0.060	0.072
Hydronic/DX cooling coil or heat pump coil (wet) allowance[3]	0.135	0.114	0.105	0.139	0.120	0.107
Solid or liquid Desiccant system allowance	0.157	0.132	0.123	0.163	0.139	0.124
Reheat Coil for Dehumidification Allowance	0.045	0.038	0.035	0.046	0.040	0.036
Allowance for Evaporative humidifier/cooler in series with a cooling coil. Value shown is allowed watts/cfm per 1.0 Inches of water gauge (in.w.g.) Determine pressure loss (in.w.g.) at 400 fpm or maximum velocity allowed by the manufacturer, whichever is less. *[Calculation required, see note 4]*	0.224	0.188	0.176	0.231	0.197	0.177
Allowance for 100% Outdoor air system[5].	0.000	0.000	0.000	0.070	0.100	0.107
Energy recovery allowance for 0.50 ≤ ERR <0.55 [6]	0.135	0.114	0.105	0.139	0.120	0.107
Energy recovery allowance for 0.55 ≤ ERR <0.60 [6]	0.160	0.134	0.124	0.165	0.141	0.126

Energy recovery allowance for 0.60 ≤ ERR <0.65 [6]	0.184	0.155	0.144	0.190	0.163	0.146
Energy recovery allowance for 0.65 ≤ ERR <0.70 [6]	0.208	0.175	0.163	0.215	0.184	0.165
Energy recovery allowance for 0.70 ≤ ERR <0.75 [6]	0.232	0.196	0.183	0.240	0.205	0.184
Energy recovery allowance for 0.75 ≤ ERR <0.80 [6]	0.257	0.216	0.202	0.264	0.226	0.203
Energy recovery allowance for ERR ≥ 0.80 [6]	0.281	0.236	0.222	0.289	0.247	0.222
Coil Runaround Loop	0.135	0.114	0.105	0.139	0.120	0.107
Allowance for Gas phase filtration. Value shown is allowed w/cfm per 1.0 in. wg air pressure drop. *[Calculation required, see note 4]*	0.224	0.188	0.176	0.231	0.197	0.177
Economizer Return Damper	0.045	0.038	0.035	0.046	0.040	0.036
Air blender allowance	0.045	0.038	0.035	0.046	0.040	0.036
Sound attenuation section [fans serving spaces with design background noise goals below NC35]	0.034	0.029	0.026	0.035	0.030	0.027

Deduction for systems that feed a terminal unit with a fan with electrical input power < 1kW	-0.100	-0.100	-0.100	-0.100	-0.100	-0.100
Low-turndown single-zone VAV fan systems meeting the requirements in note 7.	0.000	0.000	0.000	0.070	0.100	0.089

Footnotes to Table 140.4-A

1. See Section 100.1 for the definition of FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV) .
2. Filter fan power allowance can only be counted once per fan system, except fan systems in healthcare facilities, which can claim one of the MERV 13 to 16 filter allowances and the HEPA filter allowance if both are included in the fan system.
3. Healthcare facilities can claim this fan power allowance twice per fan system where coil design leaving air temperature is less than 44 ^{o}F.
4. Power allowance requires further calculation by multiplying the actual inches of water gauge (in.w.g.) of the device/ component by the watts/ cfm in Table 140.4-A.
5. The 100% outdoor air system must serve 3 or more HVAC zones and airflow during non-economizer operating periods must not exceed 135% of minimum requirements in Section 120.1(c)(3).
6. Enthalpy Recovery Ratio (ERR) calculated per ANSI/ASHRAE 84-2020.
7. A low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.

TABLE 140.4-B: EXHAUST, RETURN, RELIEF, TRANSFER FAN POWER ALLOWANCES (WATTS/ CFM)

Airflow	Multi-Zone VAV Systems[1] ≤5,000 cfm	Multi-Zone VAV Systems[1] >5,000 and ≤10,000 cfm	Multi-Zone VAV Systems[1] >10,000 cfm	All Other Fan Systems ≤5,000 cfm	All Other Fan Systems >5,000 and ≤10,000 cfm	All Other Fan Systems >10,000 cfm
Exhaust System Base Allowance	0.221	0.246	0.236	0.186	0.184	0.190
Filter (any MERV value)[2]	0.046	0.041	0.036	0.046	0.041	0.035
Energy Recovery Allowance For 0.50 ≤ ERR <0.55 [3]	0.139	0.120	0.107	0.139	0.123	0.109
Energy Recovery Allowance For 0.55 ≤ ERR <0.60 [3]	0.165	0.142	0.126	0.165	0.144	0.128
Energy Recovery Allowance For 0.60 ≤ ERR <0.65 [3]	0.190	0.163	0.146	0.191	0.166	0.148
Energy Recovery Allowance For 0.65 ≤ ERR <0.70 [3]	0.215	0.184	0.165	0.216	0.188	0.167
Energy Recovery Allowance For 0.70 ≤ ERR <0.75 [3]	0.240	0.206	0.184	0.241	0.209	0.186
Energy Recovery Allowance For 0.75 ≤ ERR <0.80 [3]	0.265	0.227	0.203	0.266	0.231	0.205
Energy Recovery Allowance For ERR ≥ 0.80 [3]	0.289	0.248	0.222	0.291	0.252	0.225
Coil Runaround Loop	0.139	0.120	0.107	0.139	0.123	0.109
Return or exhaust systems required by code or accreditation standards to be fully ducted, or systems required to maintain air pressure differentials between adjacent rooms	0.116	0.100	0.089	0.116	0.102	0.091
Return and/or exhaust airflow control devices required for space pressurization control	0.116	0.100	0.089	0.116	0.102	0.091

Laboratory and vivarium exhaust systems in high-rise buildings for vertical duct exceeding 75 ft. Value shown is allowed w/cfm per 0.25 in. wg for each 100 feet exceeding 75 feet. [Calculation required, see note 4]	0.058	0.051	0.045	0.058	0.052	0.046
Biosafety cabinet. Value shown is allowed w/cfm per 1.0 in. wg air pressure drop. [Calculation required, see note 4]	0.231	0.198	0.177	0.232	0.202	0.179
Exhaust filters, scrubbers, or other exhaust treatment required by code or standard. Value shown is allowed w/cfm per 1.0 in. wg air pressure drop. [Calculation required, see note 4]	0.231	0.198	0.177	0.232	0.202	0.179
Healthcare facility allowance[5]	0.231	0.198	0.177	0.232	0.202	0.179
Sound attenuation section [Fans serving spaces with design background noise goals below NC35.]	0.035	0.030	0.027	0.035	0.031	0.028

Footnotes to Table 140.4-B

1. See FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV) in definitions for Multizone to be classified as a Multi-Zone VAV System.
2. Filter pressure loss can only be counted once per fan system.
3. Enthalpy Recovery Ratio (ERR) calculated per ANSI/ASHRAE 84-2020.
4. Power allowance requires further calculation, multiplying the actual pressure drop (in. wg.) of the device/ component by the watts/cfm in the Table 140.4-B.
5. This allowance can only be taken for healthcare facilities.

TABLE 140.4-C: AIR DENSITY CORRECTION FACTORS

Altitude (ft)	Correction Factor
<3,000	1.000
≥3,000 and <4,000	0.896
≥4,000 and <5,000	0.864
≥5,000 and <6,000	0.832
≥6,000	0.801

TABLE 140.4-D: DEFAULT VALUES FOR FAN KW_{DESIGN} BASED ON MOTOR NAMEPLATE HP

Motor Nameplate HP	Default Fan kW_{design} with variable speed drive (Fan kW_{design})	Default Fan kW_{design} without variable speed drive(Fan kW_{design})
<1	0.96	0.89
≥1 and <1.5	1.38	1.29
≥1.5 and <2	1.84	1.72
≥2 and <3	2.73	2.57
≥3 and <5	4.38	4.17
≥5 and <7.5	6.43	6.15
≥7.5 and <10	8.46	8.13
≥10 and <15	12.47	12.03
≥15 and <20	16.55	16.04
≥20 and <25	20.58	19.92
≥25 and <30	24.59	23.77
≥30 and <40	32.74	31.70
≥40 and <50	40.71	39.46
≥50 and <60	48.50	47.10
≥60 and <75	60.45	58.87
≥75 and ≤100	80.40	78.17

Footnotes to TABLE 140.4-D:

1. This table cannot be used for Motor Nameplate Horsepower values greater than 100.
2. This table is to be used only with motors with a service factor ≤1.15. If the service factor is not provided, this table may not be used.

2. **Variable air volume (VAV) systems.**

   A. Static pressure sensor location. Static pressure sensors used to control variable air volume fans shall be placed in a position such that the controller set point is no greater than one-third the total design fan static pressure, except for systems with zone reset control complying with Section 140.4(c)2B. If this results in the sensor being located downstream of any major duct split, multiple sensors shall be installed in each major branch with fan capacity controlled to satisfy the sensor furthest below its setpoint; and

   B. Setpoint reset. For systems with direct digital control of individual zone boxes reporting to the central control panel, static pressure setpoints shall be reset based on the zone requiring the most pressure; i.e., the setpoint is reset lower until one zone damper is nearly wide open.

3. **Fractional HVAC motors for fans.** HVAC motors for fans that are less than 1 hp and 1/12 hp or greater shall be electronically-commutated motors or shall have a minimum motor efficiency of 70 percent when

rated in accordance with NEMA Standard MG 1-2006 at full load rating conditions. These motors shall also have the means to adjust motor speed for either balancing or remote control. Belt-driven fans may use sheave adjustments for airflow balancing in lieu of a varying motor speed.

Exception 1 to Section 140.4(c)3: Motors in fan-coils and terminal units that operate only when providing heating to the space served.

Exception 2 to Section 140.4(c)3: Motors in space conditioning equipment certified under Section 110.1 or 110.2.

Exception to Section 140.4(c): Fan system power caused solely by process loads.

(d) **Space-conditioning zone controls.** Each space-conditioning zone shall have controls designed in accordance with 1 or 2:

1. Each space-conditioning zone shall have controls that prevent:
   A. Reheating; and
   B. Recooling; and
   C. Simultaneous provisions of heating and cooling to the same zone, such as mixing or simultaneous supply of air that has been previously mechanically heated and air that has been previously cooled, either by cooling equipment or by economizer systems; or
2. Zones served by variable air-volume systems that are designed and controlled to reduce, to a minimum, the volume of reheated, recooled, or mixed air are allowed only if the controls meet all of the following requirements:
   A. For each zone with direct digital controls (DDC):
      i. The volume of primary air that is reheated, recooled or mixed air supply shall not exceed the larger of:
         a. 50 percent of the peak primary airflow; or
         b. The design zone outdoor airflow rate as specified by Section 120.1(c)3.
      ii. The volume of primary air in the deadband shall not exceed the design zone outdoor airflow rate as specified by Section 120.1(c)3. <
      iii. The first stage of heating consists of modulating the zone supply air temperature setpoint up to a maximum setpoint no higher than 95ºF while the airflow is maintained at the dead band flow rate.
      iv. The second stage of heating consists of modulating the airflow rate from the dead band flow rate up to the heating maximum flow rate.
   B. For each zone without DDC, the volume of primary air that is reheated, re-cooled, or mixed air supply shall not exceed the larger of the following:
      i. 30 percent of the peak primary airflow; or
      ii. The design zone outdoor airflow rate as specified by Section 120.1(c)3.

Exception 1 to Section 140.4(d): Zones with special pressurization relationships or cross-contamination control needs.

Exception 2 to Section 140.4(d): Zones served by space-conditioning systems in which at least 75 percent of the energy for reheating, or providing warm air in mixing systems, is provided from a site-recovered or site-solar energy source.

Exception 3 to Section 140.4(d): Zones in which specific humidity levels are required to satisfy exempt process loads. Computer rooms or other spaces where the only process load is from IT equipment may not use this exception.

Exception 4 to Section 140.4(d): Zones with a peak supply-air quantity of 300 cfm or less.

Exception 5 to Section 140.4(d): Systems serving healthcare facilities.

(e) **Economizers.**

1. Each cooling air handler that has a design total mechanical cooling capacity over 33,000 Btu/hr or chilled-water cooling systems without a fan or that use induced airflow that has a cooling capacity greater than the systems listed in Table 140.4-C, shall include either:

   A. An air economizer capable of modulating outside-air and return-air dampers to supply 100 percent of the design supply air quantity as outside air; or

   B. A water economizer capable of providing 100 percent of the expected system cooling load at outside air temperatures of 50°F dry-bulb and 45°F wet-bulb and below.

   Exception 1 to Section 140.4(e)1: Where special outside air filtration and treatment, for the reduction and treatment of unusual outdoor contaminants, makes compliance infeasible.

   Exception 2 to Section 140.4(e)1: Where the use of outdoor air for cooling will affect other systems, such as humidification, dehumidification or supermarket refrigeration systems, so as to increase overall building TDV energy use.

   Exception 3 to Section 140.4(e)1: Systems serving hotel/motel guestrooms.

   Exception 4 to Section 140.4(e)1: Where comfort cooling systems have the cooling efficiency that meets or exceeds the cooling efficiency improvement requirements in Table 140.4-F.

   Exception 5 to Section 140.4(e)1: Fan systems primarily serving computer rooms. See Section 140.9(a) for computer room economizer requirements.

   Exception 6 to Section 140.4(e)1: In all climate zones, each air handler that has a design total mechanical cooling capacity less than 54,000 Btu/hr where ventilation is provided by a dedicated outdoor air system (DOAS) with exhaust air heat recovery in accordance with Section 140.4(p) and the following:

   A. The DOAS unit shall meet the exhaust air heat recovery ratio as specified in Section 140.4(q)1 and include bypass or control to disable energy recovery as specified in Section 140.4(q)2.

   B. The DOAS unit shall provide at least the minimum ventilation air flow rate as specified in Section 120.1(c)3 and provide no less than 0.3 cfm/ft2 during economizer conditions.

   Exception 7 to Section 140.4(e)1: Where the use of an air economizer in controlled environment horticulture spaces will affect carbon dioxide enrichment systems.

TABLE 140.4-ECHILLED WATER SYSTEM COOLING CAPACITY

Climate Zones	Total Building Chilled Water System Capacity, Minus Capacity of the Cooling units with Air Economizers	
	Building Water-Cooled Chilled Water System	Air-Cooled Chilled Water Systems or District Chilled Water Systems
15	≥ 960,000 Btu/h (280 kW)	≥ 1,250,000 Btu/h (365 kW)
1-14	≥720,000 Btu/h (210 kW)	≥940,000 Btu/h (275 kW)
16	≥1,320,000 Btu/h (385 kW)	≥1,720,000 Bu/h (505 kW)

TABLE 140.4-FECONOMIZER TRADE-OFF TABLE FOR COOLING SYSTEMS

Climate Zone	Efficiency Improvement [a]
1	70%
2	65%
3	65%
4	65%
5	70%
6	30%
7	30%
8	30%
9	30%
10	30%
11	30%
12	30%
13	30%
14	30%
15	30%
16	70%

[a] If a unit is rated with an annualized or part-load metric, then to eliminate the required economizer, only the applicable minimum cooling efficiency of the unit must be increased by the percentage shown. If the unit is only rated with a full load metric, like EER or COP cooling, then that metric must be increased by the percentage shown. To determine the efficiency required to eliminate the economizer, when the unit equipment efficiency is rated with an energy-input divided by work-output metric, the metric shall first be converted to COP prior to multiplying by the efficiency improvement percentage and then converted back to the rated metric.

2. If an economizer is required by Section 140.4(e)1, and an air economizer is used to meet the requirement, then it shall be:

   A. Designed and equipped with controls so that economizer operation does not increase the building heating energy use during normal operation; and

      Exception to Section 140.4(e)2A: Systems that provide 75 percent of the annual energy used for mechanical heating from site-recovered energy or a site-solar energy source.

   B. Capable of providing partial cooling even when additional mechanical cooling is required to meet the remainder of the cooling load.

   C. Designed and equipped with a device type and high limit shut off complying with Table 140.4-G.

TABLE 140.4-G AIR ECONOMIZER HIGH LIMIT SHUT OFF CONTROL REQUIREMENTS

Device Type[a]	Climate Zones	Required High Limit (Economizer Off When):	
		Equation[b]	Description
Fixed Dry Bulb	1, 3, 5, 11-16	T_{OA} > 75°F	Outdoor air temperature exceeds 75°F
	2, 4, 10	T_{OA} > 73°F	Outdoor air temperature exceeds 73°F
	6, 8, 9	T_{OA} > 71°F	Outdoor air temperature exceeds 71°F
	7	T_{OA} > 69°F	Outdoor air temperature exceeds 69°F
Differential Dry Bulb	1, 3, 5, 11-16	T_{OA} > T_{RA}°F	Outdoor air temperature exceeds return air temperature
	2, 4, 10	T_{OA} > T_{RA}-2°F	Outdoor air temperature exceeds return air temperature minus 2°F
	6, 8, 9	T_{OA} > T_{RA}-4°F	Outdoor air temperature exceeds return air temperature minus 4°F
	7	T_{OA} > T_{RA}-6°F	Outdoor air temperature exceeds return air temperature minus 6°F
Fixed Enthalpy[c] + Fixed Drybulb	All	h_{OA} > 28 Btu/lb[c] or T_{OA} > 75°F	Outdoor air enthalpy exceeds 28 Btu/lb of dry air[c] or Outdoor air temperature exceeds 75°F

[a] Only the high limit control devices listed are allowed to be used and at the setpoints listed. Others such as Dew Point, Fixed Enthalpy, Electronic Enthalpy, and Differential Enthalpy Controls, may not be used in any Climate Zone for compliance with Section 140.4(e)1 unless approval for use is provided by the Energy Commission Executive Director.

[b] Devices with selectable (rather than adjustable) setpoints shall be capable of being set to within 2°F and 2 Btu/lb of the setpoint listed.

[c] At altitudes substantially different than sea level, the Fixed Enthalpy limit value shall be set to the enthalpy value at 75°F and 50% relative humidity. As an example, at approximately 6,000 foot elevation, the fixed enthalpy limit is approximately 30.7 Btu/lb.

D. The air economizer and all air dampers shall have the following features:

i. **Warranty.** 5-year manufacturer warranty of economizer assembly.

ii. **Damper reliability testing.** Suppliers of economizers shall certify that the economizer assembly, including but not limited to outdoor air damper, return air damper, drive linkage and actuator, have been tested and are able to open and close against the rated airflow and pressure of the system for 60,000 damper opening and closing cycles.

iii. **Damper leakage.** Economizer outdoor air and return air dampers shall have a maximum leakage rate of 10 cfm/sf at 250 Pascals (1.0 in. of water) when tested in accordance with AMCA Standard 500-D. The economizer outside air and return air damper leakage rates shall be certified to the Energy Commission in accordance with Section 110.0.

iv. **Adjustable setpoint.** If the high-limit control is fixed dry bulb or fixed enthalpy + fixed dry bulb, then the control shall have an adjustable setpoint.

v. **Sensor accuracy.** Outdoor air, return air, mixed air, and supply air sensors shall be calibrated within the following accuracies.

1. Drybulb and wetbulb temperatures accurate to ±2°F over the range of 40°F to 80°F;

2. Enthalpy accurate to ±3 Btu/lb over the range of 20 Btu/lb to 36 Btu/lb;

3. Relative humidity (RH) accurate to ±5 percent over the range of 20 percent to 80 percent RH;

vi. **Sensor calibration data.** Data used for control of the economizer shall be plotted on a sensor performance curve.

vii. **Sensor high limit control.** Sensors used for the high limit control shall be located to prevent false readings, including but not limited to being properly shielded from direct sunlight.

viii. **Relief air system.** Relief air systems shall be capable of providing 100 percent outside air without over-pressurizing the building.

E. The space-conditioning system shall include the following:

i. Unit controls shall have mechanical capacity controls interlocked with economizer controls such that the economizer is at 100 percent open position when mechanical cooling is on and does not begin to close until the leaving air temperature is less than 45°F.

ii. Direct Expansion (DX) units greater than 65,000 Btu/hr that control the capacity of the mechanical cooling directly based on occupied space temperature shall have a minimum of two stages of mechanical cooling capacity.

iii. DX units not within the scope of Section 140.4(e)2Eii shall comply with the requirements in Table 140.4-H, and have controls that do not false load the mechanical cooling system by limiting or disabling the economizer or by any other means except at the lowest stage of mechanical cooling capacity.

TABLE 140.4-H DIRECT EXPANSION (DX) UNIT REQUIREMENTS FOR COOLING STAGES AND COMPRESSOR DISPLACEMENT

COOLING CAPACITY	MINIMUM NUMBER OF MECHANICAL COOLING STAGES	MINIMUM COMPRESSOR DISPLACEMENT
≥ 65,000 Btu/h and < 240,000 Btu/h	3 stages	≤ 35% full load
≥ 240,000 Btu/h	4 stages	≤ 25% full load

3. Systems that include a water economizer to meet Section 140.4(e)1 shall include the following:

A. Maximum pressure drop. Precooling coils and water-to-water heat exchangers used as part of a water economizer shall either have a waterside pressure drop of less than 15 feet of water, or a secondary loop shall be installed so that the coil or heat exchanger pressure drop is not contributing to pressure drop when the system is in the normal cooling (non-economizer) mode.

B. Economizer systems shall be integrated with the mechanical cooling system so that they are capable of providing partial cooling even when additional mechanical cooling is required to meet the remainder of the cooling load. Controls shall not false load the mechanical cooling system by limiting or disabling the economizer or by any other means, such as hot gas bypass, except at the lowest stage of mechanical cooling.

(f) **Supply air temperature reset controls.** Space-conditioning systems supplying heated or cooled air to multiple zones shall include controls that automatically reset supply air temperatures. Air distribution systems serving zones that are likely to have constant loads shall be designed for the air flows resulting from the fully reset supply air temperature. Supply air temperature reset controls shall be:

1. In response to representative building loads or to outdoor air temperature; and

2. At least 25 percent of the difference between the design supply-air temperature and the design room air temperature.

Exception 1 to Section 140.4(f): Systems that meet the requirements of Section 140.4(d)1, without using Exception 1 to that section.

Exception 2 to Section 140.4(f): Where supply-air temperature reset would increase overall building energy use.

Exception 3 to Section 140.4(f): Systems supplying zones in which specific humidity levels are required to satisfy process loads. Computer rooms or other spaces with only IT equipment may not use this exception.

Exception 4 to Section 140.4(f): Systems serving healthcare facilities.

(g) **Electric resistance heating.** Electric resistance heating systems shall not be used for space heating.

Exception 1 to Section 140.4(g): Where an electric resistance heating system supplements a heating system in which at least 60 percent of the annual energy requirement is supplied by site-solar or recovered energy.

Exception 2 to Section 140.4(g): Where an electric resistance heating system supplements a heat pump heating system, and the heating capacity of the heat pump is more than 75 percent of the design heating load calculated in accordance with Section 140.4(a) at the design outdoor temperature specified in Section 140.4(b)4.

Exception 3 to Section 140.4(g): Where the total capacity of all electric resistance heating systems serving the entire building is less than 10 percent of the total design output capacity of all heating equipment serving the entire building.

Exception 4 to Section 140.4(g): Where the total capacity of all electric resistance heating systems serving the entire building, excluding those allowed under Exception 2, is no more than 3 kW.

Exception 5 to Section 140.4(g): Where an electric resistance heating system serves an entire building that is not a hotel/motel building; and has a conditioned floor area no greater than 5,000 square feet; and has no mechanical cooling; and is in an area where natural gas is not currently available.

Exception 6 to Section 140.4(g): Heating systems serving as emergency backup to gas heating equipment.

(h) **Heat rejection systems.** Heat rejection equipment used in comfort cooling systems, such as air-cooled condensers, open cooling towers, closed-circuit cooling towers and evaporative condensers shall include the following:

1. **Fan speed control.** Each fan powered by a motor of 7.5 hp (5.6 kW) or larger shall have the capability to operate that fan at two thirds of full speed or less, and shall have controls that automatically change the fan speed to control the leaving fluid temperature or condensing temperature or pressure of the heat rejection device.

   Exception 1 to Section 140.4(h)1: Heat rejection devices included as an integral part of the equipment listed in Tables 110.2-A through 110.2-N.

   Exception 2 to Section 140.4(h)1: Condenser fans serving multiple refrigerant circuits.

   Exception 3 to Section 140.4(h)1: Condenser fans serving flooded condensers.

   Exception 4 to Section 140.4(h)1: Up to one third of the fans on a condenser or tower with multiple fans where the lead fans comply with the speed control requirement.

2. **Tower flow turndown.** Open cooling towers configured with multiple condenser water pumps shall be designed so that all cells can be run in parallel with the larger of:

   A. The flow that is produced by the smallest pump, or

   B. 50 percent of the design flow for the cell.

3. **Limitation on centrifugal fan cooling towers.** Open cooling towers with a combined rated capacity of 900 gpm and greater at 95°F condenser water return, 85°F condenser water supply and 75°F outdoor wet-bulb temperature shall use propeller fans and shall not use centrifugal fans.

   Exception 1 to Section 140.4(h)3: Cooling towers that are ducted (inlet or discharge) or have an external sound trap that requires external static pressure capability.

   Exception 2 to Section 140.4(h)3: Cooling towers that meet the energy efficiency requirement for propeller fan towers in Section 110.2, Table 110.2-F.

4. **Multiple cell heat rejection equipment.** Multiple cell heat rejection equipment with variable speed fan drives shall:

    A. Operate the maximum number of fans allowed that comply with the manufacturer's requirements for all system components, and

    B. Control all operating fans to the same speed. Minimum fan speed shall comply with the minimum allowable speed of the fan drive as specified by the manufacturer's recommendation. Staging of fans is allowed once the fans are at their minimum operating speed.

5. **Cooling tower efficiency.** Axial fan, open-circuit cooling towers serving condenser water loops for chilled water plants with a total of 900 gpm or greater, shall have a rated efficiency of no less than 60 gpm/hp when rated in accordance with the conditions as listed in Table 110.2-F.

    Exception 1 to Section 140.4(h)5: Replacement of existing cooling towers that are inside an existing building or on an existing roof.

    Exception 2 to Section 140.4(h)5: Cooling towers serving buildings in Climate Zone 1 or 16.

(i) **Minimum chiller efficiency.** Chillers shall meet or exceed Path B from Table 110.2-D.

Exception 1 to Section 140.4(i): Chillers with electrical service > 600V.

Exception 2 to Section 140.4(i): Chillers attached to a heat recovery system with a design heat recovery capacity > 40 percent of the design chiller cooling capacity.

Exception 3 to Section 140.4(i): Chillers used to charge thermal energy storage systems where the charging temperature is < 40°F.

Exception 4 to Section 140.4(i): In buildings with more than three chillers, only three chillers are required to meet the Path B efficiencies.

(j) **Limitation of air-cooled chillers.** Chilled water plants shall not have more than 300 tons provided by air-cooled chillers.

Exception 1 to Section 140.4(j): Where the water quality at the building site fails to meet manufacturer's specifications for the use of water-cooled chillers.

Exception 2 to Section 140.4(j): Chillers that are used to charge a thermal energy storage system with a design temperature of less than 40°F (4°C).

Exception 3 to Section 140.4(j): Systems serving healthcare facilities.

(k) **Hydronic system measures.**

1. **Hydronic variable flow systems.** HVAC chilled and hot water pumping shall be designed for variable fluid flow and shall be capable of reducing pump flow rates to no more than the larger of: a) 50 percent or less of the design flow rate; or b) the minimum flow required by the equipment manufacturer for the proper operation of equipment served by the system.

    Exception 1 to Section 140.4(k)1: Systems that include no more than three control valves.

    Exception 2 to Section 140.4(k)1: Systems having a total pump system power less than or equal to 1.5 hp.

2. **Chiller isolation.** When a chilled water system includes more than one chiller, provisions shall be made so that flow through any chiller is automatically shut off when that chiller is shut off while still maintaining flow through other operating chiller(s). Chillers that are piped in series for the purpose of increased temperature differential shall be considered as one chiller.

3. **Boiler isolation.** When a hot water plant includes more than one boiler, provisions shall be made so that flow through any boiler is automatically shut off when that boiler is shut off while still maintaining flow through other operating boiler(s).

4. **Chilled and hot water temperature reset controls.** Systems with a design capacity exceeding 500,000 Btu/hr supplying chilled or heated water shall include controls that automatically reset supply water temperatures as a function of representative building loads or outside air temperature.

   Exception 1 to Section 140.4(k)4: Hydronic systems that use variable flow to reduce pumping energy in accordance with 140.4(k)1.

   Exception 2 to Section 140.4(k)4: Systems serving healthcare facilities.

5. **Water-cooled air conditioner and hydronic heat pump systems.** Water circulation systems serving water-cooled air conditioners, hydronic heat pumps, or both that have total pump system power exceeding 5 hp shall have flow controls that meet the requirements of Section 140.4(k)6. Each such air conditioner or heat pump shall have a two-position automatic valve interlocked to shut off water flow when the compressor is off.

6. **Variable flow controls.**

   A. Variable speed drives. Individual pumps serving variable flow systems and having a motor horsepower exceeding 5 hp shall have controls or devices (such as variable speed control) that will result in pump motor demand of no more than 30 percent of design wattage at 50 percent of design water flow. The pumps shall be controlled as a function of required differential pressure.

   B. Pressure sensor location and setpoint.

      i. For systems without direct digital control of individual coils reporting to the central control panel, differential pressure shall be measured at the most remote heat exchanger or the heat exchanger requiring the greatest differential pressure.

      ii. For systems with direct digital control of individual coils with a central control panel, the static pressure setpoint shall be reset based on the valve requiring the most pressure, and the setpoint shall be no less than 80 percent open. Pressure sensors may be mounted anywhere.

   Exception 1 to Section 140.4(k)6: Heating hot water systems.

   Exception 2 to Section 140.4(k)6: Condenser water systems serving only water-cooled chillers.

7. **Hydronic heat pump (WLHP) controls.** Hydronic heat pumps connected to a common heat pump water loop with central devices for heat rejection and heat addition shall have controls that are capable of providing a heat pump water supply temperature dead band of at least 20°F between initiation of heat rejection and heat addition by the central devices.

   Exception to Section 140.4(k)7: Where a system loop temperature optimization controller is used to determine the most efficient operating temperature based on real-time conditions of demand and capacity, dead bands of less than 20°F shall be allowed.

8. **High capacity space heating gas boiler systems.** In Climate Zones 1 through 6, 9 through 14, and 16, gas hot water boiler systems for space heating with a total system input of at least 1 MMBtu/h but no more than 10 MMBtu/h shall meet all of the following requirements.

   A**. Boiler system efficiency.** Gas hot water boilers shall have a minimum thermal efficiency of 90 percent. Systems with multiple boilers can meet this requirement if the space-heating input provided by equipment with thermal efficiencies above and below 90 percent has an input capacity-weighted average thermal efficiency of at least 90 percent. For boilers federally regulated by combustion efficiency, the calculation for the input capacity-weighted average thermal efficiency shall use the combustion efficiency value.

   B. **Hot water distribution design.** The hot water distribution system shall be designed to comply with Items i and ii.

      i. Coils and other heat exchangers shall be selected so that at design conditions the hot water return temperature entering the boilers is 120°F or less.

ii. Under all operating conditions, the water temperature entering the boiler is 120°F or less or the flow rate of supply hot water that recirculates directly into the return system, such as by three-way valves or minimum flow bypass controls, shall be no greater than 20 percent of the design flow of the operating boilers.

Exception 1 to Section 140.4(k)8: Where 25 percent of the annual space heating requirement is provided by on-site renewable energy, site-recovered energy or heat recovery chillers.

Exception 2 to Section 140.4(k)8: Space heating boilers installed in individual dwelling units.

Exception 3 to Section 140.4(k)8: Where 50 percent or more of the design heating load is served using perimeter convective heating, radiant ceiling panels or both.

Exception 4 to Section 140.4(k)8: Individual gas boilers with input capacity less than 300,000 Btu/h shall not be included in the calculations of the total system input or total system efficiency.

(l) **Reserved.**

(m) **Fan control.** Each cooling system listed in Table 140.4-I shall be designed to vary the indoor fan airflow as a function of load and shall comply with the following requirements:

1. DX and chilled water cooling systems that control the capacity of the mechanical cooling directly based on occupied space temperature shall (i) have a minimum of two stages of fan control with no more than 66 percent speed when operating on stage 1; and (ii) draw no more than 40 percent of the fan power at full fan speed, when operating at 66 percent speed.
2. All other systems, including but not limited to DX cooling systems and chilled water systems that control the space temperature by modulating the airflow to the space, shall have proportional fan control such that at 50 percent air flow the power draw is no more than 30 percent of the fan power at full fan speed.
3. Systems that include an air side economizer to meet Section 140.4(e)1 shall have a minimum of two speeds of fan control during economizer operation.

Exception 1 to Section 140.4(m): Modulating fan control is not required for chilled water systems with all fan motors < 1 HP, or for evaporative systems with all fan motors < 1 HP, if the systems are not used to provide ventilation air and all indoor fans cycle with the load.

Exception 2 to Section 140.4(m): Systems serving healthcare facilities.

TABLE 140.4-I FAN CONTROL SYSTEMS

Cooling System Type	Fan Motor Size	Cooling Capacity
DX Cooling	Any	≥ 65,000 Btu/hr
Chilled Water and Evaporative	≥ 1/4 HP	Any

(n) **Mechanical system shut-off.** Any directly conditioned space with operable wall or roof openings to the outdoors shall be provided with interlock controls that disable or reset the temperature setpoint to 55°F for mechanical heating and disable or reset the temperature setpoint to 90°F for mechanical cooling to that space when any such opening is open for more than 5 minutes.

Exception 1 to Section 140.4(n): Interlocks are not required on doors with automatic closing devices.

Exception 2 to Section 140.4(n): Any space without a thermostatic control (thermostat or a space temperature sensor used to control heating or cooling to the space).

Exception 3 to Section 140.4(n): Healthcare facilities.

(o) **Exhaust system transfer air**. Conditioned supply air delivered to any space with mechanical exhaust shall not exceed the greater of:

1. The supply flow required to meet the space heating or cooling load; or
2. The ventilation rate required by the authority having jurisdiction, the facility Environmental Health and Safety Department, or by Section 120.1(c)3; or
3. The mechanical exhaust flow minus the available transfer air. Available transfer air shall be from another conditioned space or return air plenums on the same floor and same smoke or fire compartment, and that at their closest point are within 15 feet of each other.

Exception 1 to Section 140.4(o): Biosafety level classified laboratories 3 or higher.

Exception 2 to Section 140.4(o): Vivarium spaces.

Exception 3 to Section 140.4(o): Spaces that are required by applicable codes and standards to be maintained at a positive pressure differential relative to adjacent spaces.

Exception 4 to Section 140.4(o): Spaces where the highest amount of transfer air that could be used for exhaust makeup may exceed the available transfer airflow rate and where the spaces have a required negative pressure relationship.

Exception 5 to Section 140.4(o): Healthcare facilities.

(p) **Dedicated outdoor air systems (DOAS).** HVAC systems that utilize a dedicated outdoor air system (DOAS) such as a DX-DOAS, HRV or ERV unit to condition, temper or filter 100 percent outdoor air separate from local or central space-conditioning systems serving the same space shall meet the following criteria:

1. DOAS unit fan systems with input power less than 1 kW shall not exceed a total combined fan power of 1.0 W/cfm. DOAS with fan power greater than or equal to 1 kW shall meet the requirements of Section 140.4 (c).
2. The DOAS supply air shall be delivered directly to the occupied space or at the outlet of any terminal heating or cooling coils and shall cycle off any zone heating and cooling equipment fans, circulation pumps and terminal unit fans when there is no call for heating or cooling in the zone.

   Exception 1 to Section 140.4(p)2: Active chilled beam systems.

   Exception 2 to Section 140.4(p)2: Sensible-only cooling terminal units with pressure-independent variable-airflow regulating devices limiting the DOAS supply air to the greater of latent load or minimum ventilation requirements.

   Exception 3 to Section 140.4(p)2: Any configuration where a DOAS unit provides ventilation air to a downstream fan (a terminal box, air handling unit or other space-conditioning equipment) where the total system airflow can be reduced to ventilation minimum or the downstream fan power is no greater than 0.12 watts per cfm when space temperatures are within the thermostat deadband (at low speed per manufacturer's literature).
3. DOAS supply and exhaust fans shall have a minimum of three speeds to facilitate system balancing.
4. DOAS with mechanical cooling providing ventilation to multiple zones and operating in conjunction with zone heating and cooling systems shall not use heating or heat recovery to warm supply air above 60°F when representative building loads or outdoor air temperature indicates that the majority of zones require cooling.

(q) Exhaust **air heat recovery**. Fan systems designed to operate to the criteria listed in either Table 140.4-J or Table 140.4-K shall include an exhaust air heat recovery system that meets the following:

1. A sensible energy recovery ratio of at least 60 percent or an enthalpy recovery ratio of at least 50 percent for both heating and cooling design conditions and a rating in accordance with AHRI 1060.
2. Energy recovery bypass or control to disable energy recovery and to directly economize with ventilation air based on outdoor air temperature limits specified in Table 140.4-G. For energy recovery systems where

the transfer of energy cannot be stopped, bypass shall prevent the total airflow rate of either outdoor air or exhaust air through the energy recovery exchanger from exceeding 10 percent of the full design airflow rate.

Exception to Section 140.4(q)2: For DOAS units with the capability to shut off when a separate space-conditioning system serving the same space meets the economizer requirements in Section 140.4(e)1A.

Exception 1 to Section 140.4(q): Systems meeting Section 140.9(c), Prescriptive requirements for laboratory and factory exhaust systems.

Exception 2 to Section 140.4(q): Systems serving spaces that are not cooled and that are heated to less than 60°F.

Exception 3 to Section 140.4(q): Where more than 60 percent of the outdoor air heating energy is provided from site-recovered energy in Climate Zone 16.

Exception 4 to Section 140.4(q): Sensible recovery ratio requirements at heating design conditions are exempted for Climate Zone 15.

Exception 5 to Section 140.4(q): Sensible recovery ratio requirements at cooling design conditions are exempted for Climate Zone 1.

Exception 6 to Section 140.4(q): Where the sum of the airflow rates exhausted and relieved within 20 feet of each other is less than 75 percent of the design outdoor airflow rate, excluding exhaust air that is either:

1. used for another energy recovery system,
2. not allowed by the California Mechanical Code (Title 24, Part 4) (CMC) for use in energy recovery systems with leakage potential, or
3. of Class 4 as specified in Section 120.1(g).

Exception 7 to Section 140.4(q): Systems expected to operate less than 20 hours per week.

TABLE 140.4-J: ENERGY RECOVERY REQUIREMENTS BY CLIMATE ZONE AND PERCENT OUTDOOR AIR AT FULL DESIGN AIRFLOW (<8,000 HOURS / YEAR)

% Outdoor Air at Full Design Airflow	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
≥10% and <20%	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
≥20% and <30%	≥15,000	≥20,000	NR	NR	NR	NR	NR	NR	NR	NR	≥18,500	≥18,500	≥18,500	≥18,500	≥18,500	≥18,500
≥30% and <40%	≥13,000	≥15,000	NR	NR	NR	NR	NR	NR	NR	NR	≥15,000	≥15,000	≥15,000	≥15,000	≥15,000	≥15,000
≥40% and <50%	≥10,000	≥12,000	NR	NR	NR	NR	NR	NR	NR	≥22,000	≥10,000	≥10,000	≥10,000	≥10,000	≥10,000	≥10,000
≥50% and <60%	≥9,000	≥10,000	NR	≥18,500	NR	NR	NR	NR	NR	≥17,000	≥8,000	≥8,000	≥8,000	≥8,000	≥8,000	≥8,000
≥60% and <70%	≥7,000	≥7,500	NR	≥16,500	NR	NR	NR	NR	≥20,000	≥15,000	≥7,000	≥7,000	≥7,000	≥7,000	≥7,000	≥7,000
≥70% and <80%	≥6,500	≥7,000	NR	≥15,000	NR	NR	NR	NR	≥17,000	≥14,000	≥5,000	≥5,000	≥5,000	≥5,000	≥5,000	≥5,000
≥80%	≥4,500	≥6,500	NR	≥14,000	NR	NR	NR	NR	≥15,000	≥13,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000

NOTES to Table 140.4-J:

1. Flow rates in Table 140.4-J represent the design supply fan airflow rate in CFM.

2. For a DOAS unit providing outdoor air to another space-conditioning system, the full design supply fan airflow rate shall be the total airflow of only the DOAS unit.

TABLE 140.4-K: ENERGY RECOVERY REQUIREMENTS BY CLIMATE ZONE AND PERCENT OUTDOOR AIR AT FULL DESIGN AIRFLOW (≥8,000 HOURS / YEAR)

% Outdoor Air at Full Design Airflow	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
≥10% and <20%	≥10,000	≥10,000	NR	NR	NR	NR	NR	NR	NR	≥40,000	≥40,000	≥20,000	≥10,000	≥10,000	≥10,000	≥10,000
≥20% and <30%	≥2,000	≥5,000	≥13,000	≥9,000	≥9,000	NR	NR	NR	NR	≥15,000	≥15,000	≥5,000	≥5,000	≥5,000	≥5,000	≥5,000
≥30% and <40%	≥2,000	≥3,000	≥10,000	≥6,500	≥6,500	NR	NR	NR	≥15,000	≥7,500	≥7,500	≥3,000	≥3,000	≥3,000	≥3,000	≥3,000
≥40% and <50%	≥2,000	≥2,000	≥8,000	≥6,000	≥6,000	NR	NR	NR	≥12,000	≥6,000	≥6,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000
≥50% and <60%	≥2,000	≥2,000	≥7,000	≥6,000	≥6,000	NR	NR	≥20,000	≥10,000	≥5,000	≥5,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000
≥60% and <70%	≥2,000	≥2,000	≥6,000	≥6,000	≥6,000	NR	NR	≥18,000	≥9,000	≥4,000	≥4,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000
≥70% and <80%	≥2,000	≥2,000	≥6,000	≥5,000	≥5,000	NR	NR	≥15,000	≥8,000	≥3,000	≥3,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000
≥80%	≥2,000	≥2,000	≥6,000	≥5,000	≥5,000	NR	NR	≥12,000	≥7,000	≥3,000	≥3,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000

NOTES totable 140.4-K:

1. Flow rates in Table 140.4-K represent the design supply fan airflow rate in CFM.
2. For a DOAS unit providing outdoor air to another space-conditioning system, the full design supply fan airflow rate shall be the total airflow of only the DOAS unit.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 140.5 – PRESCRIPTIVE REQUIREMENTS FOR SERVICE WATER HEATING SYSTEMS

(a) **Nonresidential occupancies.** Service water-heating systems in nonresidential buildings shall meet the requirements of 1 or 2 below, or meet the performance compliance requirements of Section 140.1:

1. School buildings less than 25,000 square feet and less than 4 stories in Climate Zones 2 through 15. A heat pump water-heating system that meets the applicable requirements of Sections 110.1, 110.3 and 120.3.

2. All other occupancies. A service water-heating system that meets the applicable requirements of Sections 110.1, 110.3, 120.3 and 140.5(c).

Exception to Section 140.5(a)1: A water-heating system serving an individual bathroom space may be an instantaneous electric water heater.

(b) **Hotel/motel occupancies.** A service water-heating system installed in hotel/motel buildings shall meet the requirements of Section 170.2(d).

(c) **High-capacity service water-heating systems**. Gas service water-heating systems with a total installed gas water-heating input capacity of 1 MMBtu/h or greater shall have gas service water-heating equipment with a minimum thermal efficiency of 90 percent. Multiple units can meet this requirement if the water-heating input provided by equipment with thermal efficiencies above and below 90 percent averages out to an input capacity-weighted average of at least 90 percent.

Exception 1 to Section 140.5(c): If 25 percent of the annual service water-heating requirement is provided by site-solar energy or site-recovered energy.

Exception 2 to Section 140.5(c): Water heaters installed in individual dwelling units.

Exception 3 to Section 140.5(c): Individual gas water heaters with input capacity at or below 100,000 Btu/h shall not be included in the calculations of the total system input or total system efficiency.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 140.6 – PRESCRIPTIVE REQUIREMENTS FOR INDOOR LIGHTING

A building complies with this section if:

i. The calculation of adjusted indoor lighting power of all proposed building areas combined, calculated under Subsection (a) is no greater than the calculation of allowed indoor lighting power, specific methodologies calculated under Subsection (c); and

ii. The calculation of allowed indoor lighting power, general rules comply with Subsection > (b).

The prescriptive limits on indoor lighting power are the smaller of the adjusted and allowed indoor lighting power values determined in accordance with Item i.

(a) **Calculation of adjusted indoor lighting power.** The adjusted indoor lighting power of all proposed building areas is the total watts of all planned permanent and portable lighting systems in all areas of the proposed building; subject to the applicable adjustments under Subdivisions 1 through 4 of this subsection and the requirements of Subdivision 4 of this subsection.

Exception to Section 140.6(a): Up to 0.3 watts per square foot of portable lighting for office areas shall not be required to be included in the calculation of actual indoor lighting power.

1. **Two interlocked lighting systems.** No more than two lighting systems may be used for an area, and if there are two they must be interlocked. Where there are two interlocked lighting systems, the watts of the lower wattage system may be excluded from the adjusted indoor lighting power density if:

   A. An installation certificate detailing compliance with Section 140.6(a)1 is submitted in accordance with Sections 10-103 and 130.4; and

   B. The area or areas served by the interlocking systems is an auditorium, a convention center, a conference room, a multipurpose room or a theater; and

   C. The two lighting systems are interlocked with a nonprogrammable double-throw switch to prevent simultaneous operation of both systems.

      For compliance with Part 6 a nonprogrammable double-throw switch is an electrical switch commonly called a “single pole double throw” or “three-way” switch that is wired as a selector switch allowing one of two loads to be enabled. It can be a line voltage switch or a low voltage switch selecting between two relays. It cannot be overridden or changed in any manner that would permit both loads to operate simultaneously.

2. **Reduction of wattage through controls.** In calculating adjusted indoor lighting power, the installed watts of a luminaire providing general lighting in an area listed in Table 140.6-A may be reduced by the product of (i) the number of watts controlled as described in Table 140.6-A, times (ii) the applicable power adjustment factor (PAF), if all of the following conditions are met:

   A. An installation certificate is submitted in accordance with Section 130.4(b), and

   B. Luminaires and controls meet the applicable requirements of Section 110.9, and Sections 130.0 through 130.5; and

   C. The controlled lighting is permanently installed general lighting systems and the controls are permanently installed nonresidential-rated lighting controls.

      When used for determining PAFs for general lighting in offices, furniture mounted luminaires that comply with all of the following conditions shall qualify as permanently installed general lighting systems:

      i. The furniture mounted luminaires shall be permanently installed no later than the time of building permit inspection; and

      ii. The furniture mounted luminaires shall be permanently hardwired; and

      iii. The furniture mounted lighting system shall be designed to provide indirect general lighting; and

iv. Before multiplying the installed watts of the furniture mounted luminaire by the applicable PAF, 0.2 watts per square foot of the area illuminated by the furniture mounted luminaires shall be subtracted from installed watts of the furniture mounted luminaires; and

v. The lighting control for the furniture mounted luminaire complies with all other applicable requirements in Section 140.6(a)2.

D. At least 50 percent of the light output of the controlled luminaire is within the applicable area listed in Table 140.6-A. Luminaires on lighting tracks shall be within the applicable area in order to qualify for a PAF.

E. Only one PAF from Table 140.6-A may be used for each qualifying luminaire. PAFs shall not be added together unless allowed in Table 140.6-A.

F. Only lighting wattage directly controlled in accordance with Section 140.6(a)2 shall be used to reduce the installed watts as allowed by Section 140.6(a)2 for calculating the Adjusted Indoor Lighting Power. If only a portion of the wattage in a luminaire is controlled in accordance with Section 140.6(a)2, then only that portion of controlled wattage may be reduced in calculating adjusted indoor lighting power.

G. Lighting controls used to qualify for a PAF shall be designed and installed in addition to manual, multilevel, and automatic lighting controls required in Section 130.1, and in addition to any other lighting controls required by any provision of Part 6. PAFs shall not be available for lighting controls required by Part 6.

H. To qualify for the PAF for daylight continuous dimming plus OFF control, the daylight control and controlled luminaires shall comply with Section 130.1(d), 130.4(a)3 and 130.4(a)7, and the daylight control shall be continuous dimming and shall additionally turn lights completely OFF when the daylight available in the daylit zone is greater than 150 percent of the illuminance received from the general lighting system at full power. The PAF shall apply to the luminaires in the primary sidelit daylit zone, secondary sidelit daylit zone and skylit daylit zone.

I. To qualify for the PAF for an occupant sensing control controlling the general lighting in large-office areas above workstations, in accordance with Table 140.6-A, the following requirements shall be met:

i. The office area shall be greater than 250 square feet; and

ii. This PAF shall be available only in office areas which contain workstations; and

iii. Controlled luminaires shall only be those that provide general lighting directly above the controlled area, or furniture mounted luminaires that comply with Section 140.6(a)2 and provide general lighting directly above the controlled area; and

iv. Qualifying luminaires shall be controlled by occupant sensing controls that meet all of the following requirements, as applicable:

a. Infrared sensors shall be equipped by the manufacturer, of fitted in the field by the installer, with lenses or shrouds to prevent them from being triggered by movement outside of the controlled area.

b. Ultrasonic sensors shall be tuned to reduce their sensitivity to prevent them from being triggered by movements outside of the controlled area.

c. All other sensors shall be installed and adjusted as necessary to prevent them from being triggered by movements outside of the controlled area.

J. To qualify for the PAF for an Institutional Tuning in Table 140.6-A, the tuned lighting system shall comply with all of the following requirements:

i. The lighting controls shall limit the maximum output or maximum power draw of the controlled lighting to 85 percent or less of full light output or full power draw; and

ii. The means of setting the limit is accessible only to authorized personnel; and

iii. The setting of the limit is verified by the acceptance test required by Section 130.4(a)7; and

iv. The construction documents specify which lighting systems shall have their maximum light output or maximum power draw set to no greater than 85 percent of full light output or full power draw.

K. To qualify for the PAF for a demand responsive control in Table 140.6-A, the general lighting wattage receiving the PAF shall not be within the scope of Section 110.12(c) and a demand responsive control shall meet all of the following requirements:

i. The controlled lighting shall be capable of being automatically reduced in response to a demand response signal; and

ii. General lighting shall be reduced in a manner consistent with uniform level of illumination requirements in Table 130.1-A.

L. To qualify for the PAFs for clerestory fenestration, horizontal slats, or light shelves in Table 140.6-A, the daylighting design shall meet the requirements in Section 140.3(d). The PAFs shall only apply to lighting in a primary or secondary sidelit daylit zone where continuous dimming daylighting controls meeting the requirements of Section 130.1(d) are installed.

3. **Lighting wattage excluded.** The watts of the following indoor lighting applications may be excluded from adjusted indoor lighting power. (Indoor lighting not listed below shall comply with all applicable nonresidential indoor lighting requirements in Part 6):

A. In theme parks: lighting for themes and special effects;

B. Studio lighting for film or photography, provided that these lighting systems are in addition to and separately switched from a general lighting system;

C. Lighting for dance floors, lighting for theatrical and other live performances, and theatrical lighting used for religious worship, provided that these lighting systems are additions to a general lighting system and are separately controlled by a multiscene or theatrical cross-fade control station accessible only to authorized operators;

Lighting intended for makeup, hair, and costume preparation in performing arts facility dressing rooms, provided that the lighting is separately switched from the general lighting system, switched independently at each dressing station, and is controlled with a vacancy sensor.

D. In civic facilities, transportation facilities, convention centers and hotel function areas: lighting for temporary exhibits, if the lighting is in addition to a general lighting system, and is separately controlled from a panel accessible only to authorized operators;

E. Lighting installed by the manufacturer in walk-in coolers or freezers, vending machines, food preparation equipment, and scientific and industrial equipment;

F. Examination and surgical lights, low ambient night lights and lighting integral to medical equipment, provided that these lighting systems are additions to and separately switched from a general lighting system;

G. Lighting for plant growth or maintenance in non-CEH spaces, if it is controlled by a multilevel astronomical time-switch control that complies with the applicable provisions of Section 110.9;

H. Lighting equipment that is for sale;

I. Lighting demonstration equipment in lighting education facilities;

J. Lighting that is required for exit signs subject to the CBC. Exit signs shall meet the requirements of the Appliance Efficiency Regulations;

K. Exit way or egress illumination that is normally off and that is subject to the CBC;

L. In hotel/motel buildings, lighting in guest rooms (lighting in hotel/motel guestrooms shall comply with Section 130.0(b). (Indoor lighting not in guestrooms shall comply with all applicable nonresidential lighting requirements in Part 6.)

M. Reserved.

N. Temporary lighting systems.

O. Lighting in occupancy group U buildings less than 1,000 square feet;

P. Lighting in unconditioned agricultural buildings less than 2,500 square feet;

Q. Lighting systems in qualified historic buildings, as defined in the California Historical Building Code (Title 24, Part 8), are exempt from the lighting power density allowances, if they consist solely of historic lighting components or replicas of historic lighting components. If lighting systems in qualified buildings contain some historic lighting components or replicas of historic components, combined with other lighting components, only those historic or historic replica components are exempt. All other lighting systems in qualified historic buildings shall comply with the lighting power density allowances;

R. Lighting in nonresidential parking garages for seven or less vehicles: Lighting in nonresidential parking garages for seven or less vehicles shall comply with the applicable residential parking garage provisions of Section 150.0(k).

S. Lighting for signs: Lighting for signs shall comply with Section 140.8.

T. Lighting in refrigerated cases less than 3,000 square feet. (Lighting in refrigerated cases less than 3,000 square feet shall comply with the Title 20 Appliance Efficiency Regulations).

U. Lighting in elevators where the lighting meets the requirements in Section 120.6(f).

V. Lighting connected to a Life Safety Branch or Critical Branch, as specified in Section 517 of the California Electrical Code.

W. Horticultural lighting in CEH spaces (indoor growing and greenhouses) complying with Section 120.6(h).

4. **Luminaire classification and power adjustment.**

A. Luminaire classification and power shall be determined in accordance with Section 130.0(c).

B. Small aperture tunable-white and dim-to-warm luminaires lighting power adjustment. For qualifying small aperture tunable-white and dim-to-warm LED luminaires, the adjusted indoor lighting power of these luminaires shall be calculated by multiplying their maximum rated wattage by 0.80. Qualifying luminaires shall meet all of the following:

i. Small aperture. Qualifying luminaires with a luminaire aperture length longer than 18 inches shall have a luminaire aperture no wider than four inches. Qualifying luminaires with a luminaire aperture length of 18 inches or less shall have a luminaire aperture no wider than eight inches.

ii. Color changing. qualifying tunable-white luminaires shall be capable of a color change greater than or equal to 2,000 Kelvin correlated color temperature (CCT). Qualifying dim-to-warm luminaires shall be capable of color change greater than or equal to 500 Kelvin CCT.

iii. Controls. Qualifying luminaires shall be connected to controls that allows color changing of the luminaires.

C. Tailored method display lighting mounting height lighting power adjustment. For wall display luminaires or floor display luminaires meeting Tailored Method Section 140.6(c)3G and H and where the bottom of luminaires are 10 feet 7 inches and greater above the finished floor, the adjusted indoor lighting power of these luminaires shall be calculated by multiplying their maximum rated wattage and the appropriated mounting height adjustment factor from Table 140.6-E. Luminaire mounting height is the distance from the finished floor to the bottom of the luminaire. General lighting shall not qualify for a mounting height multiplier.

(b) **Calculation of allowed indoor lighting power: general rules.**

1. The allowed indoor lighting power allotment for conditioned areas shall be calculated separately from the allowed lighting power allotment for unconditioned areas. Each allotment is applicable solely to the area to which it applies, and there shall be no trade-offs between conditioned and unconditioned area allotments.
2. Allowed indoor lighting power allotment shall be calculated separately from the allowed outdoor lighting power allotment. Each allotment is applicable solely to the area to which it applies, and there shall be no trade-offs between the separate indoor and outdoor allotments.
3. The allowed indoor lighting power density allotment for general lighting shall be calculated as follows:
   A. The complete building method, as described in Section 140.6(c)1, shall be used only for an entire building, except as permitted by Section 140.6(c)1. As described more fully in Section 140.6(c)1, and subject to the adjustments listed there, the allowed indoor lighting power allotment for general lighting for the entire building shall be calculated as follows:
      i. For a conditioned building, the product of the square feet of conditioned space of the building times the applicable allotment of watts per square foot described in Table 140.6-B.
      ii. For an unconditioned building, the product of the square foot of unconditioned space of the building times the applicable allotment of watts per square feet described in Table 140.6-B.
   B. The area category method, as described in Section 140.6(c)2, shall be used either by itself for all areas in the building, or when some areas in the building use the tailored method described in Section 140.6(c)3. Under the area category method (either by itself or in conjunction with the tailored method), as described more fully in Section 140.6(c)2, and subject to the adjustments listed there, the allowed indoor lighting power allotment for general lighting shall be calculated for each area in the building as follows:
      i. For conditioned areas, by multiplying the conditioned square feet of the area times the applicable allotment of watts per square foot for the area shown in Table 140.6-C (or Table 140.6-D if the tailored method is used for that area).
      ii. For unconditioned areas, by multiplying the unconditioned square feet of the area times the applicable allotment of watts per square foot for the area shown in Table 140.6-C (or Table 140.6-D if the tailored method is used for that area).

      The allowed indoor lighting power allotment for general lighting for one area for which the area category method was used may be increased up to the amount that the allowed indoor lighting power allotment for general lighting for another area using the area category method or tailored method is decreased, except that such increases and decreases shall not be made between conditioned and unconditioned space.
   C. The tailored method, as described in Section 140.6(c)3, shall be used either by itself for all areas in the building, or when some areas in the building use the area category method described in Section 140.6(c)2. Under the tailored method (either by itself or in conjunction with the area category method) as described more fully in Section 140.6(c)3, and subject to the adjustments listed there, allowed indoor lighting power allotment for general lighting shall be calculated for each area in the building as follows:
      i. For conditioned areas, by multiplying the conditioned square feet of the area times the applicable allotment of watts per square foot for the area shown in Table 140.6-D (or Table 140.6-C if the area category method is used for that area);
      ii. For unconditioned areas, by multiplying the unconditioned square feet of the area times the applicable allotment of watts per square foot for the area shown in Table 140.6-D (or Table 140.6-C if the area category method is used for that area);

The allowed indoor lighting power allotment for general lighting for one area for which the Tailored Method was used may be increased up to the amount that the allowed indoor power lighting for general lighting for another area is decreased, but only if the Tailored Method or Area Category Method was used for the other area, except that such increases and decreases shall not be made between conditioned and unconditioned space.

D. If the Area Category Method is used for an area, the Tailored Method may not be used for that area. If the Tailored Method is used for an area, the Area Category Method may not be used for that area.

4. Allowed Indoor Lighting Power allotments for all lighting power allotments other than general lighting shall be restricted as follows:

A. When using the Area Category Method, allowed Indoor Lighting Power allotments for specialized task work; precision commercial and industrial work; white board or chalk board; accent, display and feature; decorative; or Videoconferencing Studio; may not be increased as a result of, or otherwise traded off against, decreasing any other allotment; and

B. When using the Tailored Method, allowed indoor lighting power allotments for wall display; floor display and task; decorative/special effect; or very valuable display case; may not be increased, or otherwise traded between any of the separate allotments.

(c) **Calculation of allowed indoor lighting power: specific methodologies.** The allowed indoor lighting power for each building type, or each primary function area shall be calculated using only one of the methods in Subsection 1, 2 or 3 below as applicable.

1. **Complete Building Method.** Requirements for using the Complete Building Method include all of the following:

A. The Complete Building Method shall be used only for building types, as defined in Section 100.1, that are specifically listed in TABLE 140.6-B. (For example, retail and wholesale stores, hotel/motel, and high-rise residential buildings shall not use this method.)

B. The Complete Building Method shall be used only on projects involving:

i. Entire buildings with one type of use occupancy; or

ii. Mixed occupancy buildings where one type of use makes up at least 90 percent of the entire building (in which case, when applying the Complete Building Method, it shall be assumed that the primary use is 100 percent of the building); or

iii. A tenant space where one type of use makes up at least 90 percent of the entire tenant space (in which case, when applying the Complete Building Method, it shall be assumed that the primary use is 100 percent of the tenant space).

C. The Complete Building Method shall be used only when the applicant is applying for a lighting permit and submits plans and specifications for the entire building or the entire tenant space.

D. Under the Complete Building Method, the allowed indoor lighting power allotment is the lighting power density value times the floor area of the entire building.

E. For buildings including a parking garage plus another type of use listed in Table 140.6-B, the parking garage portion of the building and other type of use portion of the building shall each separately use the Complete Building Method.

2. **Area Category Method.** Requirements for using the Area Category Method include all of the following:

A. The Area Category Method shall be used only for primary function areas, as defined in Section 100.1, that are listed in Table 140.6-C. For primary function areas not listed, selection of a reasonably equivalent type shall be permitted.

B. Primary function areas in TABLE 140.6-C shall not apply to a complete building. Each primary function area shall be determined as a separate area.

C. For purposes of compliance with Section 140.6(c)2, an "area" shall be defined as all contiguous areas that accommodate or are associated with a single primary function area listed in Table 146.0-C.

D. Where areas are bounded or separated by interior partitions, the floor area occupied by those interior partitions may be included in primary function area.

E. If at the time of permitting for a newly constructed building, a tenant is not identified for a multitenant area, a maximum of 0.4 watts per square foot shall be allowed for the lighting in each area in which a tenant has not been identified. The area shall be classified as unleased tenant area.

F. Under the Area Category Method, the allowed indoor lighting power for each primary function area is the lighting power density value in Table 140.6-C times the square feet of the primary function area. The total allowed indoor lighting power density for the building is the sum of all allowed indoor lighting powers densities for all areas in the building.

G. In addition to the allowed indoor lighting power calculated according to Sections 140.6(c)2A through F, the building may add additional lighting power allowances for qualifying lighting systems as specified in the Qualifying Lighting Systems column in TABLE 140.6-C under the following conditions:

i. Only primary function areas having a lighting system as specified in the Qualifying Lighting Systems column in TABLE 140.6-C and in accordance with the corresponding footnote of the TABLE shall qualify for the additional lighting power allowances; and

ii. The additional lighting power allowances shall be used only if the plans clearly identify all applicable task areas and the lighting equipment designed to illuminate these tasks; and

iii. Tasks that are performed less than two hours per day or poor quality tasks that can be improved are not eligible for the additional lighting power allowances; and

iv. The additional lighting power allowances shall not utilize any type of luminaires that are used for general lighting in the building; and

v. The additional lighting power allowances shall not be used when using the Complete Building Method, or when the Tailored Method is used for any area in the building; and

vi. The additional lighting power allowed is the smaller of:

a. the lighting power density listed in the "Allowed Additional Lighting LPD" column in Table 140.6-C, times the square feet of the primary function, or

b. the adjusted indoor lighting power of the applicable lighting; and

vii. In addition to meeting Sections 140.6(c)2Gi through vi, additional lighting power for videoconferencing as specified in Table 140.6-C shall be allowed in a videoconferencing studio, as defined in Section 100.1, provided the following conditions are met:

a. A completed and signed installation certificate is prepared and submitted in accordance with Section 130.4(b), specifically detailing compliance with the applicable requirements of Section 140.6(c)2Gvii; and

b. The videoconferencing studio is a room with permanently installed videoconferencing cameras, audio equipment, and playback equipment for both audio-based and video-based two-way communication between local and remote sites; and

c. General lighting is switched in accordance with Table 130.1-A; and

d. Wall wash lighting is separately switched from the general lighting system; and

e. All of the lighting in the studio, including general lighting and additional lighting power allowed by Section 140.6(c)2Gvii is controlled by a multiscene programmable control system (also known as a scene preset control system).

3. **Tailored method.** Requirements for using the Tailored Method include all of the following:

A. The Tailored Method shall be used only for primary function areas listed in Table 140.6-D, as defined in Section 100.1.

B. Allowed indoor lighting power allotments for general lighting shall be determined according to Section 140.6(c)3F, as applicable.

C. For compliance with Section 140.6(c)3, an "area" shall be defined as all contiguous areas that accommodate or are associated with a single primary function area listed in Table 140.6-D.

D. Where areas are bounded or separated by interior partitions, the floor area occupied by those interior partitions may be included in a primary function area.

E. In addition to the allowed indoor lighting power allotments for general lighting calculated according to Sections 140.6(c)3F, as applicable, the building may add additional lighting power allowances for wall display lighting, floor display lighting and task lighting, decorative/special effects lighting, and very valuable display cases lighting according to Sections 140.6(c)3G through J.

F. Determine allowed indoor lighting power allotments for general lighting for primary function areas listed in Table 140.6-D as follows:

   i. Use the General Illumination Level (Lux) listed in Column 2 of Table 140.6-D to determine the allowed general lighting power density allotments for the area.

   ii. Determine the room cavity ratio (RCR) for the area. The RCR shall be calculated according to the applicable equation in Table 140.6-F.

   iii. Find the allowed general lighting power density allotments in Table 140.6-G that is applicable to the general illuminance level (Lux) from Column 2 of Table 140.6-D (as described in Item i) and the RCR determined in accordance with Table 140.6-F (as described in Item ii).

   iv. Determine the square feet of the area in accordance with Section 140.6(c)3C and D.

   v. Multiply the allowed lighting power density allotment, as determined in accordance with Item iii by the square feet of each primary function area, as determined in accordance with Item iv. The product is the allowed indoor lighting power allotment for general lighting for the area.

G. Determine additional allowed power for wall display lighting according to column 3 of Table 140.6-D for each primary function area as follows:

   i. Floor displays shall not qualify for wall display allowances.

   ii. Qualifying wall lighting shall:

      a. Be mounted within 10 feet of the wall having the wall display. When track lighting is used for wall display, and where portions of that lighting track are more than 10 feet from the wall and other portions are within 10 feet of the wall, portions of track more than 10 feet from the wall shall not be used for the wall display allowance.

      b. Be a lighting system type appropriate for wall lighting. Lighting systems appropriate for wall lighting are lighting track adjacent to the wall, wall-washer luminaires, luminaires behind a wall valance or wall cove, or accent light. (Accent luminaires are adjustable or fixed luminaires with PAR, R, MR, AR or luminaires providing directional display light.)

   iii. Additional allowed power for wall display lighting is available only for lighting that illuminates walls having wall displays. The length of display walls shall include the length of the perimeter walls, including but not limited to closable openings and permanent full height interior partitions. Permanent full height interior partitions are those that (I) extend from the floor to within two feet of the ceiling or are taller than ten feet and (II) are permanently anchored to the floor.

   iv. For wall display lighting where the bottom of the luminaire is greater than 10 feet 6 inches above the finished floor, the mounting height adjustment factor from Table 140.6-E can be used to adjust the installed luminaire wattage as specified in Section 140.6(a)4C.

v. The allowed power for wall display lighting shall be the smaller of:

a. the "wall display lighting power density" determined in accordance with Table 140.6-D, multiplied by the wall display lengths determined in accordance with Item iii; and

b. The adjusted indoor lighting power used for the wall display lighting systems.

vi. Lighting internal to display cases that are attached to a wall or directly adjacent to a wall are counted as wall display lighting as specified in Section 140.6(c)3G. All other lighting internal to display cases are counted as floor display lighting as specified in Section 140.6(c)3H, or as very valuable display case lighting as specified in Section 140.6(c)3J.

H. Determine additional allowed power for floor display lighting and task lighting as follows:

i. Displays that are installed against a wall shall not qualify for the floor display lighting power allowances.

ii. Lighting internal to display cases that are not attached to a wall and not directly adjacent to a wall shall be counted as floor display lighting in accordance with Section 140.6(c)3H; or very valuable display case lighting in accordance with Section 140.6(c)3J.

iii. Additional allowed power for floor display lighting, and additional allowed power for task lighting, may be used by qualifying floor display lighting systems, qualifying task lighting systems, or a combination of both. For floor areas qualifying for both floor display and task lighting power allowances, the additional allowed power shall be used only once for the same floor area, so that the allowance shall not be additive.

iv. Qualifying floor display lighting shall:

a. Be mounted no closer than 2 feet to a wall.

b. Consist of only (I) directional lamp types, such as PAR, R, MR, AR; or (II) luminaires providing directional display light.

c. If track lighting is used, shall be only track heads that are classified as direction lighting types.

v. Qualifying task lighting shall:

a. Be located immediately adjacent to and capable of illuminating the task for which it is installed.

b. Be of a type different from the general lighting system.

c. Be separately switched from the general lighting system.

vi. If there are illuminated floor displays, floor display lighting power shall be used only if allowed by Column 4 of Table 140.6-D.

vii. The square footage of floor display or the square footage of task areas shall be determined in accordance with Section 140.6(c)3C and D, except that any floor area designed to not have floor displays or tasks, such as floor areas designated as a path of egress, shall not be included for the floor display allowance.

viii. For floor display lighting where the bottom of the luminaire is greater than 10.6 feet above the finished floor, multiply the floor display installed watts by the appropriate mounting height adjustment factor from Table 140.6-E to calculate the Adjusted Indoor Lighting Power as specified in Section 140.6(a)4C.

ix. The allowed power for floor display lighting for each applicable area shall be the smaller of:

a. the allowed floor display and task lighting power determined in accordance with Section 140.6(c)3Hvi multiplied by the floor square footage determined in accordance with Section 140.6(c)3Hvii; and

b. The Adjusted Indoor Lighting Power used for the floor display lighting systems.

I. Determine additional allowed power for decorative/special effects lighting as follows:

i. Qualifying decorative lighting includes luminaires such as chandeliers, sconces, lanterns, neon and cold cathode, light emitting diodes, theatrical projectors, moving lights and light color panels, when any of those lights are used in a decorative manner that does not serve as display lighting or general lighting.

ii. Additional lighting power for decorative/special effects lighting shall be used only if allowed by Column 5 of Table 140.6-D.

iii. Additional lighting power for decorative/special effects lighting shall be used only in areas having decorative/special effects lighting. The square footage of the floor area shall be determined in accordance with Section 140.6(c)3C and D, and it shall not include floor areas not having decorative/special effects lighting.

iv. The additional allowed power for decorative/special effects lighting for each applicable area shall be the smaller of:

a. The product of the allowed decorative/special effects lighting power determined in accordance with Section 140.6(c) 3Iii, multiplied by the floor square footage determined in accordance with Section 140.6(c) 3Iiii; and

b. The adjusted indoor lighting power of allowed decorative/special effects lighting.

J. Determine additional allowed power for very valuable display case lighting as follows:

i. Additional allowed power for very valuable display case lighting shall be available only for display cases in appropriate function areas in retail merchandise sales, museum and religious worship.

ii. To qualify for additional allowed power for very valuable display case lighting, a case shall contain jewelry, coins, fine china, fine crystal, precious stones, silver, small art objects and artifacts, and/or valuable collections the display of which involves customer inspection of very fine detail from outside of a locked case.

iii. Qualifying lighting includes internal display case lighting or external lighting employing highly directional luminaires specifically designed to illuminate the case or inspection area without spill light, and shall not be fluorescent lighting unless installed inside of a display case.

iv. If there is qualifying very valuable display case lighting in accordance with Section 140.6(c)3Jii, the smallest of the following separate lighting power for display cases presenting very valuable display items is permitted:

a. The product of the area of the primary function and 0.50 watt per square foot; or

b. The product of the area of the display case and 7 watts per square foot; or

c. The adjusted indoor lighting power of lighting for very valuable displays.

TABLE 140.6-A LIGHTING POWER ADJUSTMENT FACTORS (PAF)

TYPE OF CONTROL	TYPE OF AREA		FACTOR
a. To qualify for any of the Power Adjustment Factors in this table, the installation shall comply with the applicable requirements in Section 140.6(a)2 b. Only one PAF may be used for each qualifying luminaire unless combined below. c. Lighting controls that are required for compliance with Part 6 shall not be eligible for a PAF			
1. Daylight Continuous Dimming plus OFF Control	Luminaires in skylit daylit zone or primary sidelit daylit zone or secondary sidelit daylit zone		0.10
2. Occupant Sensing Controls in Offices Larger than 250 square feet	One sensor controlling an area that is:	No larger than 125 square feet	0.30
		From 126 to 250 square feet	0.20
3.Institutional Tuning	Luminaires in non-daylit areas. Luminaires that qualify for other PAFs in this table may also qualify for this tuning PAF.		0.10
	Luminaires in daylit areas. Luminaires that qualify for other PAFs in this table may also qualify for this tuning PAF.		0.05
4. Demand Responsive Control	General lighting luminaires not in the scope of Section 110.12(c). Luminaires that qualify for other PAFs in this table may also qualify for this demand responsive control PAF		0.05
5. Clerestory Fenestration	Luminaires in daylit areas adjacent to the clerestory. Luminaires that qualify for daylight dimming plus OFF control may also qualify for this PAF.		0.05
6. Horizontal Slats	Luminaires in daylit areas adjacent to vertical fenestration with interior or exterior horizontal slats. Luminaires that qualify for daylight dimming plus OFF control may also qualify for this PAF.		0.05
7.Light Shelves	Luminaires in daylit areas adjacent to clerestory fenestration with interior or exterior light shelves. This PAF may be combined with the PAF for clerestory fenestration. Luminaires that qualify for daylight dimming plus OFF control may also qualify for this PAF		0.10

TABLE 140.6-B COMPLETE BUILDING METHOD LIGHTING POWER DENSITY VALUES

TYPE OF BUILDING	ALLOWED LIGHTING POWER DENSITY (WATTS PER SQUARE FOOT)
Assembly Building	0.65
Bank or Financial Institution Building	0.65
Grocery Store Building	0.90
Gymnasium Building	0.60
Healthcare Facility	0.90
Industrial/Manufacturing Facility Building	0.60
Library Building	0.70
Motion Picture Theater Building	0.60
Museum Building	0.65
Office Building	0.60
Parking Garage Building	0.13
Performing Arts Theater Building	0.75
Religious Facility Building	0.70
Restaurant Building	0.65
Retail Store Building	0.90
School Building	0.60
Sports Arena Building	0.75
All other buildings	0.40

TABLE 140.6-C AREA CATEGORY METHOD - LIGHTING POWER DENSITY VALUES (WATTS/FT²)

Primary Function Area		Allowed Lighting Power Density for General Lighting (W/ft²)	Additional Lighting Power	
			Qualified Lighting Systems	Additional Allowance (W/ft², unless noted otherwise)
Aging Eye/Low-vision[11]	Corridor Area	0.70	Decorative/Display	0.30
	Dining	0.80	Decorative/Display	0.30
			Tunable white or dim-to-warm[10]	0.10
	Lobby, Main Entry	0.85	Decorative/Display	0.30
			Transition Lighting OFF at night[12]	0.95
			Tunable white or dim-to-warm[10]	0.10
	Lounge/Waiting Area	0.80	Decorative/Display	0.30
			Tunable white or dim-to-warm[10]	0.10
	Multipurpose Room	0.85	Decorative/Display	0.30
			Tunable white or dim-to-warm[10]	0.10
	Religious Worship Area	1.00	Decorative/Display	0.30
			Tunable white or dim-to-warm[10]	0.10
	Restroom	1.00	Decorative/Display	0.20
	Stairwell	0.80	Decorative/Display	0.30
Audience Seating Area		0.50	Decorative/Display	0.25
Auditorium Area		0.70	Decorative/Display	0.45
Auto Repair / Maintenance Area		0.55	Detailed Task Work[7]	0.20
Barber, Beauty Salon, Spa Area		0.70	Detailed Task Work[7]	0.30
			Decorative/Display	0.25
Civic Meeting Place Area		0.90	Decorative/Display	0.25
Classroom, Lecture, Training, Vocational Area		0.60	White or Chalk Board[1]	7 W/ft
Concourse and Atria Area		0.60	Decorative/Display	0.25
Convention, Conference, Multipurpose and Meeting Area		0.75	Decorative/Display	0.25
Copy Room		0.50	-	-
Corridor Area		0.40	Decorative/Display	0.25
Dining Area	Bar/Lounge and Fine Dining	0.45	Decorative/Display	0.35
	Cafeteria/Fast Food	0.45	Decorative/Display	0.25
	Family and Leisure	0.40	Decorative/Display	0.25
Electrical, Mechanical, Telephone Rooms		0.40	Detailed Task Work[7]	0.20
Exercise/Fitness Center and Gymnasium Area		0.50	-	-
Financial Transaction Area		0.70	Decorative/Display	0.25
Healthcare Facility and Hospitals	Exam/Treatment Room	1.15	-	-
	Imaging Room	0.60	Decorative/Display	0.20

			Tunable white or dim-to-warm[10]	0.10
	Medical Supply Room	0.55	-	-
	Nursery	0.80	Tunable white or dim-to-warm[10]	0.10
	Nurse's Station	0.85	Tunable white or dim-to-warm[10]	0.10
			Detailed Task Work[7]	0.20
	Operating Room	1.90	-	-
	Patient Room	0.70	Decorative/Display	0.15
			Tunable white or dim-to-warm[10]	0.10
	Physical Therapy Room	0.75	Tunable white or dim-to-warm[10]	0.10
	Recovery Room	0.90	Tunable white or dim-to-warm[10]	0.10
Hotel Function Area		0.85	Decorative/Display	0.25
Kitchen/Food Preparation Area		0.95	-	-
Laboratory, Scientific		0.90	Specialized Task Work[8]	0.35
Laundry Area		0.45	-	-
Library	Reading Area	0.80	Decorative/Display	0.25
	Stacks Area	1.00	-	-
Lobby, Main Entry		0.70	Decorative/Display	0.25
Locker Room		0.45	-	-
Lounge, Breakroom, or Waiting Area		0.55	Decorative/Display	0.25
Manufacturing, Commercial & Industrial Work Area	Low Bay	0.60	Detailed Task Work[7]	0.20
	High Bay	0.65	Detailed Task Work[7]	0.20
	Precision	0.85	Precision Specialized Work[9]	0.70
Museum Area	Exhibition/Display	0.60	Decorative/Display	0.45
	Restoration Room	0.70	Detailed Task Work[7]	0.35
Office Area	> 250 square feet	0.60	Decorative/Display and Portable lighting for office areas[6]	0.20
	≤ 250 square feet	0.65		
Parking Garage Area	Parking Zone and Ramps	0.10	First ATM or Ticket Machine	100 W
			Additional ATM or Ticket Machine	50 W each
	Daylight Adaptation Zones[2]	1.00	-	-

Pharmacy Area		1.00	Specialized Task Work[8]	0.35
Retail Sales Area	Grocery Sales	1.00	-	-
			Decorative/Display	0.35
	Retail Merchandise Sales	0.95	-	-
			Decorative/Display	0.35
	Fitting Room	0.60	External Illuminated Mirror[5]	40 W/ea
			Internal Illuminated Mirror[5]	120 W/ea
Religious Worship Area		0.95	Decorative/Display	0.25
Restrooms		0.65	Decorative/Display	0.35
Stairwell		0.60	Decorative/Display	0.35
Storage, Commercial/Industrial	Warehouse	0.40	-	-
	Shipping & Handling	0.60	-	-
Sports Arena – Playing Area	Class I Facility[13]	2.25	-	-
Sports Arena – Playing Area	Class II Facility[13]	1.45	-	-
Sports Arena – Playing Area	Class III Facility[13]	1.10	-	-
Sports Arena – Playing Area	Class IV Facility[13]	0.75	-	-
Theater Area	Motion picture	0.50	Decorative/Display	0.25
Theater Area	Performance	0.80	Decorative/Display	0.25
Transportation Function	Baggage Area	0.40	-	-
	Ticketing Area	0.45	Decorative/Display	0.20
Videoconferencing Studio		0.90	Videoconferencing[14]	1.00
All other		0.40	-	-

Footnotes for this table are listed below.

1. White board or chalk board. – Directional lighting dedicated to a white board or chalk board.

2. Daylight Adaptation Zones shall be no longer than 66 feet from the entrance to the parking garage.

3. Reserved

4. Reserved

5. Illuminated mirrors. Lighting shall be dedicated to the mirror.

6. Portable lighting in office areas includes under shelf or furniture-mounted supplemental task lighting qualifies when controlled by a time clock or an occupancy sensor.

7. Detailed task work – Lighting provides high level of visual acuity required for activities with close attention to small elements and/or extreme close up work.

8. Specialized task work – Lighting provides for small-scale, cognitive or fast performance visual tasks; lighting required for operating specialized equipment associated with pharmaceutical/laboratorial activities.

9. Precision specialized work – Lighting for work performed within a commercial or industrial environment that entails working with low contrast, finely detailed, or fast moving objects.

10. Tunable white luminaires capable of color change greater than or equal to 2000K CCT, or dim-to-warm luminaires capable of color change greater than or equal to 500K CCT, connected to controls that allows color changing of the luminaires.

11. Aging Eye/Low-vision areas can be documented as being designed to comply with the light levels in ANSI/IES RP-28 and are or will be licensed by local or state authorities for either senior long-term care, adult day care, senior support, and/or people with special visual needs.

12. Transition lighting OFF at night. Lighting power controlled by astronomical time clock or other control to shut off lighting at night. Additional LPD only applies to area within 30 feet of an exit. Not applicable to lighting in daylit zones.

13. Class I Facility is used for competition play for 5000 or more spectators. Class II Facility is used for competition play for up to 5000 spectators. Class III Facility is used for competition play for up to 2000 spectators. Class IV Facility is normally used for recreational play and there is limited or no provision for spectators.

14. The additional videoconferencing lighting power shall be allowed provided the videoconferencing studio meets all the requirements of Section 140.6(c)2Gvii.

TABLE 140.6-D TAILORED METHOD LIGHTING POWER ALLOWANCES

1	2	3	4	5
Primary Function Area	**General Illumination Level (Lux)**	**Wall Display Lighting Power Density (W/ft)**	**Allowed Combined Floor Display Power and Task Lighting Power Density (W/ft²)**	**Allowed Decorative/ Special Effect Lighting Power Density (W/ft²)**
Auditorium Area	300	3.00	0.20	0.35
Convention, Conference, Multipurpose, and Meeting Center Areas	300	2.00	0.30	0.35
Dining Areas	200	1.25	0.45	0.35
Exhibit, Museum Areas	150	11.20	0.70	0.35
Hotel Area:				
Ballroom/Events	400	1.80	0.12	0.35
Lobby	200	3.40	0.20	0.35
Lobby, Main entry	200	3.40	0.20	0.35
Religious Worship Area	300	1.30	0.40	0.35
Retail Sales				
Grocery	600	6.60	0.60	0.35
Merchandise Sales, and Showroom Areas	500	11.50	0.70	0.35
Theater Area:				
Motion picture	200	2.00	0.20	0.35
Performance Arts	200	7.30	0.20	0.35

TABLE 140.6-E TAILORED WALL AND FLOOR DISPLAY MOUNTING HEIGHT ADJUSTMENT FACTORS

Height in feet above finished floor and bottom of luminaire(s)	Floor Display or Wall Display Mounting Height Adjustment Factor
≤ 10’-6”	1.00
> 10’-6” to 14’-0”	0.85
>14’-0” to 18’-0”	0.75
> 18’-0”	0.70

TABLE 140.6-F ROOM CAVITY RATIO (RCR) EQUATIONS

Determine the Room Cavity Ratio for TABLE 140.6-G using one of the following equations.

Room cavity ratio for rectangular rooms

$$RCR = \frac{5 \times H \times (L + W)}{L \times W}$$

Room cavity ratio for irregular-shaped rooms

$$RCR = \frac{2.5 \times H \times P}{A}$$

Where: L =Length of room; W = Width of room; H =Vertical distance from the work plane to the centerline of the lighting fixture; P = Perimeter of room, and A = Area of room

TABLE 140.6-G TAILORED METHOD GENERAL LIGHTING POWER ALLOWED – BY ILLUMINANCE AND ROOM CAVITY RATIO

General Lighting Power Density (W/ft²) for the following RCR values[b]

General Illuminance Level (lux)[a]	RCR ≤ 2.0	RCR > 2.0 and ≤ 3.5	RCR > 3.5 and ≤ 7.0	RCR > 7.0
150	0.35	0.40	0.50	0.65
200	0.40	0.50	0.65	0.85
300	0.55	0.70	0.85	1.20
400	0.65	0.80	1.05	1.25
500	0.80	0.90	1.25	1.55
600	0.90	1.05	1.40	2.00

[a] Illuminance values from Column 2 of TABLE 140.6-D.

[b] RCR values are calculated using applicable equations in TABLE 140.6-F.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 140.7 – PRESCRIPTIVE REQUIREMENTS FOR OUTDOOR LIGHTING

(a) An outdoor lighting installation complies with this section if it meets the requirements in Subsections (b) and (c), and the actual outdoor lighting power installed is no greater than the allowed outdoor lighting power calculated under Subsection (d). The allowed outdoor lighting shall be calculated according to outdoor lighting zone in Title 24, Part 1, Section 10-114.

Exceptions to Section 140.7(a): When more than 50 percent of the light from a luminaire falls within one or more of the following applications, the lighting power for that luminaire shall be exempt from Section 140.7:

1. Temporary outdoor lighting.
2. Lighting required and regulated by the Federal Aviation Administration, and the Coast Guard.
3. Lighting for public streets, roadways, highways and traffic signage lighting, including lighting for driveway entrances occurring in the public right-of-way.
4. Lighting for sports and athletic fields, and children's playgrounds.
5. Lighting for industrial sites, including but not limited to, rail yards, maritime shipyards and docks, piers and marinas, chemical and petroleum processing plants, and aviation facilities.
6. Lighting of public monuments.
7. Lighting of signs complying with the requirements of Sections 130.3 and 140.8.
8. Lighting of tunnels, bridges, stairs, wheelchair elevator lifts for American with Disabilities Act (ADA) compliance, and ramps that are other than parking garage ramps.
9. Landscape lighting.
10. In theme parks: outdoor lighting only for themes and special effects.
11. Lighting for outdoor theatrical and other outdoor live performances, provided that these lighting systems are additions to area lighting systems and are controlled by a multiscene or theatrical cross-fade control station accessible only to authorized operators.
12. Outdoor lighting systems for qualified historic buildings, as defined in the California Historic Building Code (Title 24, Part 8), if they consist solely of historic lighting components or replicas of historic lighting components. If lighting systems for qualified historic buildings contain some historic lighting components or replicas of historic components, combined with other lighting components, only those historic or historic replica components are exempt. All other outdoor lighting systems for qualified historic buildings shall comply with Section 140.7.

(b) **Outdoor lighting power trade-offs.** Outdoor lighting power trade-offs shall be determined as follows:

1. Allowed lighting power determined according to Section 140.7(d)1 for general hardscape lighting allowance may be traded to specific applications in Section 140.7(d)2, provided the hardscape area from which the lighting power is traded continues to be illuminated in accordance with Section 140.7(d)1A.
2. Allowed lighting power determined according to Section 140.7(d)2 for additional lighting power allowances for specific applications shall not be traded between specific applications, or to hardscape lighting in Section 140.7(d)1.
3. Trading of lighting power allowances between outdoor and indoor areas shall not be permitted.

(c) **Calculation of actual lighting power.** The wattage of outdoor luminaires shall be determined in accordance with Section 130.0(c).

(d) **Calculation of allowed lighting power.** The allowed lighting power shall be the combined total of the sum of the general hardscape lighting allowance determined in accordance with Section 140.7(d)1, and the sum of the additional lighting power allowance for specific applications determined in accordance with Section 140.7(d)2.

1. **General hardscape lighting allowance.** Determine the general hardscape lighting power allowances as follows:

   A. The general hardscape area of a site shall include parking lot(s), roadway(s), driveway(s), sidewalk(s), walkway(s), bikeway(s), plaza(s), bridge(s), tunnel(s), and other improved area(s) that are illuminated. In plan view of the site, determine the illuminated hardscape area, which is defined as any hardscape area that is within a square pattern around each luminaire or pole that is ten times the luminaire mounting height with the luminaire in the middle of the pattern, less any areas that are within a building, beyond the hardscape area, beyond property lines or obstructed by a structure. The illuminated hardscape area shall include portions of planters and landscaped areas that are within the lighting application and are less than or equal to 10 feet wide in the short dimensions and are enclosed by hardscape or other improvement on at least three sides. Multiply the illuminated hardscape area by the area wattage allowance (AWA) from Table 140.7-A for the appropriate lighting zone.

   B. Determine the perimeter length of the general hardscape area. The total perimeter shall not include portions of hardscape that are not illuminated according to Section 140.7(d)1A. Multiply the hardscape perimeter by the linear wattage allowance (LWA) for hardscape from Table 140.7-A for the appropriate lighting zone. The perimeter length for hardscape around landscaped areas and permanent planters shall be determined as follows:

      i. Landscaped areas completely enclosed within the hardscape area, and which have a width or length less than 10 feet wide, shall not be added to the hardscape perimeter length.

      ii. Landscaped areas completely enclosed within the hardscape area, and which width or length is a minimum of 10 feet wide, the perimeter of the landscaped areas or permanent planter shall be added to the hardscape perimeter length.

      iii. Landscaped edges that are not abutting the hardscape shall not be added to the hardscape perimeter length.

   C. Determine the Initial Wattage Allowance (IWA) for general hardscape lighting from Table 140.7-A for the appropriate lighting zone. The hardscape area shall be permitted one IWA per site.

   D. The general hardscape lighting allowance shall be the sum of the allowed watts determined from (A), (B) and (C) above.

2. **Additional lighting power allowance for specific applications.** Additional lighting power for specific applications shall be the smaller of the additional lighting allowances for specific applications determined in accordance with Table 140.7-B for the appropriate lighting zone, or the actual installed lighting power meeting the requirements for the allowance.

TABLE 140.7-A GENERAL HARDSCAPE LIGHTING POWER ALLOWANCE

Type of Power Allowance	Lighting Zone 0[3]	Lighting Zone 1[3]	Lighting Zone 2[3]	Lighting Zone 3[3]	Lighting Zone 4[3]
Area Wattage Allowance (AWA)	No allowance[1]	0.016 W/ft²	0.019 W/ft²	0.021 W/ft²	0.024 W/ft²
Linear Wattage Allowance (LWA)	No allowance[1]	0.13 W/lf	0.15 W/lf	0.20 W/lf	0.29 W/lf
Initial Wattage Allowance (IWA)	No allowance[1]	150 W	200 W	250 W	320 W

[1] Continuous lighting is explicitly prohibited in Lighting Zone 0. A single luminaire of 15 Watts or less may be installed at an entrance to a parking area, trail head, fee payment kiosk, outhouse, or toilet facility, as required to provide safe navigation of the site infrastructure. Luminaires installed shall meet the maximum zonal lumen limits as specified in Section 130.2(b).

[2] RESERVED.

[3] Narrow band spectrum light sources with a dominant peak wavelength greater than 580 nm – as mandated by local, state, or federal agencies to minimize the impact on local, active professional astronomy or nocturnal habitat of specific local fauna – shall be allowed a 2.0 lighting power allowance multiplier.

TABLE 140.7-B ADDITIONAL LIGHTING POWER ALLOWANCE FOR SPECIFIC APPLICATIONS
All area and distance measurements in plan view unless otherwise noted.

Lighting Application	Lighting Zone 0	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	Lighting Zone 4
WATTAGE ALLOWANCE PER APPLICATION. Use all that apply as appropriate.					
Building Entrances or Exits. Allowance per door. Luminaires qualifying for this allowance shall be within 20 feet of the door.	Not applicable	9 watts	15 watts	19 watts	21 watts
Primary Entrances to Senior Care Facilities, Police Stations, Healthcare Facilities, Fire Stations, and Emergency Vehicle Facilities. Allowance per primary entrance(s) only. Primary entrances shall provide access for the general public and shall not be used exclusively for staff or service personnel. This allowance shall be in addition to the building entrance or exit allowance above. Luminaires qualifying for this allowance shall be within 100 feet of the primary entrance.	Not applicable	20 watts	40 watts	57 watts	60 watts
Drive Up Windows. Allowance per customer service location. Luminaires qualifying for this allowance shall be within 2 mounting heights of the sill of the window.	Not applicable	16 watts	30 watts	50 watts	75 watts
Vehicle Service Station Uncovered Fuel Dispenser. Allowance per fueling dispenser. Luminaires qualifying for this allowance shall be within 2 mounting heights of the dispenser.	Not applicable	55 watts	77 watts	81 watts	135 watts
ATM Machine Lighting. Allowance per ATM machine. Luminaires qualifying for this allowance shall be within 50 feet of the dispenser.	Not applicable	100 watts for first ATM machine, 35 watts for each additional ATM machine.			
WATTAGE ALLOWANCE PER UNIT LENGTH (w/linear ft). May be used for one or two frontage side(s) per site.					
Outdoor Sales Frontage. Allowance for frontage immediately adjacent to the principal viewing location(s) and unobstructed for its viewing length. A corner sales lot may include two adjacent sides provided that a different principal viewing location exists for each side. Luminaires qualifying for this allowance shall be located between the principal viewing location and the frontage outdoor sales area.	Not applicable	No Allowance	11 W/linear ft	19 W/linear ft	25 W/linear ft
WATTAGE ALLOWANCE PER HARDSCAPE AREA (W/ft²). May be used for any illuminated hardscape area on the site.					
Hardscape Ornamental Lighting. Allowance for the total site illuminated hardscape area. Luminaires qualifying for this allowance shall be rated for 50 watts or less as determined in accordance with Section 130.0(c), and shall be post-top luminaires, lanterns, pendant luminaires, or chandeliers.	Not applicable	No Allowance	0.007 W/ft²	0.013 W/ft²	0.019 W/ft²
WATTAGE ALLOWANCE PER SPECIFIC AREA (W/ft²). Use as appropriate provided that none of the following specific applications shall be used for the same area.					
Building Facades. Only areas of building façade that are illuminated shall qualify for this allowance. Luminaires qualifying for this allowance shall be aimed at the façade and shall be capable of illuminating it without obstruction or interference by permanent building features or other objects.	Not applicable	No Allowance	0.100 W/ft²	0.170 W/ft²	0.225 W/ft²
Outdoor Sales Lots. Allowance for uncovered sales lots used exclusively for the display of vehicles or other merchandise for sale. Driveways, parking lots or other non-sales areas shall be considered hardscape areas even if these areas are completely surrounded by sales lot on all sides. Luminaires qualifying for this allowance shall be within 5 mounting heights of the sales lot area.	Not applicable	0.060 W/ft²	0.210 W/ft²	0.280 W/ft²	0.485 W/ft²
Vehicle Service Station Hardscape. Allowance for the total illuminated hardscape area less area of buildings, under canopies, off property, or obstructed by signs or structures. Luminaires qualifying for this allowance shall be illuminating the hardscape area and shall not be within a building, below a canopy, beyond property lines, or obstructed by a sign or other structure.	Not applicable	0.006 W/ft²	0.068 W/ft²	0.138 W/ft²	0.200 W/ft²
Vehicle Service Station Canopies. Allowance for the total area within the drip line of the canopy. Luminaires qualifying for this allowance shall be located under the canopy.	Not applicable	0.220 W/ft²	0.430 W/ft²	0.580 W/ft²	1.010 W/ft²

Sales Canopies. Allowance for the total area within the drip line of the canopy. Luminaires qualifying for this allowance shall be located under the canopy.	Not applicable	No Allowance	0.470 W/ft²	0.622 W/ft²	0.740 W/ft²
Non-sales Canopies and Tunnels. Allowance for the total area within the drip line of the canopy or inside the tunnel. Luminaires qualifying for this allowance shall be located under the canopy or tunnel.	Not applicable	0.057 W/ft²	0.137 W/ft²	0.270 W/ft²	0.370 W/ft²
Guard Stations. Allowance up to 1,000 square feet per vehicle lane. Guard stations provide access to secure areas controlled by security personnel who stop and may inspect vehicles and vehicle occupants, including identification, documentation, vehicle license plates, and vehicle contents. Qualifying luminaires shall be within 2 mounting heights of a vehicle lane or the guardhouse.	Not applicable	0.081 W/ft²	0.176 W/ft²	0.325 W/ft²	0.425 W/ft²
Student Pick-up/Drop-off zone. Allowance for the area of the student pick-up/drop-off zone, with or without canopy, for preschool through 12th grade school campuses. A student pick-up/drop off zone is a curbside, controlled traffic area on a school campus where students are picked-up and dropped off from vehicles. The allowed area shall be the smaller of the actual width or 25 feet, times the smaller of the actual length or 250 feet. Qualifying luminaires shall be within 2 mounting heights of the student pick-up/drop-off zone.	Not applicable	No Allowance	0.056 W/ft²	0.200 W/ft²	No Allowance
Outdoor Dining. Allowance for the total illuminated hardscape of outdoor dining. Outdoor dining areas are hardscape areas used to serve and consume food and beverages. Qualifying luminaires shall be within 2 mounting heights of the hardscape area of outdoor dining.	Not applicable	0.004 W/ft²	0.030 W/ft²	0.050 W/ft²	0.075 W/ft²
Special Security Lighting for Retail Parking and Pedestrian Hardscape. This additional allowance is for illuminated retail parking and pedestrian hardscape identified as having special security needs. This allowance shall be in addition to the building entrance or exit allowance.	Not applicable	0.004 W/ft²	0.005 W/ft²	0.010 W/ft²	No Allowance
Security Cameras. This additional allowance is for illuminated general hardscape area. This allowance shall apply when a security camera is installed within 2 mounting heights of the general hardscape area and mounted more than 10 feet away from a building.	Not applicable	No Allowance	0.018 W/ft²	0.018 W/ft²	0.018 W/ft²

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 140.8 – PRESCRIPTIVE REQUIREMENTS FOR SIGNS

This section applies to all internally illuminated and externally illuminated signs, unfiltered light emitting diodes (LEDs), and unfiltered neon, both indoor and outdoor. Each sign shall comply with either Subsection (a) or (b), as applicable.

(a) **Maximum allowed lighting power.**

1. For internally illuminated signs, the maximum allowed lighting power shall not exceed the product of the illuminated sign area and 12 watts per square foot. For double-faced signs, only the area of a single face shall be used to determine the allowed lighting power.
2. For externally illuminated signs, the maximum allowed lighting power shall not exceed the product of the illuminated sign area and 2.3 watts per square foot. Only areas of an externally lighted sign that are illuminated without obstruction or interference, by one or more luminaires, shall be used.
3. Lighting for unfiltered light emitting diodes (LEDs) and unfiltered neon shall comply with Section 140.8(b).

(b) **Alternate lighting sources.** The sign shall be equipped with one or more of the following light sources:

1. High pressure sodium lamps; or
2. Metal halide lamps that are:
   A. Pulse start or ceramic served by a ballast that has a minimum efficiency of 88 percent or greater, or
   B. Pulse start that are 320 watts or smaller, are not 250 watt or 175 watt lamps, and are served by a ballast that has a minimum efficiency of 80 percent.

   Ballast efficiency is the reference lamp power divided by the ballast input power when tested according to ANSI C82.6-2015.
3. Neon or cold cathode lamps with transformer or power supply efficiency greater than or equal to the following:
   A. A minimum efficiency of 75 percent when the transformer or power supply rated output current is less than 50 mA; or
   B. A minimum efficiency of 68 percent when the transformer or power supply rated output current is 50 mA or greater.

   The ratio of the output wattage to the input wattage is at 100 percent tubing load.
4. Fluorescent lighting systems meeting one of the following requirements:
   A. Use only lamps with a minimum color rendering index (CRI) of 80; or
   B. Use only electronic ballasts with a fundamental output frequency not less than 20 kHz.
5. Light emitting diodes (LEDs) with a power supply having an efficiency of 80 percent or greater; or

   Exception to Section 140.8(b)5: Single voltage external power supplies that are designed to convert 120 volt AC input into lower voltage DC or AC output, and have a nameplate output power less than or equal to 250 watts, shall comply with the applicable requirements of the appliance efficiency regulations Appliance Efficiency Regulations (Title 20).
6. Compact fluorescent lamps that do not contain a medium screw base socket (E24/E26).

Exception 1 to Section 140.8: Unfiltered incandescent lamps that are not part of an electronic message center (EMC), an internally illuminated sign or an externally illuminated sign.

Exception 2 to Section 140.8: Exit signs. Exit signs shall meet the requirements of the Appliance Efficiency Regulations.

Exception 3 to Section 140.8: Traffic Signs. Traffic signs shall meet the requirements of the Appliance Efficiency Regulations.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 140.9 – PRESCRIPTIVE REQUIREMENTS FOR COVERED PROCESSES

(a) **Prescriptive Requirements for Computer Rooms.** Computer rooms with a power density greater than 20 W/ft^2 shall comply with this section.

1. **Economizers.** Each individual cooling system primarily serving computer rooms shall include either:

   A. An integrated air economizer capable of providing partial cooling even when additional mechanical cooling is required and capable of providing 100 percent of the expected system cooling load at 65°F to 80.6°F supply air temperature at outside air temperatures of 65°F dry-bulb and below or 50°F wet-bulb and below, and be equipped with a fault detection and diagnostic system as specified by Section 120.2(i); or

   B. An integrated water economizer capable of providing partial cooling even when additional mechanical cooling is required and capable of providing 100 percent of the expected system cooling load at 65°F to 80.6°F supply air temperature at outside air temperatures of 50°F dry-bulb and below or 45°F wet-bulb and below.

   EXCEPTION 1 to Section 140.9(a)1: Individual computer rooms with an ITE design load under 5 tons (18 kW) in a building that does not have any economizers.

   EXCEPTION 2 to Section 140.9(a)1: A computer room with an ITE design load less than 20 tons (70 kW) may be served by a second fan system without an economizer if it is also served by a fan system with an economizer that also serves other spaces within the building, provided that all of the following are met:

   i. The economizer system is sized to meet the design cooling load of the computer room when the other spaces within the building are at 50 percent of their design load at outside air temperatures of 65°F dry-bulb and below or 50°F wet-bulb and below; and

   ii. The economizer system has the ability to serve only the computer rooms connected to it, e.g., shut off flow to other spaces within the building when unoccupied.

2. **Power Consumption of Fans.** The total fan power at design conditions of each fan system shall not exceed 27 W/kBtu·h of net sensible cooling capacity.

3. Air **Containment.** Computer rooms with air-cooled computers in racks and with a ITE design load exceeding 10 kW (2.8 tons) per room shall include air barriers such that there is no significant air path for computer discharge air to recirculate back to computer inlets without passing through a cooling system.

   EXCEPTION 1 to Section 140.9(a)3: Expansions of existing computer rooms.

   EXCEPTION 2 to Section 140.9(a)3: Computer racks with a design load less than 1 kW (0.28 tons) per rack.

   EXCEPTION 3 to Section 140.9(a)3: Equivalent energy performance based on computational fluid dynamics or other analysis.

4. **Alternating Current-Output Uninterruptible Power Supplies (UPS).** Alternating current-output UPS systems serving a computer room shall meet or exceed minimum average efficiencies in Table 140.9-B. Minimum average efficiency for alternating current-output UPS shall meet or exceed calculation and testing requirements identified in ENERGY STAR Program Requirements for Uninterruptible Power Supplies (UPSs) – Eligibility Criteria Version 2.0.

   where:

   P is the rated output power in watts (W).

   E_{MOD} is an allowance of 0.004 for modular UPSs applicable in the commercial 1,500-10,000 W range.

   ln is the natural logarithm.

   The requirement shall be rounded to the third decimal place for certification and reporting.

   Exception to Section 140.9(a)4: Alternating current-output UPS that utilizes standardized NEMA 1-15P or NEMA 5-15P input plug, as specified in ANSI/NEMA WD-6-2016.

Table 140.9-B Alternating Current-Output Uninterruptible Power Supply Minimum Average Efficiency

	Voltage and Frequency Dependent	Voltage Independent	Voltage and Frequency Independent
P≤350 W	$5.71 \times 10^{-5} \times P + 0.962$	$5.71 \times 10^{-5} \times P + 0.964$	$0.011 \times \ln(P) + 0.824$
350 W<P≤1,500 W	0.982	0.984	$0.011 \times \ln(P) + 0.824$
1,500 W<P≤10,000 W	$0.981 - E_{MOD}$	$0.980 - E_{MOD}$	$0.0145 \times \ln(P) + 0.800 - E_{MOD}$
P>10,000 W	0.970	0.940	$0.0058 \times \ln(P) + 0.886$

(b) **Prescriptive requirements for commercial kitchens.**

1. **Kitchen exhaust systems.**

   A. Replacement air introduced directly into the hood cavity of kitchen exhaust hoods shall not exceed 10 percent of the hood exhaust airflow rate.

   B. For kitchen/dining facilities having total Type I and Type II kitchen hood exhaust airflow rates greater than 5,000 cfm, each Type I hood shall have an exhaust rate that complies with Table 140.9-C. If a single hood or hood section is installed over appliances with different duty ratings, then the maximum allowable flow rate for the hood or hood section shall not exceed the Table 140.9-A values for the highest appliance duty rating under the hood or hood section. Refer to ASHRAE Standard 154-2011 for definitions of hood type, appliance duty and next exhaust flow rate.

      Exception 1 to Section 140.9(b)1B: 75 percent of the total Type I and Type II exhaust replacement air is transfer air that would otherwise be exhausted.

      Exception 2 to Section 140.9(b)1B: Existing hoods not being replaced as part of an addition or alteration.

TABLE 140.9-C MAXIMUM NET EXHAUST FLOW RATE, CFM PER LINEAR FOOT OF HOOD LENGTH

Type of Hood	Light Duty Equipment	Medium Duty Equipment	Heavy Duty Equipment	Extra Heavy Duty Equipment
Wall-mounted Canopy	140	210	280	385
Single Island	280	350	420	490
Double Island	175	210	280	385
Eyebrow	175	175	Not Allowed	Not Allowed
Backshelf / Passover	210	210	280	Not Allowed

2. **Kitchen ventilation.**

   A. Mechanically cooled or heated makeup air delivered to any space with a kitchen hood shall not exceed the greater of:

      i. The supply flow required to meet the space heating and cooling load; or

      ii. The hood exhaust flow minus the available transfer air from adjacent spaces. Available transfer air is that portion of outdoor ventilation air serving adjacent spaces not required to satisfy other exhaust needs, such as restrooms, not required to maintain pressurization of adjacent spaces, and that would otherwise be relieved from the building.

      Exception to Section 140.9(b)2A: Existing kitchen makeup air units not being replaced as part of an addition or alteration.

   B. A kitchen/dining facility having a total Type I and Type II kitchen hood exhaust airflow rate greater than 5,000 cfm shall have one of the following:

      i. At least 50 percent of all replacement air is transfer air that would otherwise be exhausted; or

      ii. Demand ventilation system(s) on at least 75 percent of the exhaust air. Such systems shall:

a. Include controls necessary to modulate airflow in response to appliance operation and to maintain full capture and containment of smoke, effluent and combustion products during cooking and idle; and

b. Include failsafe controls that result in full flow upon cooking sensor failure; and

c. Include an adjustable timed override to allow occupants the ability to temporarily override the system to full flow; and

d. Be capable of reducing exhaust and replacement air system airflow rates to the larger of:

(i) 50 percent of the total design exhaust and replacement air system airflow rates; or

(ii) The ventilation rate required as specified by Section 120.1(c)3.

iii. Listed energy recovery devices with a sensible heat recovery effectiveness of not less than 40 percent on at least 50 percent of the total exhaust airflow; or

iv. A minimum of 75 percent of makeup air volume that is:

a. Unheated or heated to no more than 60°F; and

b. Uncooled or cooled without the use of mechanical cooling.

Exception to Section 140.9(b)2B: Existing hoods not being replaced as part of an addition or alteration.

3. **Kitchen exhaust system acceptance.** Before an occupancy permit is granted for a commercial kitchen subject to Section 140.9(b), the following equipment and systems shall be certified as meeting the acceptance requirements for code compliance, as specified by the Reference Nonresidential Appendix NA7. A certificate of acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA7.11.

Exception to Section 140.9(b): healthcare facilities.

(c) **Prescriptive requirements for laboratory and factory exhaust systems.**

1. **Airflow reduction requirements.** For buildings with laboratory exhaust systems where the minimum circulation rate to comply with code or accreditation standards is 10 ACH or less, the design exhaust airflow shall be capable of reducing zone exhaust and makeup airflow rates to the regulated minimum circulation rate, or the minimum required to maintain pressurization requirements, whichever is larger. Variable exhaust and makeup airflow shall be coordinated to achieve the required space pressurization at varied levels of demand and fan system capacity.

Exception 1 to Section 140.9(c)1: Laboratory exhaust systems serving zones where constant volume is required by the authority having jurisdiction, facility environmental health & safety department or other applicable code.

Exception 2 to Section 140.9(c)1: New zones on an existing constant volume exhaust system.

2. **Exhaust System Transfer Air.** Conditioned supply air delivered to any space with mechanical exhaust shall comply with the requirements of Section 140.4(o).

3. **Fan System Power Consumption.** All newly installed fan exhaust systems serving a laboratory or factory greater than 10,000 cfm shall meet Subsection A and either B, C, or D:

A. System shall meet all discharge requirements in ANSI Z9.5-2012.

B. The exhaust fan system power shall not exceed 0.85 watts per cfm of exhaust air for systems with air filtration, scrubbers, or other air treatment devices. For all other exhaust fan systems the system power shall not exceed 0.65 watts per cfm of exhaust air. Exhaust fan system power equals the sum of the power of all fans in the exhaust system that are required to operate at normal occupied design conditions in order to exhaust air from the conditioned space to the outdoors. Exhaust air does not

include entrained air, but does include all exhaust air from fume hoods, hazardous exhaust flows, or other manifolded exhaust streams.

Exception to Section 140.9(c)3B: Laboratory exhaust systems where applicable local, state, or federal exhaust treatment requirements specify installation of air treatment devices that cause more than 1 in. of water pressure drop.

C. The volume flow rate at the stack shall vary based on the measured 5-minute averaged wind speed and wind direction obtained from a calibrated local anemometer.

i. At least one sonic anemometer or at least two anemometers of other types shall be installed in a location that experiences similar wind conditions to the free stream environment above the exhaust stacks and be at a height that is outside the wake region of nearby structures.

ii. Look-up tables shall be used to define the required exhaust volume flow rate, as a function of at least eight wind speeds and eight wind directions, to maintain downwind concentrations below health and odor limits, as defined by the 2018 American Conference of Governmental Industrial Hygienists Threshold Limit Values and Biological Exposure Indices, for all contaminants, or as defined by applicable local, state, or federal jurisdictions, if more stringent.

iii. Wind speed/direction sensors shall be certified by the manufacturer to be accurate within plus or minus 40 fpm (0.2 m/s) and 5.0 degrees when measured at sea level and 25°C, factory calibrated, and certified by the manufacturer to require calibration no more frequently than once every 5 years.

iv. Upon detection of anemometer and/or signal failure, the system shall reset the exhaust volume flow rate to the value needed to maintain downwind concentrations below health and odor limits for all contaminants at worst-case wind conditions and shall report the fault to an Energy Management Control System (EMCS) or fault management application which automatically provides notification of the fault to a remote system provider. The EMCS or fault management system shall log the error and the time when it occurred. The system shall have logic that automatically checks for anemometer failure by the following means.

a. If any anemometer has not been calibrated within the manufacturer's recommended calibration period, the anemometer has failed.

b. During unoccupied periods the system compares the readings of all anemometers. If any anemometer is more than 30% above or below the average reading for a period of 4 hours, the anemometer has failed.

c. Wind speed and wind direction readings shall be sampled at least 10 times per minute. If the difference between the maximum and minimum readings from the average of either the wind direction or the wind speed over a one minute period is less than 10% of the average value, the measurements shall be considered a signal failure.

d. Other error signals sent by the anemometer.

v. Before an occupancy permit is granted for a laboratory or process facility subject to Section 140.9(c)3C, the applicable equipment and systems shall be certified as meeting the Acceptance Requirements for Code Compliance, as specified by the Reference Nonresidential Appendix NA7.16. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA7.16.

D. The volume flow rate at the stack shall vary based on the measured contaminant concentration in the exhaust plenum from a calibrated contaminant sensor installed within each exhaust plenum.

i. A contaminant-event threshold shall be established based on maintaining downwind concentrations below health and odor limits for all chemicals at worst-case wind conditions, as defined by the 2018 American Conference of Governmental Industrial Hygienists Threshold Limit Values and Biological Exposure Indices, or as defined by applicable local, state, or federal jurisdictions, if more stringent.

ii. At least two contaminant concentration sensors shall be Photo Ionization Detectors (PID) certified by the manufacturer to be accurate within plus or minus 5% when measured at sea level and 25°C, factory calibrated, and certified by the manufacturer to require calibration no more frequently than once every 6 months.

iii. Upon detection of sensor and/or signal failure, the system shall reset the exhaust volume flow rate to the value needed to maintain downwind concentrations below health and odor limits for all contaminants at worst-case wind conditions and shall report the fault to an Energy Management Control System or fault management application which automatically provides notification of the fault to a remote system provider. The system shall have logic that automatically checks for sensor failure by the following means.

a. If any sensor has not been calibrated within the manufacturer's recommended calibration period, the sensor has failed.

b. During unoccupied periods the system compares the readings of all sensors. If any sensor is more than 30% above or below the average reading for a period of 4 hours, the sensor has failed.

iv. Before an occupancy permit is granted for a laboratory or process facility subject to Section 140.9(c)3D, the applicable equipment and systems shall be certified as meeting the Acceptance Requirements for Code Compliance, as specified by the Reference Nonresidential Appendix NA7.16. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA7.16.

4. **Fume Hood Automatic Sash Closure.** Variable air volume laboratory fume hoods with vertical only sashes located in fume hood intensive laboratories, as described in Table 140.9-D, shall have an automatic sash closure system that complies with the following:

A. The automatic sash closure system shall be capable of the following:

i. The automatic sash closure system shall have a dedicated zone presence sensor that detects people in the area near the fume hood sash and automatically closes the sash within 5 minutes of no detection.

ii. The automatic sash closure system shall have controls to prevent the sash from automatic closing when a force of no more than 10 lbs is detected.

iii. The automatic sash closure system shall be equipped with an obstruction sensor that prevents the sash from automatic closing with obstructions in the sash opening. Obstruction sensor shall be capable of sensing transparent materials such as laboratory glassware.

iv. The automatic sash closure system shall be capable of being configured in a manual open mode where once the sash is closed, detection of people in the area near the fume hood by the zone presence sensor does not open the fume hood sash.

B. Fume Hood Automatic Sash Closure Acceptance. Before an occupancy permit is granted for the fume hoods subject to 140.9(c)4, the equipment and systems shall be certified as meeting the Acceptance Requirement for Code Compliance as specified by the Reference Nonresidential Appendix NA7. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements specified in NA7.17.

Table 140.9-D Fume Hood Intensive Laboratories

Occupied Minimum Ventilation ACH	≤ 4	> 4 and ≤ 6	> 6 and ≤ 8	> 8 and ≤ 10	> 10 and ≤ 12	> 12 and ≤ 14
Hood Density (linear feet per 10,000 ft^3 of laboratory space	≥ 6	≥ 8	≥ 10	≥ 12	≥ 14	≥ 16

Exception to Section 140.9(c): healthcare facilities.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, *Public Resources Code*. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SECTION 140.10 – PRESCRIPTIVE REQUIREMENTS FOR PHOTOVOLTAIC AND BATTERY STORAGE SYSTEMS

(a) **Photovoltaic requirements.** All newly constructed building types specified in Table 140.10-A, or mixed occupancy buildings where one or more of these building types constitute at least 80 percent of the floor area of the building, shall have a newly installed photovoltaic (PV) system meeting the minimum qualification requirements of Reference Joint Appendix JA11. The PV size in kW_{dc} shall be not less than the smaller of the PV system size determined by Equation 140.10-A, or the total of all available Solar Access Roof Areas (SARA) multiplied by 14 W/ft².

1. SARA includes the area of the building's roof space capable of structurally supporting a PV system, and the area of all roof space on covered parking areas, carports and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2, Section 1511.2.

2. SARA does NOT include:

   A. Any area that has less than 70 percent annual solar access. Annual solar access is determined by dividing the total annual solar insolation (accounting for shading obstructions) by the total annual solar insolation if the same areas were unshaded by those obstructions. For all roofs, all obstructions, including those that are external to the building, and obstructions that are part of the building design and elevation features may be considered for the annual solar access calculations.

   B. Occupied roofs as specified by CBC Section 503.1.4.

   C. Roof space that is otherwise not available due to compliance with other building code requirements if confirmed by the Executive Director.

EQUATION 140.10-A PHOTOVOLTAIC DIRECT CURRENT SIZE

$kW_{PVdc} = (CFA \times A)/1000$

where:

kW_{PVdc} = Size of the PV system in kW.

CFA = Conditioned floor area in square feet.

A = PV capacity factor specified in Table 140.10-A for the building type

Where the building includes more than one of the space types listed in Table 140.10-A, the total PV system capacity for the building shall be determined by applying Equation 140.10-A to each of the listed space types and summing the capacities determined for each.

Exception 1 to Section 140.10(a). No PV system is required where the total of all available SARA is less than three percent of the conditioned floor area.

Exception 2 to Section 140.10(a). No PV system is required where the required PV system size is less than 4 kW_{dc}.

Exception 3 to Section 140.10(a). No PV system is required if the SARA contains less than 80 contiguous square feet.

Exception 4 to Section 140.10(a). Buildings with enforcement-authority-approved roof designs, where the enforcement authority determines it is not possible for the PV system, including panels, modules, components, supports and attachments to the roof structure, to meet ASCE 7-16, Chapter 7, Snow Loads.

Exception 5 to Section 140.10(a). Multitenant buildings in areas where a load-serving entity does not provide either a virtual net metering (VNEM) or community solar program.

(b) **Battery storage system requirements.** All buildings that are required by Section 140.10(a) to have a PV system shall also have a battery storage system meeting the minimum qualification requirements of Reference Joint Appendix JA12. The rated energy capacity and the rated power capacity shall be not less than the values determined by Equation 140.10-B and Equation 140.10-C. Where the building includes more than one of the space types listed in Table 140.10-B, the total battery system capacity for the building shall be determined by applying Equations 140.10-B and 140.10-C to each of the listed space types and summing the capacities determined for each space type and equation.

EQUATION 140.10-B - BATTERY STORAGE RATED ENERGY CAPACITY

$kWh_{batt} = kW_{PVdc} \times B / D^{0.5}$

where:

kWh_{batt} = Rated useable energy capacity of the battery storage system in kWh.

kW_{PVdc} = PV system capacity required by Section 140.10(a) in kWdc.

B = Battery energy capacity factor specified in Table 140.10-B for the building type.

D = Rated single charge-discharge cycle AC to AC (round-trip) efficiency of the battery storage system.

EQUATION 140.10-C - BATTERY STORAGE RATED POWER CAPACITY

$kW_{batt} = kW_{PVdc} \times C$

where:

kW_{batt} = Power capacity of the battery storage system in kWdc.

kW_{PVdc} = PV system capacity required by Section 140.10(a) in kWdc.

C = Battery power capacity factor specified in Table 140.10-B for the building type.

Exception 1 to Section 140.10(b).: No battery storage system is required if the installed PV system size is less than 15 percent of the size determined by Equation 140.10-A.

Exception 2 to Section 140.10(b). No battery storage system is required in buildings with battery storage system requirements with less than 10 kWh rated capacity.

Exception 3 to Section 140.10(b). For multitenant buildings, the energy capacity and power capacity of the battery storage system shall be based on the tenant spaces with more than 5,000 square feet of conditioned floor area. For single-tenant buildings with less than 5,000 square feet of conditioned floor area, no battery storage system is required.

Exception 4 to Section 140.10(b). In Climate Zone 1, no battery storage system is required for offices, schools and warehouses.

Table 140.10-A – PV Capacity Factors

	Factor A – Minimum PV Capacity (W/ft² of conditioned floor area)		
Climate Zone	**1, 3, 5, 16**	**2, 4, 6 -14**	**15**
Grocery	2.62	2.91	3.53
High-Rise Multifamily	1.82	2.21	2.77
Office, Financial Institutions, Unleased Tenant Space	2.59	3.13	3.80
Retail	2.62	2.91	3.53
School	1.27	1.63	2.46
Warehouse	0.39	0.44	0.58
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0.39	0.44	0.58

Table 140.10-B – Battery Storage Capacity Factors

	Factor B – Energy Capacity	**Factor C – Power Capacity**
Storage-to-PV Ratio	**Wh/W**	**W/W**
Grocery	1.03	0.26
High-Rise Multifamily	1.03	0.26
Office, Financial Institutions, Unleased Tenant Space	1.68	0.42
Retail	1.03	0.26
School	1.87	0.46
Warehouse	0.93	0.23
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0.93	0.23

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8 and 25943, Public Resources Code.

SUBCHAPTER 6
NONRESIDENTIAL, AND HOTEL/MOTEL OCCUPANCIES—ADDITIONS, ALTERATIONS, AND REPAIRS

SECTION 141.0 – ADDITIONS, ALTERATIONS, AND REPAIRS TO EXISTING NONRESIDENTIAL, AND HOTEL/MOTEL BUILDINGS, TO EXISTING OUTDOOR LIGHTING, AND TO INTERNALLY AND EXTERNALLY ILLUMINATED SIGNS

Additions, alterations, and repairs to existing nonresidential, and hotel/motel buildings, existing outdoor lighting for these occupancies, and internally and externally illuminated signs, shall meet the requirements specified in Sections 100.0 through 110.10, and 120.0 through 130.5 that are applicable to the building project, and either the performance compliance approach (energy budgets) in Section 141.0(a)2 (for additions) or 141.0(b)3 (for alterations), or the prescriptive compliance approach in Section 141.0(a)1 (for additions) or 141.0(b)2 (for alterations), for the Climate Zone in which the building is located. Climate zones are shown in FIGURE 100.1-A.

Covered process requirements for additions, alterations and repairs to existing nonresidential, and hotel/motel buildings are specified in Section 141.1.

Exception to Section 141.0: Alterations to healthcare facilities are not required to comply with this Section.

NOTES:

1. For alterations that change the occupancy classification of the building, the requirements specified in Section 141.0(b) apply to the occupancy after the alterations.
2. Relocation or moving of a relocatable public school building is not, by itself, considered an alteration for the purposes of Title 24, Part 6.

(a) **Additions.** Additions shall meet either Item 1 or 2 below.

1. **Prescriptive approach.** The envelope and lighting of the addition; any newly installed space-conditioning system, electrical power distribution system, or water-heating system; any addition to an outdoor lighting system; and any new sign installed in conjunction with an indoor or outdoor addition shall meet the applicable requirements of Sections 110.0 through 120.7, 120.9 through 130.5, and 140.2 through 140.9.
2. **Performance approach.**
   A. The envelope and indoor lighting in the conditioned space of the addition, and any newly installed space-conditioning system, electrical power distribution system, or water-heating system, shall meet the applicable requirements of Sections 110.0 through 120.7, 120.9 through 130.5; and
   B. Either:
      i. The addition alone shall comply with Section 140.1; or
      ii. Existing plus addition plus alteration. The standard design for existing plus addition, plus alteration energy use is the combination of the existing building's unaltered components to remain, existing building altered components that are the more efficient, in TDV energy, of either the existing conditions, or the requirements of Section 141.0(b)2, plus the proposed addition's energy use meeting the requirements of Section 140.1. The proposed design energy use is the combination of the existing building's unaltered components to remain and the altered component's energy features, plus the proposed energy features of the addition.

Exception 1 to Section 141.0(a): When heating, cooling, or service water heating to an addition are provided by expanding existing systems, the existing systems and equipment need not comply with Sections 110.0 through 120.9, or Sections 140.4 through 140.5.

Exception2 to Section 141.0(a): Where an existing system with electric reheat is expanded by adding variable air volume (VAV) boxes to serve an addition, total electric reheat capacity may be expanded so that the total capacity does not exceed 150 percent of the existing installed electric heating capacity in any one permit, and the system need not comply with Section 140.4(g). Additional electric reheat capacity in excess of 150 percent of the existing installed electric heating capacity may be added subject to the requirements of Section 140.4(g).

Exception 3 to Section 141.0(a): Duct Sealing. When ducts are extended from an existing duct system to serve the addition, the existing duct system and the extended ducts shall meet the applicable requirements specified in Section 141.0(b)2D.

Exception 4 to Section 141.0(a): Additions that increase the area of the roof by 2,000 square feet or less are exempt from the requirements of Section 110.10.

Exception 5 to Section 141.0(a): A gas hot water boiler system with a total system input of at least 1 MMBtu/h but no more than 10 MMBtu/h added to an existing building is exempt from the requirements of 140.4(k)8.

Exception 6 to Section 141.0(a): A gas service water heating with a total system input of at least 1 MMBtu/h added to an existing building is exempt from the requirements of 140.5(c).

Exception 7 to Section 141.0(a): Section 140.4(a)2 shall not apply to new space conditioning systems or components.

(b) **Alterations.** Alterations to components of existing nonresidential, hotel/motel, or relocatable public school buildings, including alterations made in conjunction with a change in building occupancy to a nonresidential, high-rise residential, or hotel/motel occupancy shall meet item 1, and either Item 2 or 3 below:

1. **Mandatory Requirements**. Altered components in a nonresidential, or hotel/motel building shall meet the minimum requirements in this Section.

   A. **Roof/Ceiling Insulation.** The opaque portions of the roof/ceiling that separate conditioned spaces from unconditioned spaces or ambient air shall meet the requirements of Section 141.0(b)2Bii.

   B. **Wall Insulation.** For the altered opaque portion of walls separating conditioned spaces from unconditioned spaces or ambient air shall meet the applicable requirements of Items 1 through 4 below:

      1. **Metal Building.** A minimum of R-13 insulation between framing members, or the area-weighted average U-factor of the wall assembly shall not exceed U-0.113.

      2. **Metal Framed.** A minimum of R-13 insulation between framing members, or the area-weighted average U-factor of the wall assembly shall not exceed U-0.217.

      3. **Wood Framed and Others.** A minimum of R-11 insulation between framing members, or the area-weighted average U-factor of the wall assembly shall not exceed U-0.110.

      4. **Spandrel Panels and Glass Curtain Walls.** A minimum of R-4, or the area-weighted average U-factor of the wall assembly shall not exceed U-0.280.

      Exception to Section 141.0(b)1B: Light and heavy mass walls.

   C. **Floor Insulation.** For the altered portion of raised floors that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable requirements of Items 1 through 3 below:

      1. **Raised Framed Floors.** A minimum of R-11 insulation between framing members, or the area-weighted average U-factor of the floor assembly shall not exceed the U-factor of U-0.071.

      2. **Raised Mass Floors in Hotel/Motel Guest Rooms.** A minimum of R-6 insulation, or the area-weighted average U-factor of the floor assembly shall not exceed the U-factor of U-0.111.

3. **Raised Mass Floors in Other Occupancies.** No minimum U-factor requirement.

D. **Fan Energy Index:** New fan systems serving an existing building shall meet the requirements of Section 120.10.

2. **Prescriptive approach.** The altered components of the envelope, or space conditioning, lighting, electrical power distribution and water heating systems, and any newly installed equipment serving the alteration, shall meet the applicable requirements of Sections 110.0 through 110.9, Sections 120.0 through 120.6, and Sections 120.9 through 130.5.

Exception to Section 141.0(b)2: The requirements of Section 120.2(i) shall not apply to alterations of space-conditioning systems or components.

A. Fenestration alterations other than repair and those subject to Section 141.0(b)2 shall meet the requirements below:

i. Vertical fenestration alterations shall meet the requirements in Table 141.0-A.

ii. Added vertical fenestration shall meet the requirements of TABLE 140.3-B, C, or D.

iii. All altered or newly installed skylights shall meet the requirements of TABLE 140.3-B, C or D.

Exception 1 to Section 141.0(b)2Ai: In an alteration, where 150 square feet or less of the entire building's vertical fenestration is replaced, RSHGC and VT requirements of TABLE 141.0-A shall not apply.

Exception 2 to Section 141.0(b)2Aii: In an alteration, where 50 square feet or less of vertical fenestration is added, RSHGC and VT requirements of TABLE 140.3-B, C or D shall not apply.

Exception 3 to Section 141.0(b)2Aiii: In an alteration, where 50 square feet or less of skylight is added, SHGC and VT requirements of TABLE 140.3-B, C or D shall not apply.

NOTE: Glass replaced in an existing sash and frame or sashes replaced in an existing frame are considered repairs. In these cases, Section 141.0(c) requires that the replacement be at least equivalent to the original in performance.

Table 141.0-A Altered Vertical Fenestration Maximum U-Factor and Maximum RSHGC

Climate Zone	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
U-factor	0.47	0.47	0.58	0.47	0.58	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
RSHGC	0.41	0.31	0.41	0.31	0.41	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.41
VT	See TABLE 140.3-B, C, and D for all Climate Zones															

B. Existing roofs of a nonresidential or hotel/motel building being replaced, recovered or recoated, as defined in Section 100.1(b) and Title 24, Part 2, Chapter 2, shall meet the requirements of Section 110.8(i). Roofs with more than 50 percent of the roof area or more than 2,000 square feet of roof, whichever is less, is being altered the requirements of i and ii below apply:

i. Roofing Products shall comply with requirements in Section 140.3(a)1A:

Exception 1 to Section 141.0(b)2Bi: An aged solar reflectance less than 0.63 is allowed for low-sloped roofs provided the maximum roof/ceiling U-factor in TABLE 141.0-B is not exceeded.

Exception 2 to Sections 141.0(b)2Bi: Roof area covered by building integrated photovoltaic panels and building integrated solar thermal panels are not required to meet the minimum requirements for solar reflectance, thermal emittance, or SRI.

EXCEPTION 3 to Sections 141.0(b)2Bi: Roof constructions with a weight of at least 25 lb/ft^2 are not required to meet the minimum requirements for solar reflectance, thermal emittance, or SRI.

Table 141.0-B Roof/Ceiling Insulation Tradeoff for Low-Sloped Aged Solar Reflectance

Aged Solar Reflectance	Climate Zones 6, 7, & 8 U-factor	All Other Climate Zones U-factor
0.62- 0.60	0.043	0.035
0.59-0.55	0.041	0.034
0.54-0.50	0.038	0.031
0.49-0.45	0.034	0.029
0.44-0.40	0.032	0.028
0.39-0.35	0.029	0.026
0.34-0.30	0.028	0.025
0.29-0.25	0.026	0.024

ii. **Roof/ceiling insulation.** For low-sloped roofs, the area of the roof recover or roof replacement shall be insulated to the level specified in Table 141.0-C.

Exception 1 to Section 141.0(b)2Bii: Roof recovers with new R-10 insulation added above deck do not need to be insulated to the level specified in Table 141.0-C.

Exception 2 to Section 141.0(b)2Bii: When existing mechanical equipment located on the roof will not be disconnected and lifted, insulation added is the greater of R-10 or the maximum installed thickness that will allow the distance between the height of the roof membrane surface to the top of the base flashing to remain in accordance with the manufacturer's instructions.

Exception 3 to Section 141.0(b)2Bii: At the drains and other low points, tapered insulation with a thermal resistance less than that prescribed in Table 141.0-C may be used, provided that insulation thickness is increased at the high points of the roof so that the average thermal resistance equals or exceeds the value specified in Table 141.0-C.

Exception 4 to Section 141.0(b)2Bii: The area of the roof recoat is not required to be insulated.

TABLE 141.0-C INSULATION REQUIREMENTS FOR ROOF ALTERATIONS

Climate Zone	Continuous Insulation R-value	U-factor
1-5, 9-16	R-23	0.037, with at least R-10 above deck
6-8	R-17	0.047, with at least R-10 above deck

C. **New or Replacement Space-Conditioning Systems or Components** other than new or replacement space-conditioning system ducts shall meet the requirements of Section 140.4 applicable to the systems or components being altered. Additional Fan Power Allowances are available when determining the Fan Power Budget (Fan kW_{budget}) as specified in Table 141.0-D. These values can be added to the Fan Power Allowance values in Tables 140.4-A and Table 140.4-B.

TABLE 141.0-D: ADDITIONAL FAN POWER ALLOWANCES

Airflow	Multi-Zone VAV Systems[1] ≤5,000 cfm	Multi-Zone VAV Systems[1] >5,000 and ≤10,000 cfm	Multi-Zone VAV Systems[1] >10,000 cfm	All Other Fan Systems ≤5,000 cfm	All Other Fan Systems >5,000 and ≤10,000 cfm	All Other Fan Systems >10,000 cfm
Supply Fan System Additional Allowance	0.135	0.114	0.105	0.139	0.12	0.107
Supply Fan System Additional Allowance In Unit with Adapter Curb	0.033	0.033	0.043	0.000	0.000	0.000
Exhaust/ Relief/ Return/ Transfer Fan System Additional Allowance	0.07	0.061	0.054	0.07	0.062	0.055
Exhaust/ Relief/ Return/ Transfer Fan System Additional Allowance In Unit with Adapter Curb	0.016	0.017	0.022	0.000	0.000	0.000

Footnotes to Table 141.0-D:

See FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV) in definitions for "Multi-zone" to be classified as a multi-zone VAV system.

Exception 1 to Section 141.0(b)2C: Section 140.4(a)2 shall not apply to new or replacement space conditioning systems or components.

Exception 2 to Section 141.0(b)2C: Subsection (b)2C does not apply to replacement of electric reheat of equivalent or lower capacity electric resistance space heaters, when natural gas is not available.

Exception 3 to Section 141.0(b)2C: Section 140.4(n) is not applicable to new or replacement space conditioning systems.

Exception 4 to Section 141.0(b)2C: Section 140.4(e) is applicable to systems, other than single package air-cooled commercial unitary air conditioners and heat pumps, with cooling capacity less than 54,000 Btu/h.

Exception 5 to Section 141.0(b)2C: A new or replacement gas hot water boiler system with a total system input of at least 1 MMBtu/h but no more than 10 MMBtu/h need not comply with the requirements of 140.4(k)8.

D. **Altered Duct Systems.** New or replacement space-conditioning system ducts installed to serve an existing building shall meet the requirements of Section 120.4(a) through (f) and meet I, ii, or iii below:

i. Entirely new or complete replacement duct systems installed as part of an alteration shall be leakage tested in accordance with Section 120.4(g). This applies to replacement duct systems

installed as part of an alteration that are constructed of at least 75 percent new duct material. Up to 25 percent of that alteration may consist of reused parts from the building's existing duct system, including registers, grilles, boots, air handlers, coils, plenums, and ducts, if the reused parts are accessible and can be sealed to prevent leakage.

ii. If the new ducts are an extension of an existing duct system and the combined new and existing duct system meets the criteria in Subsections 1, 2, 3, and 4 below, the duct system shall be sealed to a leakage rate not to exceed 15 percent of the nominal air handler airflow rate as confirmed through HERS field verification and diagnostic testing, in accordance with the applicable procedures in Reference Nonresidential Appendix NA7.5.3:

1. The duct system does not serve a healthcare facility;
2. The duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system;
3. The space conditioning system serves less than 5,000 square feet of conditioned floor area; and
4. The combined surface area of the ducts located outdoors or in unconditioned space is more than 25 percent of the total surface area of the entire duct system.

Exception 1 to Section 141.0(b)2Dii: When it is not possible to achieve the duct leakage criterion in Section 141.0(b)2Dii, then all accessible leaks shall be sealed and verified through a visual inspection and a smoke test performed by a certified HERS Rater utilizing the methods specified in Reference Nonresidential Appendix NA2.1.4.2.2.

Exception 2 to Section 141.0(b)2Dii: Duct Sealing. Existing duct systems that are extended, which are constructed, insulated or sealed with asbestos are exempt from the requirements of subsection 141.0(b)2Dii.

iii. If new ducts installed as part of an alteration are exempt from leakage testing according to section 141.0(b)2Di or 141.0(b)2Dii, then the new ducts shall meet the duct leakage testing requirements of CMC Section 603.9.2.

E. **Altered Space-Conditioning Systems.** When a space-conditioning system is altered by the installation or replacement of space-conditioning system equipment (including replacement of the air handler, outdoor condensing unit of a split system air conditioner or heat pump, or cooling or heating coil:

i. For all altered units where the existing thermostat does not comply with the requirements for demand responsive controls specified in Section 110.12, the existing thermostat shall be replaced with a demand responsive thermostat that complies with Section 110.12. All newly installed space-conditioning systems requiring a thermostat shall be equipped with a demand responsive thermostat that complies with Section 110.12; and

ii. The duct system that is connected to the new or replaced space-conditioning system equipment shall be sealed in accordance with Section 141.0(b)2Dii.

Exception 1 to Section 141.0(b)2Eii: Duct Sealing. Buildings altered so that the duct system no longer meets the criteria of Section 141.0(b)2Dii.

Exception 2 to Section 141.0(b)2Eii: Duct Sealing. Duct systems that are documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.

Exception 3 to Section 141.0(b)2Eii: Duct Sealing. Existing duct systems constructed, insulated or sealed with asbestos are exempt from the requirements of Subsection 141.0(b)2Eii.

F. Spaces with lighting systems installed for the first time shall meet the requirements of Sections 110.9, 130.0, 130.1, 130.2, 130.4, 140.3(c), 140.6 and 140.7.

G. When the requirements of Section 130.1(d) are triggered by the addition of skylights to an existing building and the lighting system is not recircuited, the daylighting control need not meet the multilevel requirements in Section 130.1(d).

H. New internally and externally illuminated signs shall meet the requirements of Sections 110.9, 130.3 and 140.8.

I. **Altered Indoor Lighting Systems.** Alterations to indoor lighting systems that include 10% or more of the luminaires serving an enclosed space shall meet the requirements of i, ii, or iii below:

i. The alteration shall comply with the indoor lighting power requirements specified in Section 140.6 and the lighting control requirements specified in Table 141.0-F;

ii. The alteration shall not exceed 80% of the indoor lighting power requirements specified in Section 140.6, and shall comply with the lighting control requirements specified in Table 141.0-F; or

iii. The alteration shall be a one-for-one luminaire alteration within a building or tenant space of 5,000 square feet or less, the total wattage of the altered luminaires shall be at least 40% lower compared to their total pre-alteration wattage, and the alteration shall comply with the lighting control requirements specified in Table 141.0-F.

Alterations to indoor lighting systems shall not prevent the operation of existing, unaltered controls, and shall not alter controls to remove functions specified in Section 130.1.

Alterations to lighting wiring are considered alterations to the lighting system. Alterations to indoor lighting systems are not required to separate existing general, floor, wall, display, or decorative lighting on shared circuits or controls. New or completely replaced lighting circuits shall comply with the control separation requirements of Section 130.1(a)3 and 130.1(c)1D.

Exception 1 to Section 141.0(b)2I: Alteration of portable luminaires, luminaires affixed to moveable partitions, or lighting excluded as specified in Section 140.6(a)3.

Exception 2 to Section 141.0(b)2I: Any enclosed space with only one luminaire.

Exception 3 to Section 141.0(b)2I: Any alteration that would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 4 to Section 141.0(b)2I: Acceptance testing requirements of Section 130.4 are not required for alterations where lighting controls are added to control 20 or fewer luminaires.

Exception 5 to Section 141.0(b)2I: Any alteration limited to adding lighting controls or replacing lamps, ballasts, or drivers.

Exception 6 to Section 141.0(b)2I: One-for-one luminaire alteration of up to 50 luminaires either per complete floor of the building or per complete tenant space, per annum.

J. **Reserved**.

K. **Reserved.**

L. Alterations to existing outdoor lighting systems in a lighting application listed in TABLE 140.7-A or 140.7-B shall meet the applicable requirements of Sections 130.0, 130.2(b), and 130.4, and:

i. In alterations that increase the connected lighting load, the added or altered luminaires shall meet the applicable requirements of Section 130.2(c) and the requirements of Section 140.7 for general hardscape lighting or for the specific lighting applications containing the alterations; and

ii. In alterations that do not increase the connected lighting load, where 10 percent or more of the existing luminaires are replaced in a general hardscape or a specific lighting application, the alterations shall meet the following requirements:

a. In parking lots and outdoor sales lots where the bottom of the luminaire is mounted 24 feet or less above the ground, the replacement luminaires shall comply with Section 130.2(c)1 AND Section 130.2(c)3;

b. For parking lots and outdoor sales lots where the bottom of the luminaire is mounted greater than 24 feet above the ground and for all other lighting applications, the replacement luminaires shall comply with Section 130.2(c)1 AND EITHER comply with Section 130.2(c)2 or be controlled by lighting control systems, including motion sensors, that automatically reduce lighting power by at least 40 percent in response to the area being vacated of occupants; and

Exception to Section 141.0(b)2Lii: Alterations where less than 5 existing luminaires are replaced.

iii. In alterations that do not increase the connected lighting load, where 50 percent or more of the existing luminaires are replaced in general hardscape or a specific application, the replacement luminaires shall meet the requirements of subsection ii above and the requirements of Section 140.7 for general hardscape lighting or specific lighting applications containing the alterations.

Exception 1 to Section 141.0(b)2Liii: Alterations where the replacement luminaires have at least 40 percent lower power consumption compared to the original luminaires are not required to comply with the lighting power allowances of Section 140.7.

Exception 2 to Section 141.0(b)2Liii: Alterations where less than 5 existing luminaires are replaced.

Exception to Section 141.0(b)2L: Acceptance testing requirements of Section 130.4 are not required for alterations where controls are added to 20 or fewer luminaires.

M. Alterations to existing internally and externally illuminated signs that increase the connected lighting load, replace and rewire more than 50 percent of the ballasts, or relocate the sign to a different location on the same site or on a different site shall meet the requirements of Section 140.8.

Exception to Section 141.0(b)2M: Replacement of parts of an existing sign, including replacing lamps, the sign face or ballasts, that do not require rewiring or that are done at a time other than when the sign is relocated, is not an alteration subject to the requirements of Section 141.0(b)2M.

N. Service water-heating systems shall meet the requirements of Section 140.5(a)2 and (b), except for the solar water heating requirements.

O. A building shell for which interior walls or ceilings are installed for the first time shall meet the requirements of Section 140.3(c).

P. **Electrical Power Distribution Systems.** Alterations to electrical power distribution systems shall meet the applicable requirements of Section 130.5 as follows:

i. **Service Electrical Metering.** New or replacement electrical service equipment shall meet the requirements of Section 130.5(a) applicable to the electrical power distribution system altered.

ii. **Separation Of Electrical Circuits For Electrical Energy Monitoring.** For entirely new or complete replacement of electrical power distribution systems, the entire system shall meet the applicable requirements of Section 130.5(b).

iii. **Voltage Drop.** Alterations of feeders and branch circuits where the alteration includes addition, modification, or replacement of both feeders and branch circuits, the altered circuits shall meet the requirements of Section 130.5(c).

Exception to Section 141.0(b)2Piii: Voltage drop permitted by California Electrical Code Sections 647.4, 695.6 and 695.7.

iv. **Circuit Controls for 120-Volt Receptacles and Controlled Receptacles**. For entirely new or complete replacement of electrical power distribution systems, the entire system shall meet the applicable requirements of Sections 130.5(d) and 130.5(e).

Q. Existing building envelope wall where at least 25% or more of the wall area is being altered must comply with Section 140.3(a)9. Where the building is tested in accordance with the procedures for whole building air leakage in NA2.4 and the tested leakage rate exceeds 0.4 cfm/ft^2 of building shell at 75 pa. A Visual Inspection and Diagnostic Evaluation shall be done in accordance with NA2.4.7 and all

observed leaks shall be sealed where such sealing can be made without destruction of existing building components.

Exception to Section 141.0(b)2Q: Healthcare facilities.

R. **Exterior doors.** Alterations that add exterior door area shall meet the U-factor requirements of Section 140.3(a)7.

3. **Performance approach.**

A. The altered envelope, space–conditioning system, lighting and water heating components, and any newly installed equipment serving the alteration, shall meet the applicable requirements of Sections 110.0 through 110.9, Sections 120.0 through 120.6, and Sections 120.9 through 130.5.

Exception 1 to Section 141.0(b)3A: Window Films. Applied window films installed as part of an alteration complies with the U-factor, RSHGC and VT requirements of TABLE 141.0-E.

Exception 2 to Section 141.0(b)3A: The requirements of Section 120.2(i) shall not apply to alterations of space-conditioning systems or components.

B. The standard design for an altered component shall be the higher efficiency of existing conditions or the requirements of Section 141.0(b)2. For components not being altered, the standard design shall be based on the unaltered existing conditions such that the standard and proposed designs for these components are identical.

C. When the third party verification option is specified, all components proposed for alteration, for which the additional credit is taken, must be verified. The Executive Director shall determine the qualifications required by the third party inspector.

D. The proposed design shall be based on the actual values of the altered components.

NOTES TO SECTION 141.0(b)3:

1. If an existing component is replaced with a new component, that component is considered an altered component for the purpose of determining the energy budget and shall meet the requirements of Section 141.0(b)3.
2. The standard design assumes the same geometry and orientation as the proposed design.
3. The “existing efficiency level” modeling rules, including situations where nameplate data is not available, are described in the Nonresidential ACM Reference Manual.

Exception 1 to Section 141.0(b): When heating, cooling or service water heating for an alteration are provided by expanding existing systems, the existing systems and equipment need not comply with Sections 110.0 through 120.9 and Section 140.4 or 140.5.

Exception 2 to Section 141.0(b): When existing heating, cooling or service water heating systems or components are moved within a building, the existing systems or components need not comply with Sections 110.0 through 120.9 and Section 140.4 or 140.5.

Exception 3 to Section 141.0(b): Where an existing system with electric reheat is expanded when adding variable air volume (VAV) boxes to serve an alteration, total electric reheat capacity may be expanded not to exceed 20 percent of the existing installed electric capacity in any one permit and the system need not comply with Section 140.4(g). Additional electric reheat capacity in excess of 20 percent may be added subject to the requirements of the Section 140.4(g).

Exception 4 to Section 141.0(b): The requirements of Section 120.2(i) shall not apply to alterations of space-conditioning systems or components.

TABLE 141.0-E – The Standard Design For An Altered Component

Altered Component	Standard Design Without Third Party Verification of Existing Conditions Shall be Based On	Standard Design With Third Party Verification of Existing Conditions Shall be Based On
Roof/Ceiling Insulation, Wall Insulation, and Floor/Soffit Insulation	The requirements of Section 141.0(b)1 and 141.0(b)2Bii.	The requirements of Section 141.0(b)1 and 141.0(b)2Bii.
Fenestration The allowed glass area shall be the smaller of the a. or b. below: a. The proposed glass area: or b. The larger of: 1.The existing glass area that remains; or 2.The area allowed in Section 140.3(a)5A.	The U-factor and RSHGC requirements of TABLE 141.0-A.	The existing U-factor and RSHGC levels.
Space-Conditioning System Equipment and Ducts	The requirements of Sections 141.0(b)2C, 141.0(b)2Di or Section 141.0(b)2Dii, and Section 141.0(b)2E.	The requirements of Sections 141.0(b)2C, 141.0(b)2Di or Section 141.0(b)2Dii, and Section 141.0(b)2E.
Window Film	The U-factor of 0.40 and SHGC value of 0.35.	The existing fenestration in the alteration shall be based on TABLE 110.6-A and Table 110.6-B.
Service Water Heating Systems	The requirements of Section 140.5 without solar water heating requirements.	The requirements of Section 140.5 without solar water heating requirements.
Roofing Products	The requirements of Section 141.0(b)2B.	The requirements of Section 141.0(b)2B.
Lighting System	The requirements of Sections 141.0(b)2F, through 141.0(b)2K.	The requirements of Sections 141.0(b)2F, through 141.0(b)2K.
All Other Measures	The proposed efficiency levels.	The proposed efficiency levels.

(c) **Repairs.** Repairs shall not increase the preexisting energy consumption of the repaired component, system, or equipment.

(d) **Alternate Method of Compliance.** Any addition, alteration, or repair may comply with the requirements of Title 24, Part 6 by meeting the applicable requirements for the entire building.

Table 141.0-F – Control Requirements for Indoor Lighting System Alterations

Control Specifications		**Projects complying with Section 141.0(b)2Ii**	**Projects complying with Sections 141.0(b)2Iii or 141.0(b)2Iiii**
Manual Area Controls	130.1(a)1	Required	Required
Manual Area Controls	130.1(a)2	Required	Required
Manual Area Controls	130.1(a)3	Only required for new or completely replaced circuits	Only required for new or completely replaced circuits
Multilevel Controls	130.1(b)	Required	Not Required
Automatic Shut Off Controls	130.1(c)1	Required; 130.1(c)1D only required for new or completely replaced circuits	Required; 130.1(c)1D only required for new or completely replaced circuits
Automatic Shut Off Controls	130.1(c)2	Required	Required
Automatic Shut Off Controls	130.1(c)3	Required	Required
Automatic Shut Off Controls	130.1(c)4	Required	Required
Automatic Shut Off Controls	130.1(c)5	Required	Required
Automatic Shut Off Controls	130.1(c)6	Required	Required; except for 130.1(c)6D
Automatic Shut Off Controls	130.1(c)7	Required	Required
Automatic Shut Off Controls	130.1(c)8	Required	Required
Daylighting Controls	130.1(d)	Required	Not Required
Demand Responsive Controls	110.12(a) and 110.12(c)	Required	Not Required

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, 25910, and 25943, Public Resources Code.

SECTION 141.1 – REQUIREMENTS FOR COVERED PROCESSES IN ADDITIONS, ALTERATIONS TO EXISTING NONRESIDENTIAL, AND HOTEL/MOTEL BUILDINGS

Covered processes in additions or alterations to existing buildings that will be nonresidential, and hotel/motel occupancies shall comply with the applicable subsections of section 120.6 and 140.9.

(a) **Lab and Process Facility Exhaust Systems.** All newly installed fan systems for a laboratory or process facility exhaust system greater than 10,000 cfm shall meet the requirements of Section 140.9(c).

(b) **Computer Rooms.** All newly installed computer room cooling systems and uninterruptible power supply systems in additions/alterations shall meet the requirements of Sections 120.6(j), 140.9(a)2, and 140.9(a)4 and comply with item 1 below.

1. **Economizers.** Each individual cooling system primarily serving computer rooms in an existing building shall include either:

   A. An integrated air economizer capable of partial cooling when additional mechanical cooling is required and capable of providing 100 percent of the expected system cooling load up to 80°F room supply air temperature at outside air temperatures of 55°F dry-bulb and below or 50°F wet-bulb and below, and be equipped with a fault detection and diagnostic system as specified by section 120.2(i); or

   B. An integrated water economizer capable of partial cooling when additional mechanical cooling is required and capable of providing 100 percent of the expected system cooling load up to 80°F room supply air temperature at outside air temperatures of 40°F dry-bulb and below or 35°F wet-bulb and below.

   EXCEPTION 1 to Section 141.1(b)1: Individual computer rooms with an ITE design load under 5 tons (18 kW) in a building that does not have any economizers.

   EXCEPTION 2 to Section 141.1.(b)1: New cooling systems serving an existing computer room in an existing building with an ITE design load up to a total of 50 tons (176 kW).

   EXCEPTION 3 to Section 141.1(b)1: New cooling systems serving a new computer room in an existing building with an ITE design load up to a total of 20 tons (70 kW).

(c) **Controlled Environment Horticulture Spaces.**

1. Indoor Growing, Space-Conditioning Systems and Dehumidification. All newly installed heating, ventilation, air conditioning systems or dehumidification systems in buildings with indoor growing shall meet the applicable requirements of Section 120.6(h)1 and 120.6(h)2.

2. Greenhouses, Building Envelope and Space-Conditioning Systems. A greenhouse being converted to a conditioned greenhouse or additions to a conditioned greenhouse shall meet the requirements of Sections 120.6(h)5 and 120.6(h)6.

3. Indoor Growing and Greenhouses, Horticultural Lighting. When alterations to horticultural lighting systems increase lighting wattage or include adding, replacing, or altering 10 percent or more of the horticultural luminaires serving an enclosed space, the newly installed, replaced, or altered lighting shall meet the requirements of Section 120.6(h)3 for indoor growing or Section 120.6(h)7 for greenhouses.

   EXCEPTION to Section 141.1(c)3: Any alteration limited to adding lighting controls or replacing lamps, ballasts, or drivers.

NOTE: For alterations that change the occupancy classification of the building, the requirements of Section 141.1 apply to the occupancy that will exist after the alterations.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SUBCHAPTER 7
SINGLE-FAMILY RESIDENTIAL BUILDINGS – MANDATORY FEATURES AND DEVICES

SECTION 150.0 – MANDATORY FEATURES AND DEVICES

Single-family residential buildings shall comply with the applicable requirements of Sections 150(a) through 150.0(v).

NOTE: The requirements of Sections 150.0(a) through 150.0(r) apply to newly constructed buildings. Sections 150.2(a) and 150.2(b) specify which requirements of Sections 150.0(a) through 150.0(r) also apply to additions or alterations.

(a) **Roof deck, ceiling and rafter roof insulation.** The opaque portions of roof decks separating attic spaces from ambient air, and ceilings or rafter roofs separating conditioned spaces from unconditioned spaces or ambient air, shall meet the requirements of Items 1 through 4 below:

1. In Climate Zones 4 and 8 through 16, roof decks in newly constructed attic systems shall be insulated to achieve an area-weighted average U-factor not exceeding U-0.184.

   Exception to Section 150.0(a)1:

   i. The space-conditioning system air handler and ducts are located entirely in conditioned space below the ceiling separating the occupiable space from the attic; or

   ii. The space-conditioning system air handler is located in unconditioned space and has 12 linear feet or less of supply duct, including the length of the air handler and the plenum, located in unconditioned space, with all other portions of the supply ducts located in conditioned space below the ceiling separating the occupiable space from the attic.

2. Ceilings and rafter roofs shall be insulated to achieve an area-weighted average U-factor not exceeding U-0.043 or shall be insulated between wood-framing members with insulation resulting in an installed thermal resistance of R-22 or greater for the insulation alone. For vented attics, the mandatory insulation shall be installed at the ceiling level; for unvented attics, the mandatory insulation shall be placed at either ceiling or roof level; and

   Exception to Section 150.0(a)2: Ceilings and rafter roofs in an alteration shall be insulated to achieve an area-weighted average U-factor not exceeding 0.054 or shall be insulated between wood-framing members with insulation resulting in an installed thermal resistance of R-19 or greater.

3. Attic access doors shall have permanently attached insulation using adhesive or mechanical fasteners. The attic access shall be gasketed to prevent air leakage; and

4. Insulation shall be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration as specified in Section 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.

(b) **Loose-fill insulation.** When loose-fill insulation is installed, the minimum installed weight per square foot shall conform with the insulation manufacturer's installed design weight per square foot at the manufacturer's labeled R-value.

(c) **Wall insulation.** Opaque portions of above grade walls separating conditioned spaces from unconditioned spaces or ambient air shall meet the following requirements:

1. 2 × 4 inch framing shall have an overall assembly U-factor not exceeding U-0.102.

Exception to Section 150.0(c)1: Existing walls already insulated to a U-factor not exceeding U-0.110 or already insulated between framing members with insulation having an installed thermal resistance of R-11 or greater.

2. 2 × 6 inch or greater framing shall have an overall assembly U-factor not exceeding U-0.071.
3. Opaque nonframed assemblies shall have an overall assembly U-factor not exceeding U-0.102.
4. Bay or bow window roofs and floors shall be insulated to meet the wall insulation requirements of Table 150.1-A.
5. Masonry walls shall be insulated to meet the wall insulation requirements of Table 150.1-A.
6. In wood framed assemblies, compliance with U-factors may be demonstrated by installing wall insulation with an R-value of 13 in 2x4 assemblies, and 20 in 2x6 assemblies.

(d) **Raised-floor insulation.** Raised floors separating conditioned space from unconditioned space or ambient air shall have an overall assembly U-factor not exceeding U-0.037. In a wood framed assembly, compliance with the U-factor may be demonstrated by installing insulation with an R-value of 19 or greater.

Exception to Section 150.0(d): A building with a controlled ventilation or unvented crawlspace may omit raised floor insulation if all of the following are met:

i. The foundation walls are insulated to meet the wall insulation minimums as shown in Table 150.1-A; and

ii. A Class I or Class II vapor retarder is placed over the entire floor of the crawl space; and

iii. Vents between the crawlspace and outside air are fitted with automatically operated louvers that are temperature actuated; and

iv. The requirements in Reference Residential Appendix RA4.5.1.

(e) **Installation of fireplaces, decorative gas appliances and gas logs.** If a masonry or factory-built fireplace is installed, it shall comply with Section 110.5, Section 4.503 of Part 11, and shall have the following:

1. Closable metal or glass doors covering the entire opening of the firebox; and
2. A combustion air intake to draw air from the outside of the building, which is at least 6 square inches in area and is equipped with a readily accessible, operable and tight-fitting damper or combustion-air control device; and

   Exception to Section 150.0(e)2: An outside combustion-air intake is not required if the fireplace will be installed over concrete slab flooring and the fireplace will not be located on an exterior wall.

3. A flue damper with a readily accessible control.

   Exception to Section 150.0(e)3: When a gas log, log lighter or decorative gas appliance is installed in a fireplace, the flue damper shall be blocked open if required by the CMC or the manufacturer's installation instructions.

(f) **Slab edge insulation.** Material used for slab edge insulation shall meet the following minimum specifications:

1. Water absorption rate for the insulation material alone without facings no greater than 0.3 percent when tested in accordance with Test Method A – 24-Hour-Immersion of ASTM C272.
2. Water vapor permeance no greater than 2.0 perm/inch when tested in accordance with ASTM E96.
3. Concrete slab perimeter insulation shall be protected from physical damage and ultraviolet light deterioration.
4. Insulation for a heated slab floor shall meet the requirements of Section 110.8(g).

(g) **Vapor retarder.**

1. In Climate Zones 1–16, the earth floor of unvented crawl space shall be covered with a Class I or Class II vapor retarder. This requirement shall also apply to controlled ventilation crawl space for buildings complying with the Exception to Section 150.0(d).
2. In Climate Zones 14 and 16, a Class I or Class II vapor retarder shall be installed on the conditioned space side of all insulation in all exterior walls, vented attics and unvented attics with air-permeable insulation.

(h) **Space-conditioning equipment.**

1. **Building** cooling **and** heating loads**.** Building heating and cooling loads shall be determined using a method based on any one of the following:
   A. The ASHRAE Handbook, Equipment Volume, Applications Volume and Fundamentals Volume; or
   B. The SMACNA Residential Comfort System Installation Standards Manual; or
   C. The ACCA Manual J.

   The cooling and heating loads are two of the criteria that shall be used for equipment sizing and selection.

   Note: Heating systems are required to have a minimum heating capacity adequate to meet the minimum requirements of the CBC. The furnace output capacity and other specifications are published in the Commission's directory of certified equipment or other directories approved by the Commission.
2. **Design conditions**. For the purpose of sizing the space- conditioning (HVAC) system, the indoor design temperatures shall be 68°F for heating and 75°F for cooling. Outdoor design conditions shall be selected from Reference Joint Appendix JA2, which is based on data from the ASHRAE Climatic Data for Region X. The outdoor design temperatures for heating shall be no lower than the Heating Winter Median of Extremes values. The outdoor design temperatures for cooling shall be no greater than the 1.0 percent Cooling Dry Bulb and Mean Coincident Wet Bulb values.
3. **Outdoor condensing units.**
   A**. Clearances.** Installed air conditioner and heat pump outdoor condensing units shall have a clearance of at least five (5) feet (1.5 meters) from the outlet of any dryer vent.
   B**. Liquid line drier.** Installed air conditioner and heat pump systems shall be equipped with liquid line filter driers if required, as specified by manufacturer's instructions.
4. **Central forced-air heating furnaces**.
   A. **Temperature rise**. Central forced-air heating furnace installations shall be configured to operate in conformance with the furnace manufacturer's maximum inlet-to-outlet temperature rise specifications.

(i) **Thermostats**. All heating or cooling systems, including heat pumps, not controlled by a central energy management control system (EMCS) shall have a setback thermostat, as specified in Section 110.2(c).

(j) **Insulation for piping and tanks.**

1. **Water piping, solar water-heating system piping, and space-conditioning system line insulation thickness and conductivity.** Piping shall be insulated as follows:
   A. All domestic hot water piping shall be insulated as specified in Section 609.11 of the California Plumbing Code.
   B. Piping for space-conditioning systems, solar water-heating system collector loop, and distribution piping for steam and hydronic heating system shall meet the requirements of Section 120.3(a).

   Exception 1 to Section 150.0(j)1: Factory-installed piping within space-conditioning equipment certified under Section 110.1 or 110.2.

Exception 2 to Section 150.0(j)1: Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall butt securely against all framing members.

Exception 3 to Section 150.0(j)1: Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with (QII) as specified in the Reference Residential Appendix RA3.5.

Exception 4 to Section 150.0(j)1: Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation shall not be required to have pipe insulation.

2. **Insulation protection.** Pipe insulation shall meet the insulation protection requirements of Section 120.3(b).

(k) **Residential lighting.**

1. **Luminaire requirements.**

A. **Luminaire efficacy.** All installed luminaires shall meet the requirements in Table 150.0-A.

Exception 1 to Section 150.0(k)1A: Integrated device lighting. Lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors and garage door openers.

Exception 2 to Section 150.0(k)1A: Navigation lighting such as night lights, step lights, and path lights less than 5 watts.

Exception 3 to Section 150.0(k)1A: Cabinet lighting. Lighting internal to drawers, cabinetry and linen closets with an efficacy of 45 lumens per watt or greater.

B. **Screw-based luminaires.** Screw-based luminaires shall contain lamps that comply with Reference Joint Appendix JA8.

C. **Recessed downlight luminaires in ceilings.** Luminaires recessed into ceilings shall meet all of the following requirements:

i. Shall not contain screw base lamp sockets; and

ii. Have a label that certifies the luminaire is airtight with air leakage less than 2.0 cfm at 75 Pascals when tested in accordance with ASTM E283. An exhaust fan housing with integral light shall not be required to be certified airtight; and

iii. Be sealed with a gasket or caulk between the luminaire housing and ceiling, and have all air leak paths between conditioned and unconditioned spaces sealed with a gasket or caulk, or be installed per manufacturer's instructions to maintain airtightness between the luminaire housing and ceiling; and

iv. Meet the clearance and installation requirements of California Electrical Code Section 410.116 for recessed luminaires.

Exception to Sections 150.0(k)1Cii and iii: Recessed luminaires marked for use in fire-rated installations extruded into ceiling space and recessed luminaires installed in noninsulated ceilings.

D. **Light sources in enclosed or recessed luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, shall not be installed in enclosed or recessed luminaires.

E. **Blank electrical boxes.** The number of electrical boxes that are more than 5 feet above the finished floor and do not contain a luminaire or other device shall be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, low voltage wiring or fan speed control.

2. **Indoor lighting controls.**

   A. Lighting shall have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.

      Exception to Section 150.0(k)2A: Ceiling fans may provide control of integrated lighting via a remote control.

   B. No controls shall bypass a dimmer, occupant sensor or vacancy sensor function where that dimmer or sensor has been installed to comply with Section 150.0(k).

   C. Lighting controls shall comply with the applicable requirements of Section 110.9.

   D. An Energy Management Control System (EMCS) or a multiscene programmable control may be used to comply with dimming, occupancy and lighting control requirements in Section 150.0(k)2 if it provides the functionality of the specified controls in accordance with Section 110.9, and the physical controls specified in Section 150.0(k)2A.

   E. **Automatic-off controls.**

      i. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire shall be controlled by an occupancy or vacancy sensor providing automatic-off functionality.

      ii. For lighting internal to drawers and cabinetry with opaque fronts or doors, controls that turn the light off when the drawer or door is closed shall be provided.

   F. **Dimming controls**. Lighting in habitable spaces, including but not limited to living rooms, dining rooms, kitchens and bedrooms, shall have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces shall comply with NEMA SSL 7A.

      Exception 1 to Section 150.0(k)2F: Ceiling fans may provide control of integrated lighting via a remote control.

      Exception 2 to Section 150.0(k)2F: Luminaires connected to a circuit with controlled lighting power less than 20 watts or controlled by an occupancy or vacancy sensor providing automatic-off functionality.

      Exception 3 to Section 150.0(k)2F: Navigation lighting such as night lights, step lights, and path lights less than 5 watts, and lighting internal to drawers and cabinetry with opaque fronts or doors or with automatic-off controls.

   G. **Independent controls.** Integrated lighting of exhaust fans shall be controlled independently from the fans. The following shall be controlled separately from ceiling-installed lighting such that one can be turned on without turning on the other:

      i. Undercabinet lighting.

      ii. Undershelf lighting.

      iii. Interior lighting of display cabinets.

      iv. Switched outlets.

3. **Residential outdoor lighting.** In addition to meeting the requirements of Section 150.0(k)1A, luminaires providing residential outdoor lighting shall meet the following requirements, as applicable:

   A. For single-family residential buildings, outdoor lighting permanently mounted to a residential building or to other buildings on the same lot shall meet the requirement in Item i and the requirements in either Item ii or Item iii:

      i. Controlled by a manual ON and OFF control switch that permits the automatic actions of items ii or iii below; and

ii. Controlled by a photocell and either a motion sensor or an automatic time switch control; or

iii. Controlled by an astronomical time clock control.

Controls that override to ON shall not be allowed unless the override automatically returns the automatic control to its normal operation within 6 hours. An energy management control system that provides the specified lighting control functionality and complies with all requirements applicable to the specified controls may be used to meet these requirements.

4. **Internally illuminated address signs.** Internally illuminated address signs shall either:

A. Comply with Section 140.8; or

B. Consume no more than 5 watts of power.

5. **Residential garages for eight or more vehicles.** Lighting for residential parking garages for eight or more vehicles shall comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6 and 141.0.

(l) **Reserved.**

(m) **Air-distribution and ventilation system ducts, plenums and fans.**

1. **CMC compliance.**

A. All air-distribution system ducts and plenums, including but not limited to, mechanical closets and air-handler boxes, shall meet the requirements of the CMC Sections 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible, 3rd Edition, incorporated herein by reference.

B. Portions of supply-air and return-air ducts and plenums of a space heating or cooling system shall be insulated in accordance with either Subsection i or ii below:

i. Ducts shall have a minimum installed level of R-6.0, or

Exception to Section 150.0(m)1Bi: Portions of the duct system located in conditioned space below the ceiling separating the occupiable space from the attic are not required to be insulated if all of the following conditions are met:

a. The noninsulated portion of the duct system is located entirely inside the building's thermal envelope as confirmed by visual inspection.

b. At all locations where noninsulated portions of the duct system penetrate into unconditioned space, the penetration shall be draft stopped compliant with CFC Sections 703.1 and 704.1 and air-sealed to the construction materials that are penetrated, using materials compliant with CMC Section E502.4.2 to prevent air infiltration into the cavity. All connections in unconditioned space are insulated to a minimum of R-6.0 as confirmed by visual inspection.

ii. Ducts do not require insulation when the duct system is located entirely in conditioned space as confirmed through field verification and diagnostic testing in accordance with the requirements of Reference Residential Appendix RA3.1.4.3.8.

C. Connections of metal ducts and the inner core of flexible ducts shall be mechanically fastened.

D. Openings shall be sealed with mastic, tape or other duct-closure system that meets the applicable requirements of UL 181, UL181A or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used.

E. Building cavities, support platforms for air handlers and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct shall not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities

and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts.

Exception to Section 150.0(m)1: Ducts and fans integral to a wood heater or fireplace.

2. **Factory-fabricated duct systems.**

   A. All factory-fabricated duct systems shall comply with UL 181 for ducts and closure systems, including collars, connections and splices, and be labeled as complying with UL 181. UL 181 testing may be performed by UL laboratories or a laboratory approved by the Executive Director.

   B. All pressure-sensitive tapes, heat-activated tapes, and mastics used in the manufacture of rigid fiberglass ducts shall comply with UL 181 and UL 181A.

   C. All pressure-sensitive tapes and mastics used with flexible ducts shall comply with UL 181 and UL 181B.

   D. Joints and seams of duct systems and their components shall not be sealed with cloth-back rubber adhesive duct tapes unless such tape is used in combination with mastic and drawbands.

3. **Field-fabricated duct systems.**

   A. Factory-made rigid fiberglass and flexible ducts for field-fabricated duct systems shall comply with UL 181. All pressure-sensitive tapes, mastics, aerosol sealants or other closure systems used for installing field-fabricated duct systems shall meet the applicable requirements of UL 181, UL 181A and UL 181B.

   B. Mastic sealants and mesh.

      i. Sealants shall comply with the applicable requirements of UL 181, UL 181A and UL 18IB, and be nontoxic and water resistant.

      ii. Sealants for interior applications shall be tested in accordance with ASTM C731 and D2202 incorporated herein by reference.

      iii. Sealants for exterior applications shall be tested in accordance with ASTM C731, C732 and D2202, incorporated herein by reference.

      iv. Sealants and meshes shall be rated for exterior use.

   C. Pressure-sensitive tape. Pressure-sensitive tapes shall comply with the applicable requirements of UL 181, UL 181A and UL 181B.

   D. Joints and seams of duct systems and their components shall not be sealed with cloth-back rubber adhesive duct tapes unless such tape is used in combination with mastic and drawbands.

   E. Drawbands used with flexible duct.

      i. Drawbands shall be either stainless-steel worm-drive hose clamps or UV-resistant nylon duct ties.

      ii. Drawbands shall have a minimum tensile strength rating of 150 pounds.

      iii. Drawbands shall be tightened as recommended by the manufacturer with an adjustable tensioning tool.

   F. Aerosol-sealant closures.

      i. Aerosol sealants shall meet the requirements of UL 723 and be applied according to manufacturer specifications.

      ii. Tapes or mastics used in combination with aerosol sealing shall meet the requirements of this section.

4. **Duct insulation R-value ratings**. All duct insulation product R-values shall be based on insulation only (excluding air films, vapor retarder or other duct components) and tested C-values at 75°F mean

temperature at the installed thickness, in accordance with ASTM C518 or ASTM C177, incorporated herein by reference, and certified pursuant to Section 110.8.

5. **Duct insulation thickness**. The installed thickness of duct insulation used to determine its R-value shall be determined as follows:

   A. For duct board, duct liner and factory-made rigid ducts not normally subjected to compression, the nominal insulation thickness shall be used.

   B. For duct wrap, installed thickness shall be assumed to be 75 percent (25 percent compression) of nominal thickness.

   C. For factory-made flexible air ducts, the installed thickness shall be determined by dividing the difference between the actual outside diameter and nominal inside diameter by two.

6. **Duct labeling.** Insulated flexible duct products installed to meet this requirement shall include labels, in maximum intervals of 3 feet, showing the thermal performance R-value for the duct insulation itself (excluding air films, vapor retarders or other duct components), based on the tests in Section 150.0(m)4 and the installed thickness determined by Section 150.0(m)5C.

7. **Backdraft dampers**. All fan systems, regardless of volumetric capacity, that exchange air between the building conditioned space and the outside of the building shall be provided with backdraft or automatic dampers to prevent unintended air leakage through the fan system when the fan system is not operating.

8. **Gravity ventilation dampers.** All gravity ventilating systems that serve conditioned space shall be provided with either automatic or readily accessible, manually operated dampers in all openings to the outside except combustion inlet and outlet air openings and elevator shaft vents.

9. **Protection of insulation.** Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance and wind, but not limited to the following: Insulation exposed to weather shall be suitable for outdoor service, e.g., protected by aluminum, sheet metal, painted canvas or plastic cover. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.

10. **Porous inner core flex duct.** Flexible ducts having porous inner cores shall have a non-porous layer or air barrier between the inner core and the outer vapor barrier.

11. **Duct system sealing and leakage testing.** When space-conditioning systems utilize forced air duct systems to supply conditioned air to an occupiable space, the ducts shall be sealed as confirmed through field verification and diagnostic testing in accordance with all applicable procedures specified in Reference Residential Appendix RA3.1, and conforming to one of the following Subsections A, B or C as applicable. Air handler airflow for calculation of duct leakage rate compliance targets shall be determined according to methods specified in Reference Residential Appendix RA3.1.4.2.

    A. For single-family dwellings and townhouses with the air-handling unit installed and the ducts connected directly to the air handler, the total leakage of the duct system shall not exceed 5 percent of the air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1.

    B. For single-family dwellings and townhouses at the rough-in stage of construction prior to installation of the dwelling's interior finishing:

        i. **Air-handling unit installed.** If the air-handling unit is installed and the ducts are connected directly to the air handler, the total leakage of the duct system shall not exceed 5 percent of the air handler airflow as determined utilizing the procedures in Reference Residential Appendix Sections RA3.1.4.3.2, RA3.1.4.3.2.1 and RA3.1.4.3.3.

        ii. **Air-handling unit not yet installed.** If the air-handling unit is not yet installed, the total leakage of the duct system shall not exceed 4 percent of the air handler airflow as determined utilizing the procedures in Reference Residential Appendix Sections RA3.1.4.3.2, RA3.1.4.3.2.2 and RA3.1.4.3.3.

12. **Air filtration.**

A. System types specified in Subsections i, ii, and iii shall be provided with air filters in accordance with Sections 150.0(m)12B, 150.0(m)12C, and 150.0(m)12D. System types specified in Subsection i shall also comply with Section 150.0(m)12E.

i. Mechanical space-conditioning systems that supply air to an occupiable space through ductwork exceeding 10 feet (3 m) in length.

ii. Mechanical supply-only ventilation systems and makeup air systems that provide outside air to an occupiable space.

iii. The supply side of mechanical balanced ventilation systems, including heat recovery ventilation systems, and energy recovery ventilation systems that provide outside air to an occupiable space.

Exception 1 to Section 150.0(m)12A: Evaporative coolers are exempt from the air filtration requirements in Section 150.0(m)12.

B. **System design and installation.**

i. The system shall be designed to ensure that all recirculated air and all outdoor air supplied to the occupiable space is filtered before passing through any system's thermal conditioning components.

Exception 1 to Section 150.0(m)12Bi: For heat recovery ventilators and energy recovery ventilators the location of the filters required by Section 150.0(m)12 may be downstream of a system thermal conditioning component, provided the system is equipped with ancillary filtration upstream of the system's thermal conditioning component.

ii. All systems shall be designed to accommodate the clean-filter pressure drop imposed by the system air filter(s). The design airflow rate and maximum allowable clean-filter pressure drop at the design airflow rate applicable to each air filter shall be determined and reported on labels according to Subsection iv below.

Systems specified in Section 150.0(m)12Ai shall be equipped with air filters that meet either Subsection a or b below.

a. Nominal two-inch minimum depth filter(s) shall be sized by the system designer, or

b. Nominal one-inch minimum depth filter(s) shall be allowed if the filter(s) are sized according to Equation 150.0-A, based on a maximum face velocity of 150 ft per minute, and according to the maximum allowable clean-filter pressure drop specified in Section 150.0(m)12Dii.

$$A_{face} = Q_{filter}/V_{face} \quad \text{(Equation 150.0-A)}$$

where

A_{face} = air filter face area, the product of air filter nominal length x nominal width, ft^2.

Q_{filter} = design airflow rate for the air filter, ft^3/min.

V_{face} = air filter face velocity £150, ft/min.

iii. All system air filters shall be located and installed in such a manner as to be accessible for regular service by the system owner.

iv. All system air filter installation locations shall be labeled to disclose the applicable design airflow rate and the maximum allowable clean-filter pressure drop. The labels shall be permanently affixed to the air filter installation location, readily legible, and visible to a person replacing the air filter.

v. Filter racks or grilles shall use gaskets, sealing or other means to close gaps around inserted filters to and prevent air from bypassing the filter.

C. **Air filter efficiency.** The system shall be provided with air filter(s) having a designated efficiency equal to or greater than MERV 13 when tested in accordance with ASHRAE Standard 52.2, or a particle size efficiency rating equal to or greater than 50 percent in the 0.30-1.0 mm range, and equal to or greater than 85 percent in the 1.0-3.0 mm range when tested in accordance with AHRI Standard 680.

D. **Air filter pressure drop.** All system shall be provided with air-filter(s) that conforms to the applicable maximum allowable clean-filter pressure drop specified in Subsections i, ii, iii, or iv below, when tested using ASHRAE Standard 52.2, or as rated using AHRI Standard 680, for the applicable design airflow rate(s) for the system air filter(s).

i. The maximum allowable clean-filter pressure drop shall be determined by the system design for the nominal two-inch minimum depth air filter required by Section 150.0(m)12Biia, or

ii. A maximum of 25 PA (0.1 inches water) clean-filter pressure drop shall be allowed for a nominal one-inch depth air filter sized according to Section 150.0(m)12Biib, or

iii. For systems specified in 150.0(m)12Aii, and 150.0(m)12Aiii, the maximum allowable clean filter pressure drop shall be determined by the system design.

iv. If Exception 1 to Section 150.0(m)13B or D is utilized for compliance with cooling system airflow rate and fan efficacy requirements, the clean-filter pressure drop for the system air filter shall conform to the requirements given in Table 150.0-B or 150.0-C.

E. **Air filter product labeling**. Systems described in 150.0(m)12)Ai shall be equipped with air filters that have been labeled by the manufacturer to disclose the efficiency and pressure drop ratings that demonstrate conformance with Sections 150.0(m)12C and 150.0(m)12D.

13. **Space conditioning system airflow rate and fan efficacy.** Space conditioning systems that utilize forced air ducts to supply cooling to an occupiable space shall:

A. **Static pressure probe.** Have a hole for the placement of a static pressure probe (HSPP), or a permanently installed static pressure probe (PSPP) in the supply plenum downstream of the air conditioning evaporator coil. The size, location, and labeling of the HSPP or PSPP shall conform to the requirements specified in Reference Residential Appendix RA3.3.1.1 as confirmed by field verification and diagnostic testing; and

Exception to 150.0(m)13A: Systems that cannot conform to the specifications for hole location in Reference Residential Appendix Figure RA3.3-1 shall not be required to provide holes as described in Figure RA3.3-1.

B. **Single zone central forced air systems.** Demonstrate, in every control mode, airflow greater than or equal to 350 CFM per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy less than or equal to the maximum W/CFM specified in Subsections i or ii below. The airflow rate and fan efficacy requirements in this section shall be confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

i. 0.45 W/CFM for gas furnace air-handling units.

ii. 0.58 W/CFM for air-handling units that are not gas furnaces.

C. **Zonally controlled central forced air systems.** Zonally controlled central forced air cooling systems shall be capable of simultaneously delivering, in every zonal control mode, an airflow from the dwelling, through the air handler fan and delivered to the dwelling, of greater than or equal to 350 cfm per ton of nominal cooling capacity, and operating at an air-handling unit fan efficacy of less than or equal to the maximum W/CFM specified in Subsections i or ii below. The airflow rate and fan efficacy requirements in this section shall be confirmed by field verification and diagnostic testing in accordance with the applicable procedures specified in Reference Residential Appendix RA3.3.

i. 0.45 W/CFM for gas furnace air-handling units.

ii. 0.58 W/CFM for air-handling units that are not gas furnaces.

D. **Small duct high velocity forced air systems.** Demonstrate, in every control mode, airflow greater than or equal to 250 CFM per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy less than or equal to 0.62 W/CFM as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

Exception 1 to Section 150.0(m)13B and D: Standard ducted systems (without zoning dampers) may comply by meeting the applicable requirements in Table 150.0-B or 150.0-C as confirmed by field verification and diagnostic testing in accordance with the procedures in Reference Residential Appendix Sections RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure drop requirements specified by Section 150.0(m)12Div for the system air filter(s) shall conform to the requirements given in Tables 150.0-B and 150.0-C.

Exception 2 to Section 150.0(m)13B and D: Multispeed compressor systems or variable speed compressor systems shall verify air flow (cfm/ton) and fan efficacy (Watt/cfm) for system operation at the maximum compressor speed and the maximum air handler fan speed.

Exception 3 to Section 150.0(m)13B: Gas furnace air-handling units manufactured prior to July 3, 2019 shall comply with a fan efficacy value less than or equal to 0.58 w/cfm as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

Exception 1 to Section 150.0(m)13C: Multispeed or variable speed compressor systems, or single speed compressor systems that utilize the performance compliance approach, shall demonstrate compliance with the airflow (cfm/ton) and fan efficacy (Watt/cfm) requirements of Section 150.0(m)13C by operating the system at maximum compressor capacity and system fan speed with all zones calling for conditioning, rather than in every zonal control mode.

Exception 2 to Section 150.0(m)13C: Gas furnace air-handling units manufactured prior to July 3, 2019 shall comply with a fan efficacy value less than or equal to 0.58 w/cfm as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

(n) **Water heating system**.

1. Systems using gas or propane water heaters to serve individual dwelling units shall designate a space at least 2.5 feet by 2.5 feet wide and 7 feet tall suitable for the future installation of a heat pump water heater (HPWH) by meeting either A or B below. All electrical components shall be installed in accordance with the *California Electrical Code*:

   A. If the designated space is within 3 feet from the water heater, then this space shall include the following:

      i. A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within 3 feet from the water heater and accessible to the water heater with no obstructions; and

      ii. Both ends of the unused conductor shall be labeled with the word “spare” and be electrically isolated; and

      iii. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words “Future 240V Use”; and

      iv. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance.

   B. If the designated space is more than 3 feet from the water heater, then this space shall include the following:

i. A dedicated 240 volt branch circuit shall be installed within 3 feet from the designated space. The branch circuit shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready"; and

ii. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future HPWH installation. The reserved space shall be permanently marked as "For Future 240V use"; and

iii. Either a dedicated cold water supply, or the cold water supply shall pass through the designated HPWH location just before reaching the gas or propane water heater; and

iv. The hot water supply pipe coming out of the gas or propane water heater shall be routed first through the designated HPWH location before serving any fixtures; and

v. The hot and cold water piping at the designated HPWH location shall be exposed and readily accessible for future installation of an HPWH; and

vi. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance.

2. Water heating recirculation loops serving multiple dwelling units shall meet the requirements of Section 110.3(c)4.

3. Solar water-heating systems and collectors shall be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.

4. Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2kW) shall meet the requirements of Section 110.3(c)6.

(o) **Requirements for ventilation and indoor air quality.** All dwelling units shall meet the requirements of ASHRAE Standard 62.2. Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in Section 150.0(o)1 below. All dwelling units shall comply with Section 150.0(o)2 below.

Exception to Section 150.0(o): The following sections of ASHRAE 62.2 shall not be required for compliance: Section 4.1.1, Section 4.1.2, Section 4.1.4, Section 4.3, Section 4.6, Section 5, Section 6.1.1, Section 6.5.2 and Normative Appendix A.

1. **Amendments to ASHRAE 62.2 requirements**.

A. **Window operation.** Window operation is not a permissible method of providing the dwelling unit ventilation airflow specified in Section 150.0(o)1C below.

B. **Central fan integrated (CFI) ventilation systems.** CFI ventilation systems shall meet the following requirements.

i. **Continuous operation prohibition.** Continuous operation of a dwelling unit's central forced air system air handlers used in CFI ventilation systems is not a permissible method of providing the whole-dwelling unit ventilation airflow required in Section 150.0(o)1C.

ii. **Outdoor air damper(s)**. A motorized damper(s) shall be installed on the connected ventilation duct(s) of CFI systems that prevents all airflow into or out of the space-conditioning duct system when the damper(s) is closed.

iii. **Damper control**. The required motorized damper(s) shall be controlled to be in an opened position when outdoor air ventilation is required for compliance, and shall be in the closed position when ventilation air is not required. The damper(s) shall be closed whenever the space-conditioning system air handling unit is not operating. If the outdoor airflow for the CFI ventilation system is fan-powered, then the outdoor air fan shall not operate when the required motorized damper(s) on the outdoor air ventilation duct(s) is closed.

iv. **Variable ventilation.** CFI ventilation systems shall incorporate controls that track outdoor air ventilation run time, and either open or close the required motorized damper(s) depending on whether or not outdoor air ventilation is required for compliance with Section 150.0(o)1C. During periods when comfort conditioning is not called for by the space-conditioning thermostat, the CFI ventilation system controls shall operate the space-conditioning system central fan and outdoor air damper(s) when necessary to ensure compliance with the minimum outdoor air ventilation required by Section 150.0(o) in accordance with applicable variable mechanical ventilation methods specified in ASHRAE 62.2 Section 4.5.

C. **Whole-dwelling unit mechanical ventilation for single-family detached and townhouses. Single-**family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces shall have mechanical ventilation airflow as specified in Subsections i, ii, and iii below.

i. **Total Required Ventilation Rate [ASHRAE 62.2:4.1.1].**

The total required ventilation rate shall be calculated using Equation 150.0-B.

$$Q_{tot} = 0.03A_{floor} + 7.5(N_{br} + 1)$$ (Equation 150.0-B)

where

Q_{tot} = total required ventilation rate, cfm

A_{floor} = dwelling-unit floor area, ft^2

N_{br} = number of bedrooms (not to be less than 1)

ii. **Effective Annual Average Infiltration Rate.** The effective annual average infiltration rate shall be determined in accordance with Subsections a and b:

a. An enclosure leakage rate in cubic feet per minute at 50 Pa (0.2 inch water) (Q_{50}) shall be determined by either Subsection 1, or Subsection 2 below.

1. Q_{50} shall be calculated based on the conditioned volume of the dwelling unit and a default value for dwelling unit envelope leakage of 2 air changes per hour at 50 PA (0.2 inch water) (2 ACH_{50}) as specified by equation 150.0-C below.

$$Q_{50} = V_{du} \times 2\ ACH_{50}/60\ \text{min}$$

(Equation 150.0-C)

where

Q_{50} = leakage rate at 50 Pa.

V_{du} = dwelling unit conditioned volume, ft^3.

ACH_{50} =air changes per hour at 50 Pa (0.2 inch water).

2. If dwelling unit envelope leakage less than 2 ACH_{50} is confirmed by field verification and diagnostic testing, Q_{50} shall be calculated according to Equation 150.0-D below, using the value for dwelling unit envelope leakage less than 2 ACH_{50} verified by the procedures specified in Reference Residential Appendix RA3.8.

$$Q_{50} = V_{du} \times \textit{Verified}\ ACH_{50}/60\ \text{min}$$

(Equation 150.0-D)

where

Q_{50} = leakage rate at 50 Pa

V_{du} = dwelling unit conditioned volume, ft^3.

ACH_{50} = air changes per hour at 50 Pa (0.2 inch water).

b. The Effective Annual Average Infiltration Rate (Q_{inf}) shall be calculated using Equation 150.0-E [ASHRAE 62.2:4.1.2.1].

$$Q_{inf} = 0.052 \times Q_{50} \times wsf \times [H/H_r]^z \quad \text{(Equation 150.0-E)}$$

where

Q_{inf} = effective annual infiltration rate, cfm (L/s)

Q_{50} = leakage rate at 50 Pa from equation 150.0-C, or equation 150.0-D

wsf = weather and shielding factor from Table 150.0-D

H = vertical distance between the lowest and highest above-grade points within the pressure boundary, ft (m)

H_r = reference height, 8.2 ft (2.5 m)

z = 0.4 for the purpose of calculating the Effective Annual Average Infiltration Rate

iii. **Required Mechanical Ventilation Rate [ASHRAE 62.2:4.1.2**]

The Required Mechanical Ventilation Rate (Q_{fan}) shall be calculated using Equation 150.0-F.

$$Q_{fan} = Q_{tot} - F\,(Q_{inf} \times A_{ext})$$

(Equation 150.0-F)

where

Q_{fan} = required mechanical ventilation rate, cfm (L/s).

Q_{tot} = total required ventilation rate, cfm (L/s) from Equation 150.0-B.

Q_{inf} = effective annual average infiltration rate, cfm (L/s) from Equation 150.0-E.

A_{ext} = 1 for single-family detached homes, or the ratio of exterior envelope surface area that is not attached to garages or other dwelling units to total envelope surface area for attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces.

F = 1 for balanced ventilation systems and Q_{inf}/Q_{tot} otherwise.

D. **Air filtration.** Air filtration shall conform to the specifications in Section 150.0(m)12. Compliance with ASHRAE 62.2 Sections 6.7 (Minimum Filtration) and 6.7.1 (Filter Pressure Drop) shall not be required.

E. **Reserved**.

F. **Reserved.**

G. **Local mechanical exhaust.** A local mechanical exhaust system shall be installed in each kitchen and bathroom. Systems shall be rated for airflow in accordance with ASHRAE 62.2 Section 7.1.

i. **Nonenclosed kitchens** shall have a demand-controlled mechanical exhaust system meeting the requirements of Section 150.0(o)1Giii.

ii. **Enclosed kitchens and all bathrooms** shall have either one of the following alternatives a or b:

a. A demand-controlled mechanical exhaust system meeting the requirements of Section 150.0(o)1Giii.

b. A continuous mechanical exhaust system meeting the requirements of Section 150.0(o)1Giv.

iii. **Demand-controlled mechanical exhaust.** A local mechanical exhaust system shall be designed to be operated as needed.

a. **Control and operation.** Demand-controlled mechanical exhaust systems shall be provided with at least one of the following controls:

1. A readily accessible occupant-controlled ON-OFF control.

2. An automatic control that does not impede occupant ON control.

b. **Ventilation rate and capture efficiency.** The system shall meet or exceed either the minimum airflow in accordance with Table 150.0-E or the minimum capture efficiency in accordance with Table 150.0-E, and Table 150.0-G. Capture efficiency ratings shall be determined in accordance with ASTM E3087 and listed in a product directory approved by the Energy Commission.

iv. **Continuous mechanical exhaust.** A mechanical exhaust system shall be installed to operate continuously. The system may be part of a balanced mechanical ventilation system.

a. **Control and operation**. A manual ON-OFF control shall be provided for each continuous mechanical exhaust system. The system shall be designed to operate during all occupiable hours. The ON-OFF control shall be accessible to the dwelling unit occupant.

b. **Ventilation rate.** The minimum delivered ventilation shall be at least the amount indicated in Table 150.0-F during each hour of operation.

v**. Airflow measurement of local mechanical exhaust by the system installer.** The airflow required by Section 150.0(o)1G is the quantity of indoor air exhausted by the ventilation system as installed in the dwelling unit. When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with Section 150.0(o)1Giiib, the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be met by the installed system. The as-installed airflow shall be verified by the system installer to ensure compliance by use of either Subsection a or b below:

a. The system installer shall measure the airflow by using a flow hood, flow grid or other airflow measuring device at the mechanical ventilation fan's inlet terminals/grilles or outlet terminals/grilles in accordance with the procedures in Reference Residential Appendix RA3.7.

b. As an alternative to performing an airflow measurement of the system as installed in the dwelling unit, compliance may be demonstrated by installing an exhaust fan and duct system that conforms to the specifications of Table 150.0-H. Visual inspection shall verify the installed system conforms to the requirements of Table 150.0-H.

When using Table 150.0-H for demonstrating compliance, the airflow rating shall be greater than or equal to the value required by Section 150.0(o)1G at a static pressure greater than or equal to 0.25 in. of water (62.5 Pa). When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with Section 150.0(o)1Giiib, a static pressure greater than or equal to 0.25 in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 150.0-H for determining compliance.

Use of Table 150.0-H is limited to ventilation systems that conform to all of the following three specifications:

1. Total duct length is less than or equal to 25 ft (8 m),

2. Duct system has no more than three elbows, and
3. Duct system has exterior termination fitting with a hydraulic diameter greater than or equal to the minimum duct diameter and not less than the hydraulic diameter of the fan outlet.

vi. **Sound ratings for local mechanical exhaust.** Local mechanical exhaust systems shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2 at no less than the minimum airflow rate required by Section 150.0(o)1G.

Exception to Section 150.0(o)1Gvi: Kitchen range hoods may be rated for sound at no less than 100 cfm at a static pressure determined at working speed as specified in HVI 916 section 7.2.

H. **Airflow measurement of whole-dwelling unit ventilation.** The airflow required by Section 150.0(o)1C is the quantity of outdoor ventilation air supplied or indoor air exhausted by the mechanical ventilation system as installed and shall be measured by using a flow hood, flow grid or other airflow measuring device at the mechanical ventilation fan's inlet terminals/grilles or outlet terminals/grilles in accordance with the procedures in Reference Residential Appendix RA3.7. Balanced mechanical ventilation system airflow shall be the average of the supply fan and exhaust fan flows.

I. **Sound ratings for whole-dwelling unit ventilation systems. Whole-**dwelling unit ventilation systems shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2 at no less than the minimum airflow rate required by Section 150.0(o)1C.

J. **Label for whole-dwelling unit ventilation system on-off control**. Compliance with ASHRAE 62.2 Section 4.4 (Control and Operation) shall require manual ON-OFF control switches associated with whole-dwelling unit ventilation systems to have a label clearly displaying the following text, or equivalent text: "This switch controls the indoor air quality ventilation for the home. Leave switch in the 'on' position at all times unless the outdoor air quality is very poor."

K. **Combustion air and compensating outdoor air or makeup air.**

i. All dwelling units shall conform to the applicable requirements specified in California Mechanical Code Chapter 7, Combustion Air.

ii. All dwelling units shall conform to the requirements in ASHRAE 62.2 Section 6.4, Combustion and Solid-Fuel-Burning Appliances.

2. **Field verification and diagnostic testing.**

A. **Whole-dwelling unit ventilation airflow performance**. The whole-dwelling unit ventilation airflow required by Section 150.0(o)1C shall be confirmed through field verification and diagnostic testing in accordance with the applicable procedures specified in Reference Residential Appendix RA3.7. Balanced mechanical ventilation system airflow shall be the average of the supply fan and exhaust fan flows. Ventilation airflow of systems with multiple operating modes shall be tested in all modes designed to comply with the required ventilation airflows.

B. **Kitchen local mechanical exhaust—vented range hoods**. Vented range hoods installed to comply with local mechanical exhaust requirements specified in Section 150.0(o)1G shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.7.4.3 to confirm the model is rated by HVI or AHAM to comply with the following requirements:

i. The minimum ventilation airflow rate as specified by Section 150.0(o)1G, or alternatively the minimum capture efficiency as specified by Section 150.0(o)1G.

ii The maximum sound rating as specified in Section 150.0(o)1Gvi.

C. **Heat recovery ventilation (HRV) and energy recovery ventilation (ERV) system fan efficacy**. Systems with heat or energy recovery serving a single dwelling unit shall have a fan efficacy of ≤1.0 W/cfm as confirmed by HERS field verification in accordance with Reference Appendix RA3.7.4.4.

(p) **Pool systems and equipment installation.** Any residential pool system or equipment installed shall comply with the applicable requirements of Section 110.4, as well as the requirements listed in this section.

1. **Pump sizing and flow rate.**

   A. All installed pumps and pump motors subject to State or federal appliance standards shall be listed in the Commission's directory of certified equipment and shall comply with the Appliance Efficiency Regulations.

   B. All pump flow rates shall be calculated using the following system equation:

   $$H = C \times F^2$$

   where:

   H is the total system head in feet of water.

   F is the flow rate in gallons per minute (gpm).

   C is a coefficient based on the volume of the pool:

   0.0167 for pools less than or equal to 17,000 gallons.

   0.0082 for pools greater than 17,000 gallons.

   C. Filtration pumps shall be sized, or if programmable shall be programmed, so that the filtration flow rate is not greater than the rate needed to turn over the pool water volume in 6 hours or 36 gpm, whichever is greater; and

   D. Pump motors used for filtration shall meet the applicable federal standard in 10 CFR 431.465; and

   E. Each auxiliary pool load shall be served by either separate pumps, or the system shall be served by a multispeed pump; and

   Exception to Section 150.0(p)1E: Pumps less than 1 hp may be single speed.

   F. Multispeed pumps shall have controls which default to the filtration flow rate when no auxiliary pool loads are operating; and

   G. For multispeed pumps, the controls shall default to the filtration flow rate setting within 24 hours and shall have an override capability for servicing.

2. **System piping.**

   A. A length of straight pipe that is greater than or equal to at least 4 pipe diameters shall be installed before the pump; and

   B. Pool piping shall be sized so that the velocity of the water at maximum flow for auxiliary pool loads does not exceed 8 feet per second in the return line and 6 feet per second in the suction line; and

   C. All elbows shall be sweep elbows or of an elbow-type that has a pressure drop of less than the pressure drop of straight pipe with a length of 30 pipe diameters.

3. **Filters.** Filters shall be at least the size specified in NSF/ANSI 50 for public pool intended applications.

4. **Valves.** Minimum diameter of backwash valves shall be 2 inches or the diameter of the return pipe, whichever is greater.

(q) **Fenestration products.** Fenestration separating conditioned space from unconditioned space or outdoors shall meet the requirements of either Item 1 or 2 below:

1. Fenestration, including skylight products, must have a maximum U-factor of 0.45.

   Exception 1 to Section 150.0(q)1: Up to 10 square feet of fenestration area or 0.5 percent of the conditioned floor area, whichever is greater, is exempt from the maximum U-factor requirement.

Exception 2 to Section 150.0(q)1: For dual-glazed greenhouse or garden windows, up to 30 square feet of fenestration area is exempt from the maximum U-factor requirement.

2. The area-weighted average U-factor of all fenestration, including skylight products shall not exceed 0.45.

(r) **Solar ready buildings.** shall meet the requirements of Section 110.10 applicable to the building project.

(s) **Energy Storage Systems (ESS) ready.** All single-family residences that include one or two dwelling units shall meet the following. All electrical components shall be installed in accordance with the *California Electrical Code*:

1. At least one of the following shall be provided:

   A. ESS ready interconnection equipment with a minimum backed-up capacity of 60 amps and a minimum of four ESS-supplied branch circuits, or

   B. A dedicated raceway from the main service to a panelboard (subpanel) that supplies the branch circuits in Section 150.0(s)(2). All branch circuits are permitted to be supplied by the main service panel prior to the installation of an ESS. The trade size of the raceway shall be not less than one inch. The panelboard that supplies the branch circuits (subpanel) must be labeled "Subpanel shall include all backed-up load circuits."

2. A minimum of four branch circuits shall be identified and have their source of supply collocated at a single panelboard suitable to be supplied by the ESS. At least one circuit shall supply the refrigerator, one lighting circuit shall be located near the primary egress, and at least one circuit shall supply a sleeping room receptacle outlet.

3. The main panelboard shall have a minimum busbar rating of 225 amps.

4. Sufficient space shall be reserved to allow future installation of a system isolation equipment/transfer switch within 3 feet of the main panelboard. Raceways shall be installed between the panelboard and the system isolation equipment/transfer switch location to allow the connection of backup power source.

(t) **Heat pump space heater ready.** Systems using gas or propane furnace to serve individual dwelling units shall include the following:

1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the *California Electrical Code*.

2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V use."

(u) **Electric cooktop ready.** Systems using gas or propane cooktop to serve individual dwelling units shall include the following:

1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the cooktop and accessible to the cooktop with no obstructions. The branch circuit conductors shall be rated at 50 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the *California Electrical Code*.

2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric cooktop installation. The reserved space shall be permanently marked as "For Future 240V use."

(v) **Electric clothes dryer ready.** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units shall include the following:

1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the clothes dryer location and accessible to the clothes dryer location with no obstructions. The branch circuit conductors shall be

rated at 30 amps minimum. The blank cover shall be identified as “240V ready.” All electrical components shall be installed in accordance with the *California Electrical Code*.

2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric clothes dryer installation. The reserved space shall be permanently marked as “For Future 240V use.”

TABLE 150.0-A CLASSIFICATION OF HIGH LUMINOUS EFFICACY LIGHT SOURCES

Light sources in this column other that those installed in ceiling recessed downlight luminaires are classified as high luminous efficacy and are **not** required to comply with Reference Joint Appendix JA8.	Light sources in this column are required to comply with Reference Joint Appendix JA8 and shall be certified and marked as required by JA8.
1. LED light sources installed outdoors. 2. Inseparable Solid State Lighting (SSL) luminaires containing colored light sources that are installed to provide decorative lighting. 3. Pin-based linear fluorescent or compact fluorescent light sources using electronic ballasts. 4. High intensity discharge (HID) light sources including pulse start metal halide and high pressure sodium light sources. 5. Luminaires with hardwired high frequency generator and induction lamp. 6. Ceiling Fan Light Kits subject to federal appliance regulations.	7. All light sources installed in ceiling recessed downlight luminaires. Note that ceiling recessed downlight luminaires shall not have screw base sockets regardless of lamp type as specified in Section 150.0(k)1C. 8. Any light source not otherwise listed in this table.

TABLE 150.0-B: Return Duct Sizing for Single Return Duct Systems

Return duct length shall not exceed 30 feet and shall contain no more than 180 degrees of bend. If the total bending exceeds 90 degrees, one bend shall be a metal elbow.

Return grille devices shall be labeled in accordance with the requirements in Section 150.0(m)12Biv to disclose the grille's design airflow rate and a maximum allowable clean-filter pressure drop of 25 Pa (0.1 inches water) for the air filter when tested using ASHRAE Standard 52.2, or as rated in accordance with AHRI Standard 680 for the design airflow rate for the return grille.

SYSTEM NOMINAL COOLING CAPACITY **(Ton)***	**RETURN DUCT MINIMUM NOMINAL DIAMETER** **(inch)**	**MINIMUM TOTAL RETURN FILTER GRILLE NOMINAL AREA** ($inch^2$)
1.5	16	500
2.0	18	600
2.5	20	800

***Not applicable to systems with nominal cooling capacity greater than 2.5 tons or less than 1.5 ton.

TABLE 150.0-C: Return Duct Sizing for Multiple Return Duct Systems

Each return duct length shall not exceed 30 feet and shall contain no more than 180 degrees *of bend. If the total bending exceeds 90* degrees,*°, one bend shall be a metal elbow.*

Return grille devices shall be labeled in accordance with the requirements in Section 150.0(m)12Biv to disclose the grille's *design airflow rate and a maximum allowable clean-filter pressure drop of 25 Pa (0.1 inches water) for the air filter when tested using ASHRAE Standard 52.2, or as rated in accordance with AHRI Standard 680 for the design airflow rate for the return grille.*

System Nominal Cooling Capacity (Ton)*	***Return Duct 1 Minimum Nominal Diameter (inch)***	***Return Duct 2 Minimum Nominal Diameter (inch)***	***Minimum Total Return Filter Grille Nominal Area (inch²)***
1.5	*12*	*10*	*500*
2.0	*14*	*12*	*600*
2.5	*14*	*14*	*800*
3.0	*16*	*14*	*900*
3.5	*16*	*16*	*1000*
4.0	*18*	*18*	*1200*
5.0	*20*	*20*	*1500*

***Not applicable to systems with nominal cooling capacity greater than 5.0 tons or less than 1.5 tons.*

TABLE 150.0-D: Infiltration Effectiveness Weather and Shielding Factors [ASHRAE 62.2:Table B1]

TMY3	Wsf	Weather Station	Latitude	Longitude	State
690150	0.50	Twentynine Palms	34.30	–116.17	California
722860	0.43	March AFB	33.90	–117.25	California
722868	0.45	Palm Springs Intl	33.83	–116.50	California
722869	0.42	Riverside Muni	33.95	–117.45	California
722880	0.39	Burbank–Glendale–Pasadena AP	34.20	–118.35	California
722885	0.39	Santa Monica Muni	34.02	–118.45	California
722886	0.39	Van Nuys Airport	34.22	–118.48	California
722895	0.55	Lompoc (AWOS)	34.67	–120.47	California
722897	0.51	San Luis Co Rgnl	35.23	–120.63	California
722899	0.45	Chino Airport	33.97	–117.63	California
722900	0.38	San Diego Lindbergh Field	32.73	–117.17	California
722903	0.39	San Diego/Montgomery	32.82	–117.13	California
722904	0.40	Chula Vista Brown Field NAAS	32.58	–116.98	California
722906	0.39	San Diego North Island NAS	32.70	–117.20	California
722926	0.40	Camp Pendleton MCAS	33.30	–117.35	California
722927	0.38	Carlsbad/Palomar	33.13	–117.28	California
722930	0.39	San Diego Miramar NAS	32.87	–117.13	California

TABLE 150.0-D: Infiltration Effectiveness Weather and Shielding Factors [ASHRAE 62.2:Table B1] (continued)

722950	0.42	Los Angeles Intl Arpt	33.93	–118.40	California
722956	0.38	Jack Northrop Fld H	33.92	–118.33	California
722970	0.38	Long Beach Daugherty Fld	33.83	–118.17	California
722976	0.34	Fullerton Municipal	33.87	–117.98	California
722977	0.36	Santa Ana John Wayne AP	33.68	–117.87	California
723805	0.51	Needles Airport	34.77	–114.62	California
723810	0.59	Edwards AFB	34.90	–117.87	California
723815	0.58	Daggett Barstow–Daggett AP	34.85	–116.80	California
723816	0.62	Lancaster Gen Wm Fox Field	34.73	–118.22	California
723820	0.57	Palmdale Airport	34.63	–118.08	California
723830	0.68	Sandberg	34.75	–118.72	California
723840	0.43	Bakersfield Meadows Field	35.43	–119.05	California
723890	0.45	Fresno Yosemite Intl AP	36.78	–119.72	California
723895	0.42	Porterville (AWOS)	36.03	–119.07	California
723896	0.43	Visalia Muni (AWOS)	36.32	–119.40	California
723910	0.45	Point Mugu Nf	34.12	–119.12	California
723925	0.44	Santa Barbara Municipal AP	34.43	–119.85	California
723926	0.43	Camarillo (AWOS)	34.22	–119.08	California
723927	0.45	Oxnard Airport	34.20	–119.20	California
723940	0.52	Santa Maria Public Arpt	34.92	–120.47	California
723965	0.53	Paso Robles Municipal Arpt	35.67	–120.63	California
724800	0.55	Bishop Airport	37.37	–118.35	California
724815	0.46	Merced/Macready Fld	37.28	–120.52	California
724830	0.51	Sacramento Executive Arpt	38.50	–121.50	California
724837	0.45	Beale AFB	39.13	–121.43	California
724838	0.50	Yuba Co	39.10	–121.57	California
724839	0.51	Sacramento Metropolitan AP	38.70	–121.58	California
724915	0.49	Monterey Naf	36.60	–121.87	California
724917	0.54	Salinas Municipal AP	36.67	–121.60	California
724920	0.50	Stockton Metropolitan Arpt	37.90	–121.23	California
724926	0.47	Modesto City–County AP	37.63	–120.95	California
724927	0.53	Livermore Municipal	37.70	–121.82	California
724930	0.54	Oakland Metropolitan Arpt	37.72	–122.22	California
724935	0.47	Hayward Air Term	37.67	–122.12	California
724936	0.53	Concord–Buchanan Field	38.00	–122.05	California
724940	0.60	San Francisco Intl AP	37.62	–122.40	California
724945	0.48	San Jose Intl AP	37.37	–121.93	California
724955	0.55	Napa Co. Airport	38.22	–122.28	California
724957	0.49	Santa Rosa (AWOS)	38.52	–122.82	California

TABLE 150.0-D: Infiltration Effectiveness Weather and Shielding Factors [ASHRAE 62.2:Table B1] (continued)

TMY3	wsf	Weather Station	Latitude	Longitude	State
725845	0.44	Blue Canyon AP	39.30	–120.72	California
725846	0.66	Truckee–Tahoe	39.32	–120.13	California
725847	0.64	South Lake Tahoe	38.90	–120.00	California
725905	0.47	Ukiah Municipal AP	39.13	–123.20	California
725910	0.50	Red Bluff Municipal Arpt	40.15	–122.25	California
725920	0.47	Redding Municipal Arpt	40.52	–122.32	California
725945	0.56	Arcata Airport	40.98	–124.10	California
725946	0.60	Crescent City Faa Ai	41.78	–124.23	California
725955	0.55	Montague Siskiyou County AP	41.78	–122.47	California
725958	0.59	Alturas	41.50	–120.53	California
745090	0.45	Mountain View Moffett Fld NAS	37.40	–122.05	California
745160	0.67	Travis Field AFB	38.27	–121.93	California
746120	0.52	China Lake Naf	35.68	–117.68	California
747020	0.50	Lemoore Reeves NAS	36.33	–119.95	California
747185	0.46	Imperial	32.83	–115.58	California
747187	0.46	Palm Springs Thermal AP	33.63	–116.17	California
747188	0.48	Blythe Riverside Co Arpt	33.62	–114.72	California

Table 150.0-E Demand-Controlled Local Ventilation Exhaust Airflow Rates and Capture Efficiency

Application	Compliance Criteria
Enclosed Kitchen or Nonenclosed Kitchen	Vented range hood, including appliance-range hood combinations shall meet either the capture efficiency (CE) or the airflow rate specified in Table 150.0-G as applicable.
Enclosed Kitchen	Other kitchen exhaust fans, including downdraft: 300 cfm (150 L/s) or a capacity of 5 ACH
Nonenclosed Kitchen	Other kitchen exhaust fans, including downdraft: 300 cfm (150 L/s)
Bathroom	50 cfm (25 L/s)

Table 150.0-F Continuous Local Ventilation Exhaust Airflow Rates

Application	Airflow
Enclosed kitchen	5 ach, based on kitchen volume
Bathroom	20 cfm (10 L/s)

Table 150.0-G Kitchen Range Hood Airflow Rates (cfm) and ASTM E3087 Capture Efficiency (CE) Ratings According to Dwelling Unit Floor Area and Kitchen Range Fuel Type

Dwelling Unit Floor Area (ft^2)	Hood Over Electric Range	Hood Over Natural Gas Range
>1500	50% CE or 110 cfm	70% CE or 180 cfm
>1000 - 1500	50% CE or 110 cfm	80% CE or 250 cfm
750 - 1000	55% CE or 130 cfm	85% CE or 280 cfm
<750	65% CE or 160 cfm	85% CE or 280 cfm

Table 150.0-H Prescriptive Ventilation System Duct Sizing [ASHRAE 62.2:Table 5-3]

Fan Airflow Rating, cfm at minimum static pressure[f] 0.25 in. water (L/s at minimum 62.5 Pa)	≤50 (25)	≤80 (40)	≤100 (50)	≤125 (60)	≤150 (70)	≤175 (85)	≤200 (95)	≤250 (120)	≤350 (165)	≤400 (190)	≤450 (210)	≤700 (330)	≤800 (380)
Minimum Duct Diameter, in. (mm) [a,b] For Rigid duct	4 [e] (100)	5 (125)	5 (125)	6 (150)	6 (150)	7 (180)	7 (180)	8 (205)	9 (230)	10 (255)	10 (255)	12 (305)	12 [d] (305)
Minimum Duct Diameter, in. (mm) [a,b] For Flex duct [c]	4 (100)	5 (125)	6 (150)	6 (150)	7 (150)	7 (180)	8 (205)	8 (205)	9 (230)	10 (255)	NP	NP	NP

Footnotes for Table 150.0-H:

a. For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.
b. NP = application of the prescriptive table is not permitted for this scenario.
c. Use of this table for verification of flex duct systems requires flex duct to be fully extended and any flex duct elbows to have a minimum bend radius to duct diameter ratio of 1.0.
d. For this scenario, use of elbows is not permitted.
e. For this scenario, 4 in. (100 mm) oval duct shall be permitted, provided the minor axis of the oval is greater than or equal to 3 in. (75 mm)
f. When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with 150.0(o)1Giiib, a static pressure greater than or equal to 0.25 in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 150.0-H for determining compliance.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SUBCHAPTER 8
SINGLE-FAMILY RESIDENTIAL BUILDINGS - PERFORMANCE AND PRESCRIPTIVE COMPLIANCE APPROACHES

SECTION 150.1 – PERFORMANCE AND PRESCRIPTIVE COMPLIANCE APPROACHES FOR SINGLE-FAMILY RESIDENTIAL BUILDINGS

(a) **Basic Requirements.** Single-family residential buildings shall meet all of the following:

1. The applicable requirements of Sections 110.0 through 110.10.
2. The applicable requirements of Section 150.0 (mandatory features).
3. Either the performance standards or the prescriptive standards set forth in this section for the Climate Zone in which the building is located. Climate zones are shown in Reference Joint Appendix JA2 – Weather/Climate Data.

   Exception to Section 150.1(a)3: If a single contiguous subdivision or tract falls in more than one Climate Zone, all buildings in the subdivision or tract may be designed to meet the performance or prescriptive standards for the climate zones that contains 50 percent or more of the dwelling units.

   Note: The Commission periodically updates, publishes, and makes available to interested persons and local enforcement agencies precise descriptions of the climate zones, as specified in Reference Joint Appendix JA2 – Weather/Climate Data.

Note: The requirements of Sections 150.0(a) through 150.0(r) apply to newly constructed buildings and Sections 150.2(a) and 150.2(b) specifies changes to the requirements of Sections 150.1(a) through 150.1(c) that apply to additions or alterations.

(b) **Performance standards.** A building complies with the performance standards if the energy consumption calculated for the proposed design building is no greater than the energy budget calculated for the standard design building using Commission-certified compliance software as specified by the Alternative Calculation Methods Approval Manual.

1. **Newly constructed buildings.** The Energy Budget for newly constructed buildings is expressed in terms of the Energy Design Ratings, which are based on source energy and time-dependent valuation (TDV) energy. The Energy Design Rating 1 (EDR1) is based on source energy. The Energy Design Rating 2 (EDR2) is based on TDV energy and has two components, the Energy Efficiency Design Rating, and the Solar Electric Generation and Demand Flexibility Design Rating. The total Energy Design Rating shall account for both the Energy Efficiency Design Rating and the Solar Electric Generation and Demand Flexibility Design Rating. The proposed building shall separately comply with the Source Energy Design Rating, Energy Efficiency Design Rating and the Total Energy Design Rating.

   Exception to Section 150.1(b)1. A community shared solar electric generation system, or other renewable electric generation system, or community shared battery storage system, which provides dedicated power, utility energy reduction credits, or payments for energy bill reductions, to the permitted building and is approved by the Energy Commission as specified in Title 24, Part 1, Section 10-115, may offset part or all of the solar electric generation system and demand flexibility Energy Design Rating required to comply with the Standards, as calculated according to methods established by the Commission in the Residential ACM Reference Manual.

2. **Additions and alterations to existing buildings.** The energy budget for additions and alterations is expressed in terms of TDV energy.
3. **Compliance demonstration requirements for performance standards**.

   A. **Certificate of compliance and application for a building permit.** The application for a building permit shall include documentation pursuant to Sections 10-103(a)1 and 10-103(a)2 which demonstrates, using an

approved calculation method, that the building has been designed so that its Energy Efficiency Design Rating and the total EDR meets or exceeds the standard design EDR for the applicable climate zone.

Exception n to Section 150.1(b)3A: Multiple orientation: A permit applicant may demonstrate compliance with the energy budget requirements of Section 150.1(a) and (b) for any orientation of the same building model if the documentation demonstrates that the building model with its proposed designs and features would comply in each of the four cardinal orientations.

B. **Field verification**. When performance of installed features, materials, components, manufactured devices or systems above the minimum specified in Section 150.1(c) is necessary for the building to comply with Section 150.1(b), or is necessary to achieve a more stringent local ordinance, field verification shall be performed in accordance with the applicable requirements in the following subsections, and the results of the verification(s) shall be documented on applicable certificates of installation pursuant to Section 10-103(a)3 and applicable certificates of verification pursuant to Section 10-103(a)5.

i. **EER/EER2/SEER/SEER2/CEER/HSPF/HSPF2 Rating.** When performance compliance requires installation of a space conditioning system with a rating that is greater than the minimum rating required by Table 150.1-A or specified for the standard design, the installed system shall be field verified in accordance with the procedures specified in the applicable sections of Reference Residential Appendix RA3.4.

ii. **Variable capacity heat pump (VCHP) compliance option**. When performance compliance requires installation of a heat pump system that meets all the requirements of the VCHP compliance option specified in the ACM Reference Manual, the system shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.4.4.3.

iii. **Low leakage air handler.** When performance compliance requires installation of a low leakage air-handling unit, the installed air-handling unit shall be field verified in accordance with the procedures specified in Reference Residential Appendix RA3.1.4.3.9.

iv. **RESERVED**

v. **Heat pump** - **rated heating capacity.** When performance compliance requires installation of a heat pump system, the heating capacity values at 47° F and 17° F shall be field verified in accordance with the procedures specified in Reference Residential Appendix RA3.4.

vi. **Whole-house fan**. When performance compliance requires installation of a whole-house fan, the whole-house fan ventilation airflow rate and fan efficacy shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.9.

vii. **Central fan ventilation cooling system**. When performance compliance requires installation of a central fan ventilation cooling system, the installed system shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.3.4.

viii. **Building enclosure air leakage**. When performance compliance requires a building enclosure leakage rate that is lower than the standard design, the building enclosure shall be field verified in accordance with the procedures specified in Reference Residential Appendix RA3.8.

ix. **Quality Insulation Installation (QII).** When performance compliance requires field verification of QII, the building insulation system shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.5.

(c) **Prescriptive standards/component packages.** Buildings that comply with the prescriptive standards shall be designed, constructed and equipped to meet all of the requirements for the appropriate climate zone shown in Table 150.1-A. In Table 150.1-A, NA (not allowed) means that feature is not permitted in a particular climate zone and NR (no requirement) means that there is no prescriptive requirement for that feature in a particular climate zone. Installed components shall meet the following requirements:

1. **Insulation.**

   A. Roof and ceiling insulation shall be installed in a ventilated attic with an R-value equal to or greater than that shown in Table 150.1-A meeting options ii or iii below.

      i. Option A: **RESERVED**.

      ii. Option B: A minimum R-value of insulation installed between the roof rafters in contact with the roof deck and an additional layer of ceiling insulation located between the attic and the conditioned space when meeting Section 150.1(c)9A; or

      iii. Option C: A minimum R-value of ceiling insulation located between the attic and the conditioned space when meeting Section 150.1(c)9B.

      Note: Low rise residential single-family buildings with the ducts and air handler located in the conditioned space, as specified by Section 150.1(c)9B, need only comply with insulation requirements of Option C.

   B. **Walls.**

      i. Framed exterior walls shall be insulated such that the exterior wall has an assembly U-factor equal to or less than that shown in Table 150.1-A. The U-factors shown are maximum U-factors for the exterior wall assembly.

      ii. Mass walls above grade and below grade shall be insulated such that the wall has an assembly U-factor equal to or less than that shown in Table 150.1-A, or walls shall be insulated with continuous insulation that has an R-value equal to or greater than that shown in Table 150.1-A. “Interior” denotes continuous insulation installed on the inside surface of the wall, and “exterior” denotes continuous insulation installed on the outside surface of the wall.

      iii. Other unframed exterior walls, excluding mass walls, shall meet the requirements for framed walls shown in Table 150.1-A.

   C. Raised-floors shall be insulated such that the floor assembly has an assembly U-factor equal to or less than shown in Table 150.1-A, or shall be insulated between wood framing with insulation having an R-value equal to or greater than that shown in Table 150.1-A.

      Exception to Section 150.1(c)1C: Raised-floor insulation may be omitted if the foundation walls are insulated to meet the wall insulation minimums shown in Table 150.1-A, and a vapor retarder is placed over the entire floor of the crawl space, and the vents are fitted with automatically operated louvers, and the requirements of Reference Residential Appendix RA4.5.1 are met.

   D. Slab floor perimeter insulation shall be installed with a U-factor equal to or less than, or R-value equal to or greater than shown in TABLE 150.1-A. The minimum depth of concrete-slab floor perimeter insulation shall be 16 inches or the depth of the footing of the building, whichever is less.

      Exception to Section 150.1(c)1: The insulation requirements of Tables 150.1-A may also be met by ceiling, roof deck, wall, or floor assemblies that meet the required maximum U-factors using a U-factor calculation method that considers the thermal effects of all elements of the assembly and is approved by the Executive Director.

   E. All buildings shall comply with the Quality Insulation Installation (QII) requirements shown in Table 150.1-A. When QII is required, insulation installation shall meet the criteria specified in Reference Appendix RA3.5.

2. **Radiant barrier.** A radiant barrier required in Table 150.1-A shall meet the requirements specified in Section 110.8(j), and shall meet the installation criteria specified in the Reference Residential Appendix RA4.

3. **Fenestration.**

   A. Installed fenestration products, including glazed doors, shall have an area-weighted average U-factor and Solar Heat Gain Coefficient (SHGC) meeting the applicable fenestration value in Table 150.1-A and shall be determined in accordance with Sections 110.6(a)2 and 110.6(a)3.

   Exception 1 to Section 150.1(c)3A: For each dwelling unit, up to 3 square feet of new glazing area installed in doors and up to 3 square feet of new tubular skylights area with dual-pane diffusers shall not be required to meet the U-factor and SHGC requirements of Table 150.1-A.

   Exception 2 to Section 150.1(c)3A: For each dwelling unit up to 16 square feet of new skylight area with a maximum U-factor of 0.55 and a maximum SHGC of 0.30.

   Exception 3 to Section 150.1(c)3A For fenestration containing chromogenic type glazing:

   i. The lower-rated labeled U-factor and SHGC shall be used with automatic controls to modulate the amount of solar gain and light transmitted into the space in multiple steps in response to daylight levels or solar intensity;

   ii. Chromogenic glazing shall be considered separately from other fenestration; and

   iii. Area-weighted averaging with other fenestration that is not chromatic shall not be permitted and shall be determined in accordance with Section 110.6(a).

   EXCEPTION 4 to Section 150.1(c)3A: For dwelling units containing unrated site-built fenestration that meets the maximum area restriction, the U-factor and SHGC can be determined in accordance with the Nonresidential Reference Appendix NA6 or use default values in Table 110.6-A and Table 110.6-B.

   B. The maximum total fenestration area shall not exceed the percentage of conditioned floor area, CFA, as indicated in TABLE 150.1-A. Total fenestration includes skylights and west-facing glazing.

   C. The maximum west-facing fenestration area shall not exceed the percentage of conditioned floor area as indicated in TABLE 150.1-A. West-facing fenestration area includes skylights tilted in any direction when the pitch is less than 1:12.

4. **Shading.** Where Table 150.1-A requires a maximum SHGC, the requirements shall be met by one of the following:

   A. Complying with the required SHGC pursuant to Section 150.1(c)3A; or

   B. An exterior operable shading louver or other exterior shading device that meets the required SHGC; or

   C. A combination of Items A and B to achieve the same performance as achieved in Section 150.1(c)3A.

   D. For south-facing glazing only, optimal overhangs shall be installed so that the south-facing glazing is fully shaded at solar noon on August 21 and substantially exposed to direct sunlight at solar noon on December 21.

   E. Exterior shading devices must be permanently secured with attachments or fasteners that are not intended for removal.

   Exception to Section 150.1(c)4E: Where the California Building Code (CBC) requires emergency egress or where compliance would conflict with health and safety regulations.

5. **Doors.** Installed swinging door products separating conditioned space from outside or adjacent unconditioned space, but not including glazed door products, shall have an area-weighted average U-factor no greater than the applicable door value in Table 150.1-A and shall be determined in accordance with Section 110.6(a)2. Glazed door products are treated as fenestration products in Sections 150.1(c)3 and 150.1(c)4.

   Exception to Section 150.1(c)5: Swinging doors between the garage and conditioned space that are required to have fire protection are not required to meet the applicable door value in Table 150.1-A.

6. **Heating system type.** Heating system types shall be installed as required in Table 150.1-A. For climate zones 3, 4, 13 and 14, the space conditioning system shall be a heat pump, or shall meet the performance compliance requirements of Section 150.1(b)1.

Exception to Section 150.1(c)6: A supplemental heating unit may be installed in a space served directly or indirectly by a primary heating system, provided that the unit thermal capacity does not exceed 2 kW or 7,000 Btu/hr and is controlled by a time-limiting device not exceeding 30 minutes.

7. **Space heating and space cooling.** All space heating and space cooling equipment shall comply with minimum Appliance Efficiency Regulations as specified in Sections 110.0 through 110.2 and meet all applicable requirements of Sections 150.0 and 150.1(c)7A.

   A. **Refrigerant charge**. When refrigerant charge verification or fault indicator display is shown as required by Table 150.1-A, the system shall comply with either Section 150.1(c)7Ai or 150.1(c)7Aii:

      i. air-cooled air conditioners and air-source heat pumps, including but not limited to ducted split systems, ducted packaged systems, small duct high velocity systems, and mini-split systems, shall comply with subsections a, b and c, unless the system is of a type that cannot be verified using the specified procedures:

         a. Have measurement access holes (MAH) installed according to the specifications in Reference Residential Appendix Section RA3.2.2.3; and

            Exception to Section 150.1(c)7Aia: Systems that cannot conform to the specifications for hole location in Reference Residential Appendix Figure RA3.2-1, shall not be required to provide holes as described in Figure RA3.2-1.

         b. System airflow rate in accordance with subsection I or II shall be confirmed through field verification and diagnostic testing in accordance with all applicable procedures specified in Reference Residential Appendix Section RA3. 3 or an approved alternative procedure as specified by Section RA1; and

            I. For small duct high velocity systems the system airflow rate shall be greater than or equal to 250 cfm per ton; or

            II. For all other air-cooled air conditioner or air-source heat pump systems the system airflow rate shall be greater than or equal to 350 cfm per ton.

            Exception to Section 150.1(c)7Aib: Standard ducted systems without zoning dampers may comply with the minimum airflow rate by meeting the applicable requirements in Table-150.0-B or 150.0-C as confirmed by field verification and diagnostic testing in accordance with the procedures in Reference Residential Appendix Section RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure drop requirements of Section 150.0(m)12D for the system air filter device(s) shall conform to the requirements given in Tables 150.0-B and 150.0-C.

         c. The installer shall charge the system according to manufacturer's specifications. Refrigerant charge shall be verified according to one of the following options, as applicable:

            I. The installer and rater shall perform the standard charge procedure as specified by Reference Residential Appendix Section RA3.2.2, or an approved alternative procedure as specified by Section RA1; or

            II. The system shall be equipped with a fault indicator display (FID) device that meets the specifications of Reference Joint Appendix JA6. The installer shall verify the refrigerant charge and FID device in accordance with the procedures in Reference Residential Appendix Section RA3.4.2. The HERS Rater shall verify FID device in accordance with the procedures in Section RA3.4.2; or

            III. The installer shall perform the weigh-in charging procedure as specified by Reference Residential Appendix Section RA3.2.3.1 provided the system is of a type that can be verified using the Section RA3.2.2 standard charge verification procedure and Section RA3.3 airflow rate verification procedure or approved alternatives in Section RA1. The HERS Rater shall verify the charge using Sections RA3.2.2 and RA3.3 or approved alternatives in Section RA1.

            Exception 1 to Section 150.1(c)7Aic: When the outdoor temperature is less than 55°F and the installer utilizes the weigh-in charging procedure in Reference Residential Appendix Section

RA3.2.3.1 to verify the refrigerant charge, the installer may elect to utilize the HERS Rater verification procedure in Reference Residential Appendix Section RA3.2.3.2. If the HERS Rater verification procedure in Section RA3.2.3.2 is used for compliance, the system's thermostat shall conform to the specifications in Section 110.12. Ducted systems shall comply with minimum system airflow rate requirement in Section 150.1(c)7Aib.

ii. Air-cooled air conditioners and air-source heat pumps, including but not limited to ducted split systems, ducted packaged systems, small duct high velocity systems and mini-split systems, which are of a type that cannot comply with the requirements of Section 150.1(c)7Ai shall comply with Subsections a and b, as applicable.

a. The installer shall confirm the refrigerant charge using the weigh-in charging procedure specified in Reference Residential Appendix Section RA3.2.3.1, as verified by a HERS Rater according to the procedures specified in Reference Residential Appendix Section RA3.2.3.2; and

b. Systems that utilize forced air ducts shall comply with the minimum system airflow rate requirement in Section 150.1(c)7Aib provided the system is of a type that can be verified using the procedures in Section RA3.3 or an approved alternative procedure in Section RA1.

Exception to Section 150.1(c)7A: Packaged systems for which the manufacturer has verified correct system refrigerant charge prior to shipment from the factory are not required to have refrigerant charge confirmed through field verification and diagnostic testing. The installer of these packaged systems shall certify on the Certificate of Installation that the packaged system was pre-charged at the factory and has not been altered in a way that would affect the charge. Ducted systems shall comply with minimum system airflow rate requirements in Section 150.1(c)7Aib, provided that the system is of a type that can be verified using the procedure specified in Section RA3.3 or an approved alternative in Section RA1.

8. **Domestic water-heating systems.** Water-heating systems shall meet the requirements of A, B, C, or shall meet the performance compliance requirements of Section 150.1(b)1. For recirculation distribution systems, only demand recirculation systems with manual on/off control as specified in the Reference Appendix RA4.4.9 shall be used:

A. A single 240 volt heat pump water heater (HPWH). The storage tank shall be located in the garage or conditioned space. In addition, meet the following:

i. A compact hot water distribution system as specified in the Reference Appendix RA4.4.6 in climate zone 1 and 16; and

ii. A drain water heat recovery system that is field verified as specified in the Reference Appendix RA3.6.9 in climate zone 16.

B. A single 240 volt HPWH that meets the requirements of NEEA Advanced Water Heater Specification Tier 3 or higher. In addition, for Climate Zone 16, a drain water heat recovery system that is field verified as specified in the Reference Appendix RA3.6.9 and the storage tank shall be located in the garage or conditioned space.

C. A solar water-heating system with electric backup meeting the installation criteria specified in Reference Residential Appendix RA4 and with a minimum annual solar savings fraction of 0.7.

Exception 1 to Section 150.1(c)8: For climate zones 3, 4, 13 and 14, a gas or propane instantaneous water heater with an input of 200,000 Btu per hour or less and no storage tank may be installed.

NOTE: The space conditioning system shall be a heat pump as specified in Section 150.1(c)6.

Exception 2 to Section 150.1(c)8: An instantaneous electric water heater with point of use distribution as specified in RA4.4.5 may be installed for new dwelling units with a conditioned floor area of 500 square feet or less.

Exception 3 to Section 150.1(c)8A and B: A 120V HPWH may be installed in place of a 240V HPWH for new dwelling unit with one bedroom or less.

9. **Space conditioning distribution systems.** All space conditioning systems shall meet all applicable requirements of A or B below:

   A. High performance attics. Air handlers or ducts are allowed to be in ventilated attic spaces when the roof and ceiling insulation level meet Option B in Table 150.1-A. Duct insulation levels shall meet the requirements in Table 150.1-A.

   B. Duct and air handlers located in conditioned space. Duct systems and air handlers of HVAC systems shall be located in conditioned space, and confirmed by field verification and diagnostic testing to meet the criterion of Reference Residential Appendix Section RA3.1.4.3.8. Duct insulation levels shall meet the requirements in Table 150.1-A.

   Note: Gas heating appliances installed in conditioned spaces must meet the combustion air requirements of the California Mechanical Code Chapter 7, as applicable.

10. **Central fan integrated ventilation systems.** Central forced air system fans used to provide outside air, shall have an air-handling unit fan efficacy less than or equal to the maximum W/cfm specified in A, B, or C. The airflow rate and fan efficacy requirements in this section shall be confirmed through field verification and diagnostic testing in accordance with all applicable procedures specified in Reference Residential Appendix RA3.3. Central Fan integrated ventilation systems shall be certified to the Energy Commission as intermittent ventilation systems as specified in Reference Residential Appendix RA3.7.4.2.

    A. 0.45 W/cfm for gas furnace air-handling units.

    B. 0.58 W/cfm for air-handling units that are not gas furnaces.

    C. 0.62 W/cfm for small duct high velocity air-handling units.

    Exception to Section 150.1(c)10A: Gas furnace air-handling units manufactured prior to July 3, 2019 shall comply with a fan efficacy value less than or equal to 0.58 w/cfm as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

11. **Roofing products.** All roofing products shall meet the requirements of Section 110.8 and the applicable requirements of Subsection A or B:

    A. Single-family residential buildings with steep-sloped roofs in climate zones 10 through 15 shall have a minimum aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or a minimum SRI of 16.

    B. Single-family residential buildings with low-sloped roofs; in climate zones 13 and 15 shall have a minimum aged solar reflectance of 0.63 and a minimum thermal emittance of 0.75 or a minimum SRI of 75.

    Exception 1 to Section 150.1(c)11: Building integrated photovoltaic panels and building integrated solar thermal panels are exempt from the minimum requirements for aged solar reflectance and thermal emittance or SRI.

    Exception 2 to Section 150.1(c)11: Roof constructions with a weight of at least 25 lb/ft^2 are exempt from the minimum requirements for aged solar reflectance and thermal emittance or SRI.

12. **Ventilation cooling**. Single--family homes shall comply with the Whole-house fan (WHF) requirements shown in Table 150.1-A. When a WHF is required, comply with Subsections A, B and C below.

    A. Have installed one or more WHFs whose total airflow cfm is equal to or greater than 1.5 cfm/ft^2 of conditioned floor area. Airflow cfm for WHF's shall be determined based on the airflow listed in the Home Ventilating Institute Certified Products Directory.

    B. Have at least 1 square foot of attic vent free area for each 750 cfm of rated whole-house fan airflow cfm, or if the manufacturer has specified a greater free vent area, the manufacturers' free vent area specifications.

    Exception to Section 150.1(c)12B: WHFs that are directly vented to the outside.

    C. Provide homeowners who have WHFs with a one page "How to operate your whole-house fan" informational sheet.

Exception to section 150.1(c)12: New dwelling units with a conditioned floor area of 500 square feet or less shall not be required to comply with the WHF requirements.

13. **HVAC system bypass ducts.** Bypass ducts that deliver conditioned supply air directly to the space conditioning system return duct airflow shall not be used.

14. **Photovoltaic requirements.** All single-family residential buildings shall have a newly installed photovoltaic (PV) system or newly installed PV modules meeting the minimum qualification requirements specified in Joint Appendix JA11. The annual electrical output of the PV system shall be no less than the smaller of a PV system size determined using Equation 150.1-C, or the maximum PV system size that can be installed on the building's Solar Access Roof Area (SARA).

    A. SARA includes the area of the building's roof space capable of structurally supporting a PV system, and the area of all roof space on covered parking areas, carports, and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2, Section 1511.2.

    B. SARA does NOT include:

        i. Any roof area that has less than 70 percent annual solar access. Annual solar access is determined by dividing the total annual solar insolation, accounting for shading obstructions, by the total annual solar insolation if the same areas were unshaded by obstructions. For steep slope roofs only shading from existing permanent natural or manmade obstructions that are external to the dwelling, including but not limited to trees, hills, and adjacent structures, shall be considered for annual solar access calculations. For low slope roofs, all obstructions including those that are external to the dwelling unit, and obstructions that are part of the building design and elevation features shall be considered for the annual solar access calculations.

        ii. Occupied roof areas as specified by CBC Section 503.1.4.

        iii. Roof area that is otherwise not available due to compliance with other building code requirements if confirmed by the Executive Director.

    EQUATION 150.1-C ANNUAL PHOTOVOLTAIC ELECTRICAL OUTPUT

    $$kW_{PV} = (CFA \times A)/1000 + (N_{DU} \times B)$$

    WHERE:

    kW_{PV} = kW_{dc} size of the PV system

    CFA = Conditioned floor area

    N_{DU} = Number of dwelling units

    A = CFA adjustment factor from Table 150.1-C

    B = Dwelling unit adjustment factor from Table 150.1-C

    Exception 1 to Section 150.1(c)14: For steep slope roofs, SARA shall not consider roof areas with a northerly azimuth that lies between 300 degrees and 90 degrees from true north. No PV system is required if the SARA is less than 80 contiguous square feet.

    Exception 2 to Section 150.1(c)14: No PV system is required when the minimum PV system size specified by section 150.1(c)14 is less than 1.8 kW_{dc}.

    Exception 3 to Section 150.1(c)14: Buildings with enforcement-authority-approved roof designs, where the enforcement authority determines it is not possible for the PV system, including panels, modules and components

and supports and attachments to the roof structure, to meet the requirements of the American Society of Civil Engineers (ASCE), Standard 7-16, Chapter 7, Snow Loads.

Exception 4 to Section 150.1(c)14: For buildings that are approved by the local planning department prior to January 1, 2020 with mandatory conditions for approval:

a. Shading from roof designs and configurations for steep-sloped roofs, which are required by the mandatory conditions for approval, shall be considered for the annual solar access calculations; and

b. Roof areas that are not allowed by the mandatory conditions for approval to have PVs, shall not be considered in determining the SARA.

EXCEPTION 5 to Section 150.1(c)14: PV system sizes determined using Equation 150.1-C may be reduced by 25 percent if installed in conjunction with a battery storage system. The battery storage system shall meet the qualification requirements specified in Joint Appendix JA12 and have a minimum usable capacity of 7.5 kWh

TABLE 150.1-A COMPONENT PACKAGE – Single-Family Standard Building Design

Single-Family				Climate Zone														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Building Envelope Insulation																			
Building Envelope	**Roofs/Ceilings**	**Option B (meets § 150.1(c)9A)**	Below Roof Deck Insulation[1,2] (With Air Space)	NR	NR	NR	R 19	NR	NR	NR	R 19	R 19	R 19	R 19	R 19	R 19	R 19	R 19	R 19
			Ceiling Insulation	R 38	R 38	R 30	R 38	R 30	R 30	R 30	R 38	R 38	R 38	R 38	R 38	R 38	R 38	R 38	R 38
			Radiant Barrier	NR	REQ	REQ	NR	REQ	REQ	REQ	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Option C (meets § 150.1(c)9B)	Ceiling Insulation	R 38	R 30	R 30	R 30	R 30	R 30	R 30	R 30	R 30	R 30	R 38	R 38	R 38	R 38	R 38	R 38
			Radiant Barrier	NR	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	NR
	Walls	**Above Grade**	Framed[3]	U 0.048	U 0.048	U 0.048	U 0.048	U 0.048	U 0.065	U 0.065	U 0.048	U 0.048	U 0.048	U 0.048	U 0.048	U 0.048	U 0.048	U 0.048	U 0.048
			Mass Wall Interior[4,5]	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.059 R 17
			Mass Wall Exterior[4,5]	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.125 R 8.0	U 0.077 R 13
		Below Grade	Below Grade Interior[6]	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.067 R 15
			Below Grade Exterior[6]	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.200 R 5.0	U 0.100 R 10	U 0.100 R 10	U 0.053 R 19

TABLE 150.1-A COMPONENT PACKAGE – Single-Family Standard Building Design (continued)

				Climate Zone															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Building Envelope	Floors	Slab Perimeter		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U-0.58 R-7.0
		Raised		U- 0.037 R-19	U- 0.037 R-19	U- 0.037 R-19	U- 0.037 R-19	U- 0.037 R-19	U- 0.037 R-19	U- 0.037 R-19	U-0.037 R-19	U- 0.037 R-19	U- 0.037 R-19	U- 0.037 R-19	U- 0.037 R-19	U-0.037 R-19	U-0.037 R-19	U-0.037 R-19	U- 0.037 R-19
		Concrete Raised		U 0.092 R-8.0	U 0.092 R-8.0	U 0.269 R-0	U 0.269 R-0	U 0.269 R-0	U 0.269 R-0	U 0.269 R-0	U 0.269 R-0	U 0.269 R-0	U 0.269 R-0	U 0.092 R-8.0	U 0.138 R-4.0	U 0.092 R-8.0	U 0.092 R-8.0	U 0.138 R-4.0	U 0.092 R-8.0
	Quality Insulation Installation (QII)			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Roofing Product	Low-Sloped	Aged Solar Reflectance	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.63	NR	0.63	NR
			Thermal Emittance	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.75	NR	0.75	NR
		Steep-Sloped	Aged Solar Reflectance	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.20	0.20	0.20	0.20	0.20	0.20	NR
			Thermal Emittance	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.75	0.75	0.75	0.75	0.75	0.75	NR
	Fenestration	Maximum U-factor		0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
		Maximum SHGC		NR	0.23	NR	0.23	NR	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	NR
		Maximum Total Area		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
		Maximum West Facing Area		NR	5%	NR	5%	NR	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	NR
	Door	Maximum U-factor		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

TABLE 150.1-A COMPONENT PACKAGE – Single-Family Standard Building Design (continued)

				Climate Zone															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HVAC System	Space Heating[9]	Electric-Resistance Allowed		No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		If gas, AFUE		MIN	MIN	NA	NA	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	NA	NA	MIN	MIN
		If Heat Pump, HSPF[7] /HSPF2		MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN
	Space Cooling	SEER/SEER2		MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN
		Refrigerant Charge Verification or Fault Indicator Display		NR	REQ	NR	NR	NR	NR	NR	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	NR
		Whole-house fan[8]		NR	NR	NR	NR	NR	NR	NR	REQ	REQ	REQ	REQ	REQ	REQ	REQ	NR	NR
	Central System Air Handlers	Central Fan Integrated Ventilation System Fan Efficacy		REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ
	Ducts[10]	Roof/Ceiling Options B	Duct Insulation	R-8	R-8	R- 6	R-8	R- 6	R- 6	R- 6	R-8	R-8	R-8	R-8	R-8	R-8	R-8	R-8	R-8
			§150.1(c)9A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Roof/Ceiling Option C	Duct Insulation	R-6	R-6	R-6	R-6	R-6	R-6	R-6	R-6	R-6	R-6	R- 6	R-6	R-6	R- 6	R- 6	R- 6
			§150.1(c)9B	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ
Water Heating	All Buildings			System Shall meet Section 150.1(c)8															

Footnote requirements to TABLE 150.1-A:

1. Install the specified R-value with an air space present between the roofing and the roof deck, such as standard installation of concrete or clay tile.
2. R-values shown for below roof deck insulation are for wood-frame construction with insulation installed between the framing members. Alternatives including insulation above rafters or above roof deck shall comply with the performance standards.
3. Assembly U-factors for exterior framed walls can be met with cavity insulation alone or with continuous insulation alone, or with both cavity and continuous insulation that results in an assembly U-factor equal to or less than the U-factor shown. Use Reference Joint Appendices JA4 Table 4.3.1, 4.3.1(a), or Table 4.3.4 to determine alternative insulation products to be less than or equal to the required maximum U-factor.
4. Mass wall has a heat capacity greater than or equal to 7.0 Btu/h-ft^2.
5. "Interior" denotes insulation installed on the inside surface of the wall. "Exterior" denotes insulation installed on the exterior surface of the wall.
6. Below grade "interior" denotes insulation installed on the inside surface of the wall, and below grade "exterior" denotes insulation installed on the outside surface of the wall.
7. HSPF means heating seasonal performance factor.
8. When whole-house fans are required (REQ), only those whole-house fans that are listed in the Home Ventilating Institute Certified Products Directory may be installed. Compliance requires installation of one or more WHFs whose total airflow cfm is capable of meeting or exceeding a minimum 1.5 cfm/square foot of conditioned floor area as specified by Section 150.1(c)12.
9. A supplemental heating unit may be installed in a space served directly or indirectly by a primary heating system, provided that the unit thermal capacity does not exceed 2 kilowatts or 7,000 Btu/hr and is controlled by a time-limiting device not exceeding 30 minutes.
10. For duct and air handler location: REQ denotes location in conditioned space. When the table indicates ducts and air handlers are in conditioned space, a HERS verification is required as specified by Reference Residential Appendix RA3.1.4.3.8.

TABLE 150.1-B RESERVED

Table 150.1-C – CFA and Dwelling Unit Adjustment Factors

Climate Zone	A - CFA	B - Dwelling Units
1	0.793	1.27
2	0.621	1.22
3	0.628	1.12
4	0.586	1.21
5	0.585	1.06
6	0.594	1.23
7	0.572	1.15
8	0.586	1.37
9	0.613	1.36
10	0.627	1.41
11	0.836	1.44
12	0.613	1.40
13	0.894	1.51
14	0.741	1.26
15	1.56	1.47
16	0.59	1.22

Note: Authority: Sections 25213, 25218, 25218.5, 25402, 25402.1, and 25605, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, 25605, and 25943, Public Resources Code.

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SUBCHAPTER 9
SINGLE-FAMILY RESIDENTIAL BUILDINGS - ADDITIONS AND ALTERATIONS TO EXISTING RESIDENTIAL BUILDINGS

SECTION 150.2 – ENERGY EFFICIENCY STANDARDS FOR ADDITIONS AND ALTERATIONS TO EXISTING SINGLE-FAMILY RESIDENTIAL BUILDINGS

(a) **Additions.** Additions to existing single-family residential buildings shall meet the requirements of Sections 110.0 through 110.9, Sections 150.0(a) through (n), (p), (q), and either Section 150.2(a)1 or 2.

Exception 1 to Section 150.2(a): Additions of 300 square feet or less are exempt from the roofing requirements of Section 150.1(c)11.

Exception 2 to Section 150.2(a): Existing inaccessible piping shall not require insulation as defined under Section 150.0(j)1.

Exception 3 to Section 150.2(a): Space-conditioning system. When heating or cooling will be extended to an addition from the existing system(s), the existing heating and cooling equipment need not comply with Part 6. The heating system capacity must be adequate to meet the minimum requirements of CBC Section 1204.1.

Exception 4 to Section 150.2(a): space-conditioning system ducts. When any length of duct is extended from an existing duct system to serve the addition, the existing duct system and the extended duct shall meet the applicable requirements specified in Section 150.2(b)1Di and 150.2(b)1Dii.

Exception 5 to Section 150.2(a): Additions 1,000 square feet or less are exempt from the ventilation cooling requirements of Section 150.1(c)12.

Exception 6 to Section 150.2(a): Photovoltaic systems, as specified in Section 150.1(c)14, are not required for additions.

Exception 7 to Section 150.2(a): Space heating system. New or replacement space heating system serving an addition may be a heat pump or gas heating system.

1. **Prescriptive approach.** Additions to existing buildings shall meet the following additional requirements:
    A. Additions that are greater than 700 square feet shall meet the requirements of Section 150.1(c), with the following modifications:
        i. Extensions of existing wood-framed walls may retain the dimensions of the existing walls and shall install cavity insulation of R-15 in a 2x4 framing and R-21 in a 2x6 framing.
        ii. The maximum allowed fenestration area shall be the greater of 175 square feet or 20 percent of the addition floor area, and the maximum allowed west-facing fenestration area shall be the greater of 70 square feet or the requirements of Section 150.1(c).
        iii. When existing siding of a wood-framed wall is not being removed or replaced, cavity insulation of R-15 in a 2x4 framing and R-21 in a 2x6 framing shall be installed and continuous insulation is not required.
        iv. Additions that consist of the conversion of existing spaces from unconditioned to conditioned space shall not be required to perform the following as part of QII:
            a. Existing window and door headers shall not be required to be insulated.

b. Air sealing shall not be required when the existing air barrier is not being removed or replaced.

B. Additions that are 700 square feet or less shall meet the requirements of Section 150.1(c), with the following modifications:

i. Roof and ceiling insulation in a ventilated attic shall meet one of the following requirements:

a. In Climate Zones 1, 2, 4, and 8 through 16, achieve an overall assembly U-factor not exceeding 0.025. In wood framed assemblies, compliance with U-factors may be demonstrated by installing insulation with an R-value of R-38 or greater.

b. In Climate Zones 3, and 5 through 7, achieve an overall assembly U-factor not exceeding 0.031. In wood framed assemblies, compliance with U-factors may be demonstrated by installing insulation with an R-value of R-30 or greater.

ii. Radiant barriers shall be installed in climate zones 2-15.

iii. Extensions of existing wood-framed walls may retain the dimensions of the existing walls and shall install cavity insulation of R-15 in a 2×4 framing and R-21 in a 2×6 framing.

iv. In Climate Zones 2, 4 and 6-15; the maximum allowed west-facing fenestration area shall not be greater than 60 square feet; and shall also comply with either a or b below:

a. For additions that are 700 square feet or less but greater than 400 square feet, the maximum allowed fenestration area limit is the greater of 120 square feet or 25 percent of the conditioned floor area of the addition; or

b. For additions that are 400 square feet or less, the maximum allowed fenestration area is the greater of 75 square feet or 30 percent of the conditioned floor area of the addition.

v. Quality Insulation Installation (QII) requirements of Section 150.1(c)1E do not apply.

vi. When existing siding of a wood-framed wall is not being removed or replaced, cavity insulation of R-15 in a 2×4 framing and R-21 in a 2×6 framing shall be installed and continuous insulation is not required.

Exception to Section 150.2(a)1B: Insulation in an enclosed rafter ceiling shall meet the requirements of Section 150.0.

C. **Mechanical ventilation for indoor air quality**. Additions to existing buildings shall comply with Section 150.0(o) subject to the requirements specified in subsections i and ii below.

i. **Whole-dwelling unit mechanical ventilation**.

a. Dwelling units that meet the conditions in subsections 1, or 2 below shall not be required to comply with the whole-dwelling unit ventilation airflow specified in Sections 150.0(o)1C, 150.0(o)1E, or 150.0(o)1F.

1. Additions to an existing dwelling unit that increase the conditioned floor area of the existing dwelling unit by less than or equal to 1000 square feet.

2. Junior Accessory Dwelling Units (JADU) that are additions to an existing building.

b. Additions to an existing dwelling unit that increase the conditioned floor area of the existing dwelling unit by more than 1,000 square feet shall have mechanical ventilation airflow in accordance with Section 150.0(o)1C, 150.0(o)1E, or 150.0(o)1F as applicable. The mechanical ventilation airflow rate shall be based on the conditioned floor area of the entire dwelling unit comprised of the existing dwelling unit conditioned floor area plus the addition conditioned floor area.

c. New dwelling units that are additions to an existing building shall have mechanical ventilation airflow provided in accordance with Section 150.0(o)1C, 150.0(o)1E, or 150.0(o)1F as applicable. The mechanical ventilation airflow rate shall be based on the conditioned floor area of the new dwelling unit.

ii. **Local mechanical exhaust**. Additions to existing buildings shall comply with all applicable requirements specified in 150.0(o)1G and 150.0(o)2.

D. **Water heater**. When a second water heater is installed as part of the addition, one of the following types of water heaters shall be installed:

i. A single heat pump water heater. The storage tank shall not be located outdoors and shall be placed on an incompressible, rigid insulated surface with a minimum thermal resistance of R-10. The water heater shall be installed with a communication interface that meets either the requirements of 110.12(a) or has a ANSI/CTA-2045-B communication port; or

ii. A single heat pump water heater that meets the requirements of NEEA Advanced Water Heater Specification Tier 3 or higher; or

iii. A gas or propane instantaneous water heater with an input of 200,000 Btu per hour or less and no storage tank; or

iv. For additions that are 500 square feet or less, an instantaneous electric water heater with point of use distribution as specified in RA4.4.5; or

v. A water-heating system determined by the Executive Director to use no more energy than the one specified in Item i, ii, iii, or iv.

2. **Performance approach.** Performance calculations shall meet the requirements of Section 150.1(a) through (c), pursuant to the applicable requirements in Items A, B, and C below.

A. **For additions alone.** The addition complies if the addition alone meets the energy budgets as specified in Section 150.1(b).

B. **Existing plus alteration plus addition.** The standard design for existing plus alteration plus addition energy use is the combination of the existing building's unaltered components to remain; existing building altered components that are the more efficient, in TDV energy, of either the existing conditions or the requirements of Section 150.2(b)2; plus the proposed addition's energy use meeting the requirements of Section 150.2(a)1. The proposed design energy use is the combination of the existing building's unaltered components to remain and the altered components' energy features, plus the proposed energy features of the addition.

EXCEPTION to Section 150.2(a)2B: Existing structures with a minimum R-11 insulation in framed walls showing compliance with Section 150.2(a)2 are exempt from showing compliance with Section 150.0(c).

C. **Mechanical Ventilation for Indoor Air Quality**. Additions to existing buildings shall comply with Section 150.0(o) subject to the requirements specified in subsections i, ii below.

i. **Whole-dwelling unit mechanical ventilation**.

a. Dwelling units that meet the conditions in Subsections 1, or 2 below shall not be required to comply with the whole-dwelling unit ventilation airflow specified in Section 150.0(o)1C, 150.0(o)1E, or 150.0(o)1F.

1. Additions to an existing dwelling unit that increase the conditioned floor area of the existing dwelling unit by less than or equal to 1000 square feet.

2. Junior Accessory Dwelling Units (JADU) that are additions to an existing building.

b. Additions to an existing dwelling unit that increase the conditioned floor area of the existing dwelling unit by more than 1,000 square feet shall have mechanical ventilation airflow in

accordance with Section 150.0(o)1C, 150.0(o)1E, or 150.0(o)1F as applicable. The mechanical ventilation airflow rate shall be based on the conditioned floor area of the entire dwelling unit comprised of the existing dwelling unit conditioned floor area plus the addition conditioned floor area.

c. New dwelling units that are additions to an existing building shall have mechanical ventilation airflow provided in accordance with Section 150.0(o)1C, 150.0(o)1E, or 150.0(o)1F as applicable. The mechanical ventilation airflow rate shall be based on the conditioned floor area of the new dwelling unit.

ii. **Local mechanical exhaust** . Additions to existing buildings shall comply with all applicable requirements specified in 150.0(o)1G and 150.0(o)2.

(b) **Alterations.** Alterations to existing single-family residential buildings or alterations in conjunction with a change in building occupancy to a single-family residential occupancy shall meet either Item 1 or 2 below.

1. **Prescriptive approach.** The altered component and any newly installed equipment serving the alteration shall meet the applicable requirements of Sections 110.0 through 110.9 and all applicable requirements of Sections 150.0(a) through (l), 150.0(m)1 through 150.0 (m)10, and 150.0(p) through (q); and

A. **Added fenestration**. Alterations that add vertical fenestration and skylight area shall meet the total fenestration area and west facing fenestration area, U-factor, and Solar Heat Gain Coefficient requirements of Section 150.1(c) and TABLE 150.1-A.

Exception 1 to Section 150.2(b)1A: Alterations that add fenestration area of up to 75 square feet shall not be required to meet the total fenestration area and west-facing fenestration area requirements of Sections 150.1(c)3B and C.

Exception 2 to Section 150.2(b)1A: Alterations that add up to 16 square feet of new skylight area with a maximum U-factor of 0.55 and a maximum SHGC of 0.30 area shall not be required to meet the total fenestration area and west-facing fenestration area requirements of Sections 150.1(c)3B and C.

B. **Replacement fenestration.** New manufactured fenestration products installed to replace existing fenestration products of the same total area shall meet the U-factor and Solar Heat Gain Coefficient requirements of Sections 150.1(c)3A, and 150.1(c)4.

Exception 1 to Section 150.2(b)1B: Replacement of vertical fenestration no greater than 75 square feet with a U-factor no greater than 0.40 in Climate Zones 1-16, and a SHGC value no greater than 0.35 in Climate Zones 2, 4, and 6-15.

Exception 2 to Section 150.2(b)1B: Replaced skylights must meet a U-factor no greater than 0.55, and a SHGC value no greater than 0.30.

NOTE: Glass replaced in an existing sash and frame or sashes replaced in an existing frame are considered repairs, provided that the replacement is at least equivalent to the original in performance.

C. **Entirely new or complete replacement space-conditioning systems** installed as part of an alteration, shall include all the system heating or cooling equipment, including but not limited to: condensing unit cooling or heating coil, and air handler for split systems; or complete replacement of a packaged unit; plus entirely new or replacement duct system (Section 150.2(b)1Diia). Entirely new or complete replacement space-conditioning systems shall meet the requirements of Sections 150.0(h), 150.0(i), 150.0(j)1, 150.0(j)2, 150.0(m)1 through 150.0(m)10; 150.0(m)12; 150.0(m)13, 150.1(c)7, 150.2(b)1G, and TABLE 150.2-A.

D. **Altered duct systems - duct sealing**: In all Climate Zones, when more than 25 feet of new or replacement space-conditioning system ducts are installed, the ducts shall comply with the applicable requirements of subsections i and ii below. Additionally, when altered ducts, air-handling units, cooling or heating coils, or plenums are located in garage spaces, the system shall comply with subsection 150.2(b)1Diic regardless of the length of any new or replacement space-conditioning ducts installed in the garage space.

i. New ducts located in unconditioned space shall meet the applicable requirements of Sections 150.0(m)1 through 150.0(m)10, and the duct insulation requirements of Table 150.2-A; and

TABLE 150.2-A DUCT INSULATION R-VALUE

Climate Zone	3, 5 through 7	1, 2, 4, 8 through 16
Duct R-Value	R-6	R-8

ii. The altered duct system, regardless of location, shall be sealed as confirmed through field verification and diagnostic testing in accordance with all applicable procedures for duct sealing of altered existing duct systems as specified in Reference Residential Appendix Section RA3.1, utilizing the leakage compliance criteria specified in Subsection a or b below.

a. **Entirely new or complete replacement duct system.** If the new ducts form an entirely new or complete replacement duct system directly connected to the air handler, the duct system measured leakage shall be equal to or less than 5 percent of the system air handler airflow as confirmed by field verification and diagnostic testing utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1.

Entirely new or complete replacement duct systems installed as part of an alteration is constructed of at least 75 percent new duct material, and up to 25 percent may consist of reused parts from the dwelling unit's existing duct system, including but not limited to registers, grilles, boots, air handler, coil, plenums, duct material; if the reused parts are accessible and can be sealed to prevent leakage.

Entirely new or complete replacement duct systems shall also conform to the requirements of Sections 150.0(m)12 and 150.0(m)13. If the air handler and ducts are located within a vented attic, the requirements of Section 150.2(b)1J shall also be met.

b. **Extension of an existing duct system**. If the new ducts are an extension of an existing duct system serving single-family dwellings, the combined new and existing duct system shall meet one of the following requirements:

I. The measured duct leakage shall be equal to or less than 10 percent of system air handler airflow as confirmed by field verification and diagnostic testing utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1; or

II. The measured duct leakage to outside shall be equal to or less than 7 percent of system air handler airflow as confirmed by field verification and diagnostic testing utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.4; or

III. If it is not possible to meet the duct sealing requirements of either Section 150.2(b)1DiibI, or 150.2(b)1DiibII, then all accessible leaks shall be sealed and verified through a visual inspection and a smoke test by a certified HERS Rater utilizing the methods specified in Reference Residential Appendix RA3.1.4.3.5.

Exception to Section 150.2(b)1Diib: Duct sealing. Existing duct systems that are extended, which are constructed, insulated or sealed with asbestos.

c. **Altered ducts and duct system components in garage spaces.** When new or replacement space-conditioning ducts, air-handling units, cooling or heating coils, or plenums are located in a garage space, compliance with either I or II below is required.

I. The measured system duct leakage shall be less than or equal to 6 percent of system air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1; or

II. All accessible leaks located in the garage space shall be sealed and verified through a visual inspection and a smoke test by a certified HERS Rater utilizing the methods specified in Reference Residential Appendix RA3.1.4.3.5.

E. **Altered space-conditioning system - duct sealing.** In all climate zones, when a space-conditioning system serving a single-family dwelling is altered by the installation or replacement of space-conditioning system equipment, including replacement of the air handler, outdoor condensing unit of a split system air conditioner or heat pump, or cooling or heating coil; the duct system that is connected to the altered space-conditioning system equipment shall be sealed, as confirmed through field verification and diagnostic testing in accordance with the applicable procedures for duct sealing of altered existing duct systems as specified in Reference Residential Appendix RA3.1 and the leakage compliance criteria specified in Subsection i, ii, or iii below. Additionally, when altered ducts, air-handling units, cooling or heating coils, or plenums are located in garage spaces, the system shall comply with Section 150.2(b)1Diic regardless of the length of any new or replacement space-conditioning ducts installed in the garage space.

i. The measured duct leakage shall be equal to or less than 10 percent of system air handler airflow as determined utilizing the procedures in Reference Residential Appendix RA3.1.4.3.1; or

ii. The measured duct leakage to outside shall be equal to or less than 7 percent of system air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.4; or

iii. If it is not possible to meet the duct sealing requirements of either Section 150.2(b)1Ei or 150.2(b)1Eii, then, all accessible leaks shall be sealed and verified through a visual inspection and a smoke test by a certified HERS Rater utilizing the methods specified in Reference Residential Appendix Section RA3.1.4.3.5.

Exception 1 to Section 150.2(b)1E: Duct sealing. Duct systems that are documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Residential Appendix RA3.1.

Exception 2 to Section 150.2(b)1E: Duct sealing. Duct systems with less than 40 linear feet as determined by visual inspection.

Exception 3 to Section 150.2(b)1E: Duct sealing. Existing duct systems constructed, insulated or sealed with asbestos.

F. **Altered space-conditioning system - mechanical cooling.** When a space-conditioning system is an air conditioner or heat pump that is altered by the installation or replacement of refrigerant-containing system components such as the compressor, condensing coil, evaporator coil, refrigerant metering device or refrigerant piping, the altered system shall comply with the following requirements:

i. All thermostats associated with the system shall be replaced with setback thermostats meeting the requirements of Section 110.2(c).

ii. In Climate Zones 2, 8, 9, 10, 11, 12, 13, 14 and 15, air-cooled air conditioners and air-source heat pumps, including but not limited to ducted split systems, ducted package systems, small duct high velocity air systems, and minisplit systems, shall comply with Subsections a and b, unless the system is of a type that cannot be verified using the specified procedures. Systems that cannot comply with the requirements of 150.2(b)1Fii shall comply with Section 150.2(b)1Fiii.

Exception to Section 150.2(b)1Fii: Entirely new or complete replacement packaged systems for which the manufacturer has verified correct system refrigerant charge prior to shipment from the factory are not required to have refrigerant charge confirmed through field verification and diagnostic testing. The installer of these packaged systems shall certify on the Certificate of Installation that the packaged system was pre-charged at the factory and has not been altered in a way that would affect the charge. Ducted systems shall comply with minimum system airflow rate requirement in Section 150.2(b)1Fiia, provided that the system is of a type that can be verified using the procedure specified in RA3.3 or an approved alternative in RA1.

a. Minimum system airflow rate shall comply with the applicable Subsection I or II below as confirmed through field verification and diagnostic testing in accordance with the procedures

specified in Reference Residential Appendix Section RA3.3 or an approved alternative procedure as specified in Section RA1.

I. Small duct high velocity systems shall demonstrate a minimum system airflow rate greater than or equal to 250 cfm per ton of nominal cooling capacity; or

II. All other air-cooled air conditioner or air-source heat pump systems shall demonstrate a minimum system airflow rate greater than or equal to 300 cfm per ton of nominal cooling capacity; and

Exception 1 to Section 150.2(b)1Fiia: Systems unable to comply with the minimum airflow rate requirement shall demonstrate compliance using the procedures in Section RA3.3.3.1.5; and the system's thermostat shall conform to the specifications in Section 110.12.

Exception 2 to Section 150.2(b)1Fiia: Entirely new or complete replacement space conditioning systems, as specified by Section 150.2(b)1C, without zoning dampers may comply with the minimum airflow rate by meeting the applicable requirements in Tables-150.0-B or 150.0-C as confirmed by field verification and diagnostic testing in accordance with the procedures in Reference Residential Appendix Section RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure drop requirements of Section 150.0(m)12C for the system air filter device(s) shall conform to the requirements given in Tables150.0-B and 150.0-C.

b. The installer shall charge the system according to manufacturer's specifications. Refrigerant charge shall be verified according to one of the following options, as applicable.

I. The installer and rater shall perform the standard charge verification procedure as specified in Reference Residential Appendix Section RA3.2.2, or an approved alternative procedure as specified in Section RA1; or

II. The system shall be equipped with a fault indicator display (FID) device that meets the specifications of Reference Joint Appendix JA6. The installer shall verify the refrigerant charge and FID device in accordance with the procedures in Reference Residential Appendix Section RA3.4.2. The HERS Rater shall verify FID device in accordance with the procedures in Section RA3.4.2; or

III. The installer shall perform the weigh-in charging procedure as specified by Reference Residential Appendix Section RA3.2.3.1 provided the system is of a type that can be verified using the RA3.2.2 standard charge verification procedure and RA3.3 airflow rate verification procedure or approved alternatives in RA1. The HERS Rater shall verify the charge using RA3.2.2 and RA3.3 or approved alternatives in RA1.

Exception 1 to Section 150.2(b)1Fiib: When the outdoor temperature is less than 55° F and the installer utilizes the weigh-in charging procedure in Reference Residential Appendix Section RA3.2.3.1to demonstrate compliance, the installer may elect to utilize the HERS Rater verification procedure in Reference Residential Appendix Section RA3.2.3.2. If the HERS Rater verification procedure in Section RA3.2.3.2 is used for compliance, the system's thermostat shall conform to the specifications in Section 110.12. Ducted systems shall comply with the minimum system airflow rate requirements in Section 150.2(b)1Fiia.

iii. In climate Zones 2, 8, 9, 10, 11, 12, 13, 14, and 15, air-cooled air conditioners or air-source heat pumps, including but not limited to ducted split systems, ducted package systems, small duct high velocity, and minisplit systems, which are of a type that cannot comply with the requirements of 150.2(b)1Fiib shall comply with subsections a and b, as applicable.

a. The installer shall confirm the refrigerant charge using the weigh-in charging procedure specified in Reference Residential Appendix Section RA3.2.3.1, as verified by a HERS Rater according to the procedures specified in Reference Residential Appendix RA3.2.3.2; and

b. Systems that utilize forced air ducts shall comply with the minimum system airflow rate requirement in Section 150.2(b)1Fiia provided the system is of a type that can be verified using the procedures in Section RA3.3 or an approved alternative procedure in Section RA1.

Exception to Section 150.2(b)1Fiii: Entirely new or complete replacement packaged systems for which the manufacturer has verified correct system refrigerant charge prior to shipment from the factory are not required to have refrigerant charge confirmed through field verification and diagnostic testing. The installer of these packaged systems shall certify on the Certificate of Installation that the packaged system was pre-charged at the factory and has not been altered in a way that would affect the charge. Ducted systems shall comply with minimum system airflow rate requirement in Section 150.2(b)1Fiiib, provided that the system is of a type that can be verified using the procedure specified in Section RA3.3 or an approved alternative in Section RA1.

G. **Altered Space Heating System.** Altered or replacement space heating systems shall not use electric resistance as the primary heat source.

Exception 1 to Section 150.2(b)1G: Non-ducted electric resistance space heating systems, if the existing space heating system is electric resistance.

Exception 2 to Section 150.2(b)1G: Ducted electric resistance space heating systems, if the existing space heating system is electric resistance and a ducted space cooling system is not being replaced or installed.

Exception 3 to Section 150.2(b)1G: Electric resistance space heating systems, if the existing space heating system is electric resistance and the building is located in climate zones 7 or 15.

H. **Water-Heating System**. Altered or replacement service water-heating systems or components shall meet the applicable requirements below:

i. **Pipe Insulation.** For newly installed ad existing accessible piping, the insulation requirements of Section 150.0(j)1 shall be met.

ii. **Distribution System.** For recirculation distribution systems serving individual dwelling units, only demand recirculation systems with manual on/off control as specified in the Reference Appendix RA4.4.9 shall be installed.

iii. **Water heating system.** The water heating system shall meet one of the following:

a. A natural gas or propane water-heating system; or

b. A single heat pump water heater. The storage tank shall not be located outdoors and be placed on an incompressible, rigid insulated surface with a minimum thermal resistance of R-10. The water heater shall be installed with a communication interface that either meets the requirements of Section 110.12(a) or has an ANSI/CTA-2045-B communication port; or

c. A single heat pump water heater that meets the requirements of NEEA Advanced Water Heater Specification Tier 3 or higher; or

d. If the existing water heater is an electric resistance water heater, a consumer electric water heater; or

e. A water-heating system determined by the Executive Director to use no more energy than the one specified in Item a above; or if no natural gas is connected to the existing water heater location, a water-heating system determined by the executive director to use no more energy than the one specified in Item d above.

l. **Roofs.** Replacements of the exterior surface of existing roofs, including adding a new surface layer on top of the existing exterior surface, shall meet the requirements of Section 110.8 and the applicable requirements of Subsections i and ii where more than 50 percent of the roof is being replaced.

i. **Steep-sloped roofs.** Steep-sloped roofs shall meet the following:

New roofing products in Climate Zones 4 and 8 through 15 shall have a minimum aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or a minimum SRI of 16.

Exception 1 to Section 150.2(b)1Ii: The following shall be considered equivalent to Subsection i:

a. Buildings with ceiling assemblies with a U-factor lower than or equal to 0.025 or that are insulated with at least R-38 ceiling insulation; or

b. Buildings with a radiant barrier in the attic, where the radiant barrier is not installed directly above spaced sheathing, meeting the requirements of Section 150.1(c)2; or

c. In Climate Zones 2, 4, 9, 10, 12 and 14, buildings that have no ducts in the attic; or

d. Buildings with R-2 or greater continuous insulation above or below the roof deck.

Exception 2 to Section 150.2(b)1Ii: Roof area covered by building integrated photovoltaic panels or building integrated solar thermal panels is not required to meet minimum requirements for aged solar reflectance, thermal emittance or SRI.

Exception 3 to Section 150.2(b)1Ii: Roof constructions with a weight of at least 25 lb/ft^2 are exempt from minimum requirements for aged solar reflectance and thermal emittance, or SRI.

ii. **Low-sloped roofs.** Low-sloped roofs shall meet the following:

a. New roofing products in Climate Zones 4 and 6 through 15 shall have an aged solar reflectance equal to or greater than 0.63 and a thermal emittance equal or greater than 0.75, or a minimum SRI of 75.

Exception 1 to Section 150.2(b)1Iiia: The aged solar reflectance can be met by using insulation at the roof deck specified in Table 150.2-B.

TABLE 150.2-B AGED SOLAR REFLECTANCE INSULATION TRADE OFF TABLE

Minimum Aged Solar Reflectance	Roof Deck Continuous Insulation R-value (Climate Zones 6-7)	Roof Deck Continuous Insulation R-value (Climate Zones 2, 4, & 8-15)
0.60	2	16
0.55	4	18
0.50	6	20
0.45	8	22
No Requirement	10	24

Exception 2 to Section 150.2(b)1Iiia: Roof area covered by building integrated photovoltaic panels or building integrated solar thermal panels is not required to meet the minimum requirements for aged solar reflectance, thermal emittance or SRI.

Exception 3 to Section 150.2(b)1Iiia: Roof constructions with a weight of at least 25 lb/ft^2 are exempt from the minimum requirements for aged solar reflectance and thermal emittance, or SRI.

b. Roofs shall be insulated to the levels specified in Table 150.2-C.

TABLE 150.2-C INSULATION REQUIREMENTS FOR ROOF ALTERATIONS

Climate Zone	Continuous Insulation R-value	Roof Assembly U-factor
3, 5-7	NR	NR
1, 2, 4, 8-16	R-14	0.039

Exception 1 to Section 150.2(b)1Iiib: Existing roofs with R-10 or greater continuous insulation above or below the roof deck; or

Exception 2 to Section 150.2(b)1Iiib: Existing roofs with an assembly U-factor of 0.056 or less or that are insulated with at least R-19 insulation between the roof rafters and in contact with the roof deck in Climate Zones 1, 2, 4, and 8 through 10; or

Exception 3 to Section 150.2(b)1Iiib: The continuous insulation requirements of Table 150.2-C may be reduced to R-4 where the following conditions are met:

i. Mechanical equipment is located on the roof and will not be temporarily disconnected and lifted as part of the roof replacement and the addition of insulation required by Table 150.2-C would reduce the height from the roof surface to the top of the base flashing to less than that set forth in the manufacturer's installation instructions as per California Residential Code Section R900; or

ii. Replaced roofing abuts sidewall or parapet walls and the addition of insulation required by Table 150.2-C would reduce the height from the roof surface to the top of the base flashing to less than that set forth in the manufacturer's installation instructions as per the California Residential Code Section R900, provided that the following conditions apply:

1. The sidewall or parapet walls are finished with an exterior cladding material other than the roof covering membrane material; and
2. The sidewall or parapet walls have exterior cladding material that must be removed to install the new roof covering membrane to maintain the minimum base flashing height; and
3. The ratio of the replaced roof area to the linear dimension of affected sidewall or parapet walls is less than 25 square feet per linear foot; or

Exception 4 to Section 150.2(b)1Iiib: The continuous insulation requirements per Table 150.2-C may be reduced where increasing the thickness of above deck insulation would reduce the flashing around an existing exterior wall opening below what is permitted by the fenestration or door manufacturer's installation instructions, or registered design professionals approved flashing design, as per the California Residential Code Section R703.4, or by California Residential Code Section R905.2.8.3.

Exception 5 to Section 150.2(b)1Biib: Tapered insulation with thermal resistance less than prescribed at the drains and other low points may be used provided that the thickness of insulation is increased at the high points of the roof so that the average thermal resistance equals or exceeds the required value.

J. **Ceiling.** Vented attics shall meet the following:

i. In Climate Zones 1 through 4, 6, and 8 through 16 insulation shall be installed to achieve a weighted U-factor of 0.020 or insulation installed at the ceiling level shall result in an insulated thermal resistance of R-49 or greater for the insulation alone; and

Exception to Section 150.2(b)1Ji: In Climate Zones 1, 3, and 6, dwelling units with at least R-19 existing insulation installed at the ceiling level.

ii. In Climate Zones 2, 4, and 8 through 16 air seal all accessible areas of the ceiling plane between the attic and the conditioned space in accordance with Section 110.7; and

Exception 1 to Section 150.2(b)1Jii: Dwelling units with at least R-19 existing insulation installed at the ceiling level.

Exception 2 to Section 150.2(b)1Jii: Dwelling units with atmospherically vented space heating or water heating combustion appliances located inside the pressure boundary of the dwelling unit.

iii. In Climate Zones 1 through 4 and 8 through 16 recessed downlight luminaires in the ceiling shall be covered with insulation to the same depth as the rest of the ceiling. Luminaires not rated for insulation contact must be replaced or retrofitted with a fireproof cover that allows for insulation to be installed directly over the cover; and

Exception 1 to Section 150.2(b)1Jiii: In Climate Zones 1 through 4 and 8 through 10, dwelling units with at least R-19 existing insulation installed at the ceiling level.

iv. Attic ventilation shall comply with the California Building Code requirements.

Exception 1 to Section 150.2(b)1J: Dwelling units with at least R-38 existing insulation installed at the ceiling level.

Exception 2 to Section 150.2(b)1J: Dwelling units where the alteration would directly cause the disturbance of asbestos.

Exception 3 to Section 150.2(b)1J: Dwelling units with knob and tube wiring located in the vented attic.

Exception 4 to Section 150.2(b)1J: Where the accessible space in the attic is not large enough to accommodate the required R-value, the entire accessible space shall be filled with insulation provided such installation does not violate Section 806.3 of Title 24, Part 2.5.

Exception 5 to Section 150.2(b)1J: Where the attic space above the altered dwelling unit is shared with other dwelling units and the requirements of Section 150.2(b)1J are not triggered for the other dwelling units.

K. **Lighting**. The altered lighting system shall meet the lighting requirements of Section 150.0(k). The altered luminaires shall meet the luminaire efficacy requirements of Section 150.0(k) and TABLE 150.0-A. Where existing screw base sockets are present in ceiling-recessed luminaires, removal of these sockets is not required provided that new JA8 compliant trim kits or lamps designed for use with recessed downlights or luminaires are installed.

L. **Mechanical ventilation for indoor air quality - entirely new or complete replacement ventilation Systems.** Entirely new or complete replacement ventilation systems shall comply with all applicable requirements in Section 150.0(o). An entirely new or complete replacement ventilation system includes a new ventilation fan component and an entirely new duct system. An entirely new or complete replacement duct system is constructed of at least 75 percent new duct material, and up to 25 percent may consist of reused parts from the dwelling unit's existing duct system, including but not limited to registers, grilles, boots, air filtration devices and duct material, if the reused parts are accessible and can be sealed to prevent leakage.

M. **Mechanical ventilation for indoor air quality - altered ventilation systems**. Altered ventilation system components or newly installed ventilation equipment serving the alteration shall comply with Section 150.0(o) as applicable subject to the requirements specified in subsections i and ii below.

i. **Whole-dwelling unit mechanical ventilation**.

a. **Whole-dwelling unit airflow**. If the whole-dwelling ventilation fan is altered or replaced, then one of the following subsections 1 or 2 shall be used for compliance as applicable.

1. Dwellings that were required by a previous building permit to comply with the whole-dwelling unit airflow requirements in Section 150.0(o) shall meet or exceed the whole-dwelling unit mechanical ventilation airflow specified in Section 150.0(o)1C, 150.0(o)1E or 150.0(o)1F as confirmed through field verification and diagnostic testing in accordance with the applicable procedures specified in Reference Residential Appendix RA3.7.

2. Dwellings that were not required by a previous building permit to have a whole-dwelling unit ventilation system shall not be required to comply with the whole-dwelling unit ventilation airflow specified in Section 150.0(o)1C, 150.0(o)1E or 150.0(o)1F.

b. **Replacement ventilation fans.** Whole-dwelling unit replacement ventilation fans shall be rated for airflow and sound in accordance with the requirements of ASHRAE 62.2 Sections 7.1 and 7.2. Additionally, when conformance to a specified whole-dwelling unit airflow rate is required for compliance, the replacement fans shall be rated at no less than the airflow rate required for compliance.

c. **Air filters**. If the air filtration device for a whole-dwelling unit ventilation system is altered or replaced, then one of the following subsections 1 or 2 shall be used for compliance as applicable.

1. Dwellings that were required by a previous building permit to comply with the ventilation system air filtration requirements in Section 150.0(m)12 shall comply with the air filtration requirements in Section 150.0(m)12.

2. Dwellings that were not required by a previous building permit to comply with the ventilation system air filtration requirements in 150.0(m)12 shall not be required to comply with the air filtration requirements specified in Section 150.0(m)12.

ii. **Local mechanical exhaust**.

a. **Bathroom local mechanical exhaust**. Altered bathroom local mechanical exhaust systems shall comply with the applicable requirements specified in Section 150.0(o)1G.

b. **Kitchen local mechanical Exhaust**. If the kitchen local ventilation fan is altered or replaced, then one of the following subsections 1, 2, or 3 shall be used for compliance as applicable.

1. Dwellings that were required by a previous building permit to comply with the kitchen local exhaust requirements in 150.0(o)1G shall meet or exceed the applicable airflow or capture efficiency requirements in Section 150.0(o)1G.

2. Dwellings that were required by a previous building permit to install a vented kitchen range hood or other kitchen exhaust fan, shall install a replacement fan that meets or exceeds the airflow required by the previous building permit, or 100 cfm, whichever is greater.

3. Dwellings that were not required to have a kitchen local ventilation exhaust system according to the conditions in either subsection 1 or 2 above shall not be required to comply with the requirements of Section 150.0(o)1G.

c. **Replacement Ventilation Fans.** New or replacement local mechanical exhaust fans shall be rated for airflow and sound in accordance with the requirements of ASHRAE 62.2 Section 7.1 and Title 24, Part 6 Section 150.0(o)1Gvi. Additionally, when compliance with a specified exhaust airflow rate is required, the replacement fan shall be rated at no less than the airflow rate required for compliance.

N. **Exterior doors.** Alterations that add exterior door area shall meet the U-factor requirement of Section 150.1(c)5.

2. **Performance approach.**

The altered component(s) and any newly installed equipment serving the alteration shall meet the applicable requirements of Subsections A, B, and C below.

A. The altered components shall meet the applicable requirements of Sections 110.0 through 110.9, Sections 150.0(a) through (l), Sections 150.0(m)1 through 150.0 (m)10, and Sections 150.0(p) through (q). Entirely new or complete replacement mechanical ventilation systems as these terms are used in Section 150.2(b)1L, shall comply with the requirements in Section 150.2(b)1L. Altered mechanical ventilation systems shall comply with the requirements of Section 150.2(b)1M. Entirely new or complete replacement space-conditioning systems, and entirely new or complete replacement duct systems, as these terms are used in Sections 150.2(b)1C and 150.2(b)1Diia, shall comply with the requirements of Sections 150.0(m)12 and 150.0(m)13.

B. The standard design for an altered component shall be the higher efficiency of existing conditions or the requirements stated in Table 150.2-D. For components not being altered, the standard design shall be based on the existing conditions. When the third party verification option is specified as a requirement, all components proposed for alteration for which the additional credit is taken, must be verified.

TABLE 150.2-D STANDARD DESIGN FOR AN ALTERED COMPONENT

Altered Component	Standard Design Without Third Party Verification of Existing Conditions Shall be Based On	Standard Design With Third Party Verification of Existing Conditions Shall be Based On
Ceiling Insulation, Wall Insulation, and Raised-floor Insulation	The requirements of Sections 150.0(a), (c), and (d)	The existing insulation R-value
Fenestration	The U-factor of 0.40 and SHGC value of 0.35. The glass area shall be the glass area of the existing building.	If the proposed U-factor is ≤ 0.40 and SHGC value is ≤ 0.35, the standard design shall be based on the existing U-factor and SHGC values as verified. Otherwise, the standard design shall be based on the U-factor of 0.40 and SHGC value of 0.35. The glass area shall be the glass area of the existing building.
Window Film	The U-factor of 0.40 and SHGC value of 0.35.	The existing fenestration in the alteration shall be based on Table 110.6-A and Table 110.6-B.
Doors	The U-factor of 0.20. The door area shall be the door area of the existing building.	If the proposed U-factor is < 0.20, the standard design shall be based on the existing U-factor value as verified. Otherwise, the standard design shall be based on the U-factor of 0.20. The door area shall be the door area of the existing building.
Space-Heating and Space-Cooling Equipment	TABLE 150.1-A for equipment efficiency requirements; Section 150.2(b)1C for entirely new or complete replacement systems; Section 150.2(b)1F for refrigerant charge verification requirements.	The existing efficiency levels.
Air Distribution System – Duct Sealing	The requirements of Sections 150.2(b)1D and 150.2(b)1E	The requirements of Sections 150.2(b)1D and 150.2(b)1E
Air Distribution System – Duct Insulation	The proposed efficiency levels.	The existing efficiency levels.
Water Heating Systems	The requirements of Section 150.2(b)1Hii	The existing efficiency level.
Roofing Products	The requirements of Section 150.2(b)1I.	The requirements of Section 150.2(b)1I
All Other Measures	The proposed efficiency levels.	The existing efficiency levels.

C. The proposed design shall be based on the actual values of the altered components.

Notes to Section 150.2(b)2:

1. If an existing component must be replaced with a new component, that component is considered an altered component for the purpose of determining the standard design altered component energy budget and must meet the requirements of Section 150.2(b)2B.
2. The standard design shall assume the same geometry and orientation as the proposed design.
3. The "existing efficiency level" modeling rules, including situations where nameplate data are not available, are described in the Residential ACM Approval Manual.

Exception 1 to Section 150.2(b): Any dual-glazed greenhouse or garden window installed as part of an alteration complies with the U-factor requirements in Section 150.1(c)3.

Exception 2 to Section 150.2(b): Where the space in the attic or rafter area is not large enough to accommodate the required R-value, the entire space shall be filled with insulation provided such installation does not violate Section 1203.2 of Title 24, Part 2.

(c) **Whole building.** Any addition or alteration may comply with the requirements of Title 24, Part 6 by meeting the requirements for the entire building.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, 25910, and 25943, Public Resources Code.

SUBCHAPTER 10
MULTIFAMILY BUILDINGS—MANDATORY REQUIREMENTS

SECTION 160.0 – GENERAL

Multifamily buildings shall comply with the applicable requirements of Sections 160.1 through 160.9. Sections 160.1 through 160.9 apply to dwelling units and common use areas in multifamily buildings. Nonresidential occupancies in a mixed occupancy building shall comply with nonresidential requirements in Sections 120.0 through 141.1.

Note: The requirements of Sections 160.1 through 160.9 apply to newly constructed buildings. Sections 180.1 through 180.4 specify which requirements of Sections 160.1 through 160.9 apply to additions or alterations.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 160.1 – MANDATORY REQUIREMENTS FOR BUILDING ENVELOPES

(a) **Ceiling and roof insulation.** The opaque portions of ceilings and roofs separating conditioned spaces from unconditioned spaces or ambient air shall meet the requirements of Item 1 or 2, and 3 below:

1. Attic roof. Roofs with an attic space shall meet the requirements of A through C below:
   A. Shall be insulated to achieve an area-weighted average U-factor not exceeding U-0.043 or shall be insulated between wood-framing members with insulation resulting in an installed thermal resistance of R-22 or greater for the insulation alone. For vented attics, the mandatory insulation shall be installed at the ceiling level; for unvented attics, the mandatory insulation shall be placed at either ceiling or roof level;
   B. Attic access doors shall have permanently attached insulation using adhesive or mechanical fasteners. The attic access shall be gasketed to prevent air leakage; and
   C. When loose-fill insulation is installed, the minimum installed weight per square foot shall conform with the insulation manufacturer's installed design weight per square foot at the manufacturer's labeled R-value.
2. Non-attic roof. Roofs without attic spaces shall meet the applicable requirements of A through C below:
   A. Metal building—The area-weighted average U-factor of the roof assembly shall not exceed 0.098.
   B. Wood framed and others—The area-weighted average U-factor of the roof assembly shall not exceed 0.075.
   C. Insulation placement—When insulation is installed at the roof, fixed vents or openings to the outdoors or to unconditioned spaces shall not be installed. When the space between the ceiling and the roof is either directly or indirectly conditioned space, it shall not be considered an attic for the purposes of complying with CBC attic ventilation requirements.

      Exception to Section 160.1(a)2C: Vents that do not penetrate the roof deck and are instead designed for wind resistance for roof membranes are not within the scope of Section 160.1(a)2C.

3. Insulation shall be installed in direct contact with a roof or ceiling that is sealed to limit infiltration and exfiltration as specified in Section 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.

(b) **Wall insulation.** Opaque portions of above grade walls separating conditioned spaces from unconditioned spaces or ambient air shall meet the following applicable requirements:

1. Metal building—The area-weighted average U-factor of the wall assembly shall not exceed 0.113.
2. Metal framed—The area-weighted average U-factor of the wall assembly shall not exceed 0.151.
3. Wood framed and others—
   A. Nominal 2x4 inch framing shall have an area-weighted average U-factor of the wall assembly not exceeding 0.102.
   B. Nominal 2x6 inch framing shall have an area-weighted average U-factor of the wall assembly not exceeding 0.071.
   C. Other wall assemblies shall have an area-weighted average U-factor of the wall assembly not exceeding 0.102.
4. **Light mass walls**—A 6 inch or greater hollow core concrete masonry unit shall have a U-factor not to exceed 0.440.
5. **Heavy mass walls**—An 8 inch or greater hollow core concrete masonry unit shall have a U-factor not to exceed 0.690.
6. **Spandrel panels and curtain wall**—The area-weighted average U-factor of the spandrel panels and curtain wall assembly shall not exceed 0.280.
7. **Demising walls**—The opaque portions of framed demising walls shall meet the requirements of Item A or B below:

A. Wood framed walls shall be insulated to meet a U-factor not greater than 0.099.

B. Metal framed walls shall be insulated to meet a U-factor not greater than 0.151.

8. Bay or bow window roofs and floors shall be insulated to meet the wall insulation requirements of Table 170.2-A.

(c) **Floor and soffit insulation.** The opaque portions of floors and soffits that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable requirements of Items 1 through 3 below:

1. Raised mass floors shall have a minimum of 3 inches of lightweight concrete over a metal deck or the area-weighted average U-factor of the floor assembly shall not exceed 0.269.

2. Raised wood floor shall have an overall assembly U-factor not exceeding U-0.037. In a wood framed assembly, compliance with the U-factor may be demonstrated by installing insulation with an R-value of 19 or greater.

3. Other floors—The area-weighted average U-factor of the floor assembly shall not exceed 0.071.

4. Heated slab on grade floor—A heated slab on grade floor shall be insulated to meet the requirements of Section 110.8(g).

Exception to Section 160.1(c): A building with a controlled ventilation or unvented crawl space may omit raised floor insulation if all of the following are met:

A. The foundation walls are insulated to meet the wall insulation minimums as shown in Table 170.2-A; and

B. A Class I or Class II vapor retarder is placed over the entire floor of the crawl space; and

C. Vents between the crawl space and outside air are fitted with automatically operated louvers that are temperature actuated; and

D. The requirements in Reference Residential Appendix RA4.5.1.

(d) **Vapor retarder.**

1. In Climate Zones 1–16, the earth floor of unvented crawl space shall be covered with a Class I or Class II vapor retarder. This requirement shall also apply to controlled ventilation crawl space for buildings complying with the Exception to Section 160.1(c).

2. In Climate Zones 14 and 16, a Class I or Class II vapor retarder shall be installed on the conditioned space side of all insulation in all exterior walls, vented attics and unvented attics with air-permeable insulation.

(e) **Fenestration products.** Fenestration separating conditioned space from unconditioned space or outdoors shall meet the requirements of either Item 1 or 2 below:

1. Fenestration, including skylight products, must have a maximum U-factor of 0.58.

Exception 1 to Section 160.1(e)1: Up to 0.5 percent of the conditioned floor area is exempt from the maximum U-factor requirement.

Exception 2 to Section 160.1(e)1: For dual-glazed greenhouse or garden windows, up to 30 square feet of fenestration area per dwelling unit is exempt from the maximum U-factor requirement.

2. The area-weighted average U-factor of all fenestration, including skylight products, shall not exceed 0.58.

(f) **Installation of fireplaces, decorative gas appliances and gas logs.** If a masonry or factory-built fireplace is installed, it shall comply with Section 110.5, Section 4.503 of Part 11, and shall have the following:

1. Closable metal or glass doors covering the entire opening of the firebox; and

2. A combustion air intake to draw air from the outside of the building, which is at least 6 square inches in area and is equipped with a readily accessible, operable and tight-fitting damper or combustion-air control device; and

Exception to Section 160.1(f)2: An outside combustion-air intake is not required if the fireplace will be installed over concrete slab flooring and the fireplace will not be located on an exterior wall.

3. A flue damper with a readily accessible control.

Exception to Section 160.1(f)3: When a gas log, log lighter or decorative gas appliance is installed in a fireplace, the flue damper shall be blocked open if required by the CMC or the manufacturer's installation instructions.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 160.2 – MANDATORY REQUIREMENTS FOR VENTILATION AND INDOOR AIR QUALITY

(a) **General requirements.**

1. Attached dwelling units in multifamily buildings shall comply with the applicable requirements of Subsection 160.2(b) below. Occupiable spaces in multifamily buildings other than attached dwelling units shall comply with the applicable requirements of Section 160.2(c). When HERS field verification and diagnostic testing of attached dwelling units is required by Section 160.2, buildings with three habitable stories or fewer shall use the applicable procedures in the Residential Appendices, and buildings with four or more habitable stories shall use the applicable procedures in Nonresidential Appendices NA1 and NA2.

   NOTE: Section 160.2 is not applicable to townhouses or dwellings that contain two dwelling units.

2. The required outdoor air-ventilation rate and the air-distribution system design shall be clearly identified on the building design plans submitted to the enforcement agency in accordance with Section 10-103 of Title 24, Part 1.

(b) **Attached dwelling units.** Attached dwelling units shall comply with the requirements of Subsections 1 and 2 below**.**

1. **Air filtration.**

   A. System types specified in Subsections i, ii and iii shall be provided with air filters in accordance with Sections 160.2(b)1B, 160.2(b)1C and 160.2(b)1D. System types specified in Subsection i shall also comply with Section 160.2(b)1E.

      i. Mechanical space-conditioning systems that supply air to an occupiable space through ductwork exceeding 10 ft (3 m) in length.

      ii. Mechanical supply-only ventilation systems and makeup air systems that provide outside air to an occupiable space.

      iii. The supply side of mechanical balanced ventilation systems, including heat recovery ventilation systems, and energy recovery ventilation systems that provide outside air to an occupiable space.

   B. **System design and installation.**

      i. The system shall be designed to ensure that all recirculated air and all outdoor air supplied to the occupiable space are filtered before passing through any system's thermal conditioning components.

         Exception to Section 160.2(b)1Bi: For heat recovery ventilators and energy recovery ventilators, the location of the filters required by Section 160.2(b)1 may be downstream of a system thermal conditioning component, provided the system is equipped with ancillary filtration upstream of the system’s thermal conditioning component.

      ii. All systems shall be designed to accommodate the clean-filter pressure drop imposed by the system air filter(s). The design airflow rate, and maximum allowable clean-filter pressure drop at the design airflow rate applicable to each air filter, shall be determined and reported on labels according to Subsection iv below.

         Systems specified in Section 160.2(b)1Ai shall be equipped with air filters that meet either Subsection a or b below:

         a. Nominal two-inch minimum depth filter(s) shall be sized by the system designer, or

         b. Nominal one-inch minimum depth filter(s) shall be allowed if the filter(s) are sized according to Equation 160.2-A, based on a maximum face velocity of 150 ft per minute and according to the maximum allowable clean-filter pressure drop specified in Section 160.2(b)1Dii.

$A_{face} = Q_{filter} / V_{face}$ (Equation 160.2-A)

where:

A_{face} = air filter face area, the product of air filter nominal length × nominal width, ft^2.

Q_{filter} = design airflow rate for the air filter, ft^3/min

V_{face} = air filter face velocity ≤ 150 ft/min

iii. All system air filters shall be located and installed in such a manner as to be accessible for regular service by the system owner.

iv. All system air filter installation locations shall be labeled to disclose the applicable design airflow rate and the maximum allowable clean-filter pressure drop. The labels shall be permanently affixed to the air filter installation location, readily legible, and visible to a person replacing the air filter.

v. Filter racks or grilles shall use gaskets, sealing or other means to close gaps around inserted filters and prevent air from bypassing the filter.

C. **Air filter efficiency**. The system shall be provided with air filters having a designated efficiency equal to or greater than MERV 13 when tested in accordance with ASHRAE Standard 52.2, or a particle size efficiency rating equal to or greater than 50 percent in the 0.30–1.0 µm range, and equal to or greater than 85 percent in the 1.0–3.0 µm range when tested in accordance with AHRI Standard 680.

D. **Air filter pressure drop**. All systems shall be provided with air filters that conform to the applicable maximum allowable clean-filter pressure drop specified in Subsection i, ii, iii or iv below, when tested using ASHRAE Standard 52.2, or as rated using AHRI Standard 680, for the applicable design airflow rates for the system air filters.

i. The maximum allowable clean-filter pressure drop shall be determined by the system design for the nominal two-inch minimum depth air filter required by Section 160.2(b)1Biia, or

ii. A maximum of 25 Pa (0.1 inches water) clean-filter pressure drop shall be allowed for a nominal 1-inch depth air filter sized according to Section 160.2(b)1Biib, or

iii. For systems specified in Sections 160.2(b)1Aii and 160.2(b)1Aiii, the maximum allowable clean filter pressure drop shall be determined by the system design.

iv. If Exception 1 to Section 160.3(b)5Lii or iv is utilized for compliance with cooling system airflow rate and fan efficacy requirements, the clean-filter pressure drop for the system air filter shall conform to the requirements given in Table 160.3-A or 160.3-B.

E. **Air filter product labeling.** Systems described in Section 160.2(b)1Ai shall be equipped with air filters that have been labeled by the manufacturer to disclose the efficiency and pressure drop ratings that demonstrate conformance with Sections 160.2(b)1C and 160.2(b)1D.

Exception to Section 160.2(b)1: Evaporative coolers are exempt from the air filtration requirements in Section 160.2(b)1.

2. **Ventilation and indoor air quality for attached dwelling units**. All attached dwelling units shall meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in Section 160.2(b)2A below. All dwelling units shall comply with Section 160.2(b)2B below.

Exception to Section 160.2(b)2 The following sections of ASHRAE 62.2 shall not be required for compliance: Section 4.1.1, Section 4.1.2, Section 4.1.4, Section 4.3, Section 4.6, Section 5, Section 6.1.1, Section 6.5.2 and Normative Appendix A.

A. **Amendments to ASHRAE 62.2 requirements.**

i. **Window operation**. Window operation is not a permissible method of providing the dwelling unit ventilation airflow specified in Subsection iv or v below.

ii. **Central fan integrated (CFI) ventilation systems**.

a. Continuous operation prohibition. Continuous operation of a dwelling unit's central forced air system air handlers used in CFI ventilation systems is not a permissible method of providing the whole-dwelling unit ventilation airflow required by Section 160.2(b)2Aiv.

Exception to Section 160.2(b)2Aiia: The Energy Commission may approve continuous operation of central fan integrated ventilation systems pursuant to Section 10-109(h).

b. Outdoor air damper(s). A motorized damper(s) shall be installed on the connected ventilation duct(s) of CFI systems that prevents all airflow into or out of the space-conditioning duct system when the damper(s) is closed.

c. Damper control. The required motorized damper(s) shall be controlled to be in an opened position when outdoor air ventilation is required for compliance, and shall be in the closed position when ventilation air is not required. The damper(s) shall be closed whenever the space-conditioning system air handling unit is not operating. If the outdoor airflow for the CFI ventilation system is fan-powered, then the outdoor air fan shall not operate when the required motorized damper(s) on the outdoor air ventilation duct(s) is closed.

d. Variable ventilation. CFI ventilation systems shall incorporate controls that track outdoor air ventilation run time, and either open or close the required motorized damper(s) depending on whether or not outdoor air ventilation is required for compliance with Section 160.2(b)2Aiv. During periods when comfort conditioning is not called for by the space-conditioning thermostat, the CFI ventilation system controls shall operate the space-conditioning system central fan and outdoor air damper(s) when necessary to ensure compliance with the minimum outdoor air ventilation required by Section 160.2(b)2Aiv in accordance with applicable variable mechanical ventilation methods specified in ASHRAE 62.2 Section 4.5.

iii. **Air filtration.** Air filtration shall conform to the specifications in Section 160.2(b)1. Compliance with ASHRAE 62.2 Sections 6.7 (Minimum Filtration) and 6.7.1 (Filter Pressure Drop) shall not be required.

iv. **Whole-dwelling unit mechanical ventilation**. Multifamily attached dwelling units shall comply with Subsections a and b below.

a. Mechanical ventilation airflow shall be provided at rates greater than or equal to the value determined in accordance with Equation 160.2-B.

Total Required Ventilation Rate [ASHRAE 62.2:4.1.1].

$$Q_{tot} = 0.03A_{floor} + 7.5(N_{br} + 1) \quad \text{(Equation 160.2-B)}$$

WHERE:

Q_{tot} = total required ventilation rate, cfm

A_{floor} = dwelling-unit floor area, ft^2

N_{br} = number of bedrooms (not to be less than 1)

b. All dwelling units in a multifamily building shall use the same whole-dwelling unit ventilation system type. The system type installed throughout the building shall be only one of the following three types: supply, exhaust or balanced. The dwelling unit shall comply with one of the following Subsections 1 or 2 below.

1. **Balanced ventilation**. A balanced ventilation system shall provide the required whole-dwelling-unit ventilation airflow. Systems with heat recovery or energy recovery that serve a single dwelling unit shall have a fan efficacy of ≤1.0 W/cfm; or

2. **Supply or exhaust ventilation with compartmentalization testing**. Continuously operating supply ventilation systems or continuously operating exhaust ventilation systems shall be allowed to be used to provide the required whole-dwelling unit ventilation airflow only if the dwelling unit envelope leakage is less than or equal to 0.3 cubic feet per minute at 50 Pa (0.2 inch water) per ft^2 of dwelling unit envelope surface area as confirmed by HERS field verification and diagnostic testing in accordance with the procedures specified in Reference Appendix RA3.8 or NA2.3 as applicable.

v. **Multifamily building central ventilation system airflow rate tolerance.** Multifamily building central ventilation systems that serve multiple dwelling units shall have airflow rates in each dwelling unit served that meet or exceed a design ventilation airflow rate specification.

a. Designers shall specify a design ventilation airflow rate for each dwelling unit that is equal to or greater than the rate specified by Equation 160.2-B.

b. The design ventilation airflow rate for each dwelling unit shall be stated on the building design plans approved by the enforcement agency.

c. Airflow in each dwelling unit shall be no more than twenty percent greater than the specified design ventilation airflow rate. Ventilation systems shall utilize mechanical or software airflow control means to ensure each of the dwelling-unit airflows can be maintained at the design ventilation airflow within this tolerance at all times. System airflow control-means may include but are not limited to constant air regulation devices, orifice plates and variable speed central fans.

vi. **Local mechanical exhaust.** A local mechanical exhaust system shall be installed in each kitchen and bathroom. Systems shall be rated for airflow in accordance with ASHRAE 62.2 Section 7.1.

a. **Nonenclosed kitchens** shall have a demand-controlled mechanical exhaust system meeting the requirements of Section 160.2(b)2Avic.

b. **Enclosed kitchens and all bathrooms** shall have either one of the following options 1 or 2:

1. A demand-controlled mechanical exhaust system meeting the requirements of Section 160.2(b)2Avic; or

2. A continuous mechanical exhaust system meeting the requirements of Section 160.2(b)2Avid.

c. **Demand-controlled mechanical exhaust.** A local mechanical exhaust system shall be designed to be operated as needed.

1. **Control and operation.** Demand-controlled mechanical exhaust systems shall be provided with at least one of the following controls:

A. A readily accessible occupant-controlled ON-OFF control.

B. An automatic control that does not impede occupant ON control.

2. **Ventilation rate and capture efficiency.** The system shall meet or exceed either the minimum airflow in accordance with Table 160.2-E or the minimum capture efficiency in accordance with Table 160.2-E, and Table 160.2-G. Capture efficiency ratings shall be determined in accordance with ASTM E3087, and listed in a product directory approved by the Energy Commission.

d. **Continuous mechanical exhaust.** A mechanical exhaust system shall be installed to operate continuously. The system may be part of a balanced mechanical ventilation system.

1. **Control and operation**. A manual ON-OFF control shall be provided for each continuous mechanical exhaust system. The system shall be designed to operate during all occupiable hours. For multifamily dwelling units, the manual ON-OFF control may be accessible to the dwelling unit occupant; however, the manual ON-OFF control shall not be required to be accessible to the dwelling unit occupant.

2. **Ventilation rate.** The minimum delivered ventilation shall be at least the amount indicated in Table 160.2-F during each hour of operation.

e. **Airflow measurement of local mechanical exhaust by the system installer.** The airflow required by Section 160.2(b)2Avi is the quantity of indoor air exhausted by the ventilation system as installed in the dwelling unit. When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with Section 160.2(b)2Avic2, the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be met by the installed system. The as-installed airflow shall be verified by the system installer to ensure compliance by use of either Subsection 1 or 2 below:

1. The system installer shall measure the airflow by using a flow hood, flow grid or other airflow measuring device at the mechanical ventilation fan's inlet terminals/grilles or outlet terminals/grilles in accordance with the procedures in Reference Appendix RA3.7 or NA2.2 as applicable.

2. As an alternative to performing an airflow measurement of the system as installed in the dwelling unit, compliance may be demonstrated by installing an exhaust fan and duct system that conforms to the specifications of Table 160.2-H. Visual inspection shall verify the installed system conforms to the requirements of Table 160.2-H.

   When using Table 160.2-H for demonstrating compliance, the airflow rating shall be greater than or equal to the value required by Section 160.2(b)2Avi at a static pressure greater than or equal to 0.25 in. of water (62.5 Pa). When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with Section 160.2(b)2Avic2, a static pressure greater than or equal to 0.25 in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 160.2-H for determining compliance.

   Use of Table 160.2-H is limited to ventilation systems that conform to all of the following three specifications:

   A. Total duct length is less than or equal to 25 feet (8 m),

   B. Duct system has no more than three elbows, and

   C. Duct system has exterior termination fitting with a hydraulic diameter greater than or equal to the minimum duct diameter and not less than the hydraulic diameter of the fan outlet.

f. **Sound ratings for local mechanical exhaust**. Local mechanical exhaust systems shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2 at no less than the minimum airflow rate required by Section 160.2(b)2Avi.

   Exception to Section 160.2(b)2Avif: Kitchen range hoods may be rated for sound at a static pressure determined at working speed as specified in HVI 916 Section 7.2.

vii. **Airflow measurement of whole-dwelling unit ventilation**. The airflow required by Section 160.2(b)2Aiv or 160.2(b)2Av is the quantity of outdoor ventilation air supplied or indoor air exhausted by the mechanical ventilation system as installed and shall be measured by using a flow hood, flow grid or other airflow measuring device at the mechanical ventilation fan's inlet terminals/grilles or outlet terminals/grilles in accordance with the procedures in Reference Appendix Section RA3.7.4.1.1 or NA2.2.4.1.1 as applicable for supply and exhaust systems or RA3.7.4.1.2 or NA2.2.4.1.2 as applicable for balanced systems. Balanced mechanical ventilation system airflow shall be the average of the supply fan and exhaust fan flows.

viii. **Sound ratings for whole-dwelling unit ventilation systems. Whole-**dwelling unit ventilation systems shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2 at no less than the minimum airflow rate required by Section 160.2(b)2Aiv or 160.2(b)2Av as applicable.

ix. **Label for whole-dwelling unit ventilation system on-off control**. Compliance with ASHRAE 62.2 Section 4.4 (Control and Operation) shall require manual ON-OFF control switches associated with whole-dwelling unit ventilation systems to have a label clearly displaying the following text, or equivalent text: "This switch controls the indoor air quality ventilation for the home. Leave switch in the 'on' position at all times unless the outdoor air quality is very poor."

x. **Combustion air and compensating outdoor air or makeup air.**

a. All dwelling units shall conform to the applicable requirements specified in California Mechanical Code Chapter 7, Combustion Air.

b. All dwelling units shall conform to the requirements in ASHRAE 62.2 Section 6.4, Combustion and Solid-Fuel-Burning Appliances.

B. **Dwelling unit HERS field verification and diagnostic testing.**

i. The whole-dwelling unit ventilation airflow required by Section 160.2(b)2Aiv or 160.2(b)2Av shall be confirmed through HERS field verification and diagnostic testing in accordance with Reference Appendix RA3.7.4.1.1 or NA2.2.4.1.1 as applicable for supply and exhaust systems or RA3.7.4.1.2 or NA2.2.4.1.2 as applicable for balanced systems. Balanced mechanical ventilation system airflow shall be the average of the supply fan and exhaust fan flows. Ventilation airflow of systems with multiple operating modes shall be tested in all modes designed to comply with the required ventilation airflows.

ii. **Kitchen local mechanical exhaust—vented range hoods.** Vented range hoods installed to comply with local mechanical exhaust requirements specified in Section 160.2(b)2Avi shall be HERS field verified in accordance with Reference Appendix RA3.7.4.3 or NA2.2.4.1.4 as applicable to confirm the model is rated by HVI or AHAM to comply with the following requirements:

a. The minimum ventilation airflow rate as specified by Section 160.2(b)2Avi, or alternatively the minimum capture efficiency as specified by Section 160.2(b)2Avi; and

b. The maximum sound rating as specified in Section 160.2(b)2Avif.

iii. **Heat recovery ventilation (HRV) and energy recovery ventilation (ERV) system fan efficacy.** At a minimum, systems with heat or energy recovery serving a single dwelling unit shall have a fan efficacy of ≤1.0 W/cfm as confirmed by HERS field verification in accordance with Reference Appendix RA3.7.4.4 or NA2.2.4.1.5 as applicable. If Section 170.2(c)3Biva requirements are applicable to the dwelling unit, then HERS field verification shall instead confirm compliance with the maximum fan efficacy and minimum sensible recovery efficiency specified in Section 170.2(c)3Biva in accordance with the procedures specified in Reference Appendix RA3.7.4.4 or NA2.2.4.1.5 as applicable.

C. **Multifamily building central ventilation system field verification.**

i. **Central ventilation system duct sealing.** Ventilation ducts that conform to Subsections a and b below shall meet the duct sealing requirements in California Mechanical Code Section 603.10 and have leakage that is no greater than six percent of the rooftop fan or central fan design airflow rate as confirmed by field verification in accordance with the procedures in Reference Appendix NA7.18.3. The leakage test shall be conducted using a test pressure of 25 Pa (0.1 inches) for ducts serving six or fewer dwelling units and 50 Pa (0.2 inches) for ducts serving more than six dwelling units, and shall measure the leakage of all ductwork between the central fan and the connection point to the in-unit grille or fan.

a. The ventilation ducts serve multiple dwelling units.

b. The ventilation ducts provide continuous airflows or airflows to provide balanced ventilation to meet the requirements specified in Section 160.2(b)2Aiv or 160.2(b)2Av as applicable.

(c) **Common use areas.** All occupiable spaces shall comply with the requirements of Subsection 1 and shall also comply with either Subsection 2 or Subsection 3:

1. **Air filtration.**
   A. Mechanical system types specified in Subsections i, ii and iii below shall be designed to ensure that all recirculated air and all outdoor air supplied to the occupiable space are filtered before passing through any system's thermal conditioning components. Air filters shall conform to the requirements of Sections 160.2(c)1B, 160.2(c)1C and 160.2(c)1D.

      i. Mechanical space-conditioning systems that supply air to an occupiable space through ductwork exceeding 10 ft (3 m) in length.

      ii. Mechanical supply-only ventilation systems and makeup air systems that provide outside air to an occupiable space.

      iii. The supply side of mechanical balanced ventilation systems, including heat recovery ventilation systems and energy recovery ventilation systems that provide outside air to an occupiable space.

      Exception to Section 160.2(c)1A: For heat recovery ventilators and energy recovery ventilators, the location of the filters required by Section 160.2(c)1A may be downstream of a system's thermal conditioning component, provided the system is equipped with ancillary filtration upstream of the system's thermal conditioning component.

   B. **Air filter efficiency**. The filters shall have a designated efficiency equal to or greater than MERV 13 when tested in accordance with ASHRAE Standard 52.2, or a particle size efficiency rating equal to or greater than 50 percent in the 0.30–1.0 µm range, and equal to or greater than 85 percent in the 1.0–3.0 µm range when tested in accordance with AHRI Standard 680; and

   C. Systems shall be equipped with air filters that meet either Subsection i or ii below.

      i. Nominal two inch minimum depth filter(s); or

      ii. Nominal one inch minimum depth filter(s) shall be allowed if the filter(s) are sized according to Equation 160.2-A, based on a maximum face velocity of 150 ft per minute.

   D. Filter racks or grilles shall be gasketed or sealed to eliminate any gaps around the filter to prevent air from bypassing the filter.

2. **Natural ventilation.** Naturally ventilated spaces shall be designed in accordance with Sections 160.2(c)2A through 160.2(c)2C and include a mechanical ventilation system designed in accordance with Section 160.2(c)3:

   Exception 1 to Section 160.2(c)2: The mechanical ventilation system shall not be required where natural ventilation openings complying with Section 160.2(c)2 are either permanently open or have controls that prevent the openings from being closed during periods of expected occupancy.

   Exception 2 to Section 160.2(c)2: The mechanical ventilation system shall not be required where the zone is not served by a space-conditioning system.

   A. **Floor area to be ventilated**. Spaces or portions of spaces to be naturally ventilated shall be located within a distance based on the ceiling height, as specified in i, ii and iii. The ceiling height (H) to be used in i, ii or iii shall be the minimum ceiling height in the space, or for ceilings that are increasing in height as distance from the operable openings is increased, the ceiling height shall be determined as the average height of the ceiling within 20 ft from the operable opening. [ASHRAE 62.1:6.4.1]

      i. Single side opening. For spaces with operable opening on one side of the space, the maximum distance from the operable opening shall be not more than 2H. [ASHRAE 62.1:6.4.1.1]

      ii. Double side opening. For spaces with operable openings on two opposite sides of the space, the maximum distance from the operable opening shall be not more than 5H. [ASHRAE 62.1:6.4.1.2]

      iii. Corner opening. For spaces with operable openings on two adjacent sides of a space, the maximum distance from the operable openings shall be not more than 5H along a line drawn between the two

openings that are the farthest apart. Floor area outside that line shall comply with i or ii. [ASHRAE 62.1:6.4.1.3]

iv. Ceiling height. The ceiling height (H) to be used in Sections 160.2(c)2Ai through 160.2(c)2Aiii shall be the minimum ceiling height in the space.

Exception to Section 160.2(c)2Aiv: For ceilings that are increasing in height as distance from the opening is increased, the ceiling height shall be determined as the average height of the ceiling within 20 feet from the operable openings. [ASHRAE 62.1:6.4.1.4]

B. **Location and size of openings**. Spaces or portions of spaces to be naturally ventilated shall be permanently open to operable wall openings directly to the outdoors. The openable area shall be not less than 4 percent of the net occupiable floor area. Where openings are covered with louvers or otherwise obstructed, the openable area shall be based on the net free unobstructed area through the opening. Where interior rooms, or portions of rooms, without direct openings to the outdoors are ventilated through adjoining rooms, the opening between rooms shall be permanently unobstructed and have a free area of not less than 8 percent of the area of the interior room or less than 25 square feet. [ASHRAE 62.1:6.4.2]

C. **Control and accessibility.** The means to open the required operable opening shall be readily accessible to building occupants whenever the space is occupied. Controls shall be designed to coordinate operation of the natural and mechanical ventilation systems. [ASHRAE 62.1:6.4.3]

3. **Mechanical ventilation.** Occupiable spaces shall be ventilated with a mechanical ventilation system capable of providing an outdoor airflow rate (V_z) to the zone no less than the larger of A or B as described below:

A. The outdoor airflow rate to the zone (Vz) shall be determined in accordance with Equation 160.2-G; or

$$V_z = R_a \times A_z \qquad \text{(Equation 160.2-G)}$$

Where:

R_a = Outdoor airflow rate required per unit area as determined from Table 160.2-B.

A_z = Zone floor area is the net occupiable floor area of the ventilation zone in square feet.

B. For spaces designed for an expected number of occupants, the outdoor airflow rate to the zone (V_z) shall be determined in accordance with Equation 160.2-H;

$$V_z = R_p \times P_z \qquad \text{(Equation 160.2-H)}$$

Where:

R_p = 15 cubic feet per minute of outdoor airflow per person

P_z = The expected number of occupants. The expected number of occupants shall be the expected number specified by the building designer. For spaces with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.

Exception to Section 160.2(c)3: Transfer air. The rate of outdoor air required by Section 160.2(c)3 may be provided with air transferred from other ventilated space if:

i. Use of transfer air is in accordance with Section 160.2(c)8; and

ii. The outdoor air that is supplied to all spaces combined is sufficient to meet the requirements of Section 160.2(c)3 for each space individually.

4. **Exhaust ventilation.** The design exhaust airflow shall be determined in accordance with the requirements in Table 160.2-C. Exhaust makeup air shall be permitted to be any combination of outdoor air, recirculated air or transfer air. [ASHRAE 62.1:6.5.1]

5. **Operation and control requirements for minimum quantities of outdoor air**.

A. **Times of occupancy.** The minimum rate of outdoor air required by Section 160.2(c) shall be supplied to each space at all times when the space is usually occupied.

Exception 1 to Section 160.2(c)5A: Demand control ventilation. In intermittently occupied spaces that do not have processes or operations that generate dusts, fumes, mists, vapors or gases and are not provided with local exhaust ventilation (such as indoor operation of internal combustion engines or areas designated for unvented food service preparation), the rate of outdoor air may be reduced if the ventilation system serving the space is controlled by a demand control ventilation device complying with Section 160.2(c)5D or by an occupant sensor ventilation control device complying with Section 160.2(c)5E.

Exception 2 to Section 160.2(c)5A: Temporary reduction. The rate of outdoor air provided to a space may be reduced below the level required by Section 160.2(c) for up to 30 minutes at a time if the average rate for each hour is equal to or greater than the required ventilation rate.

B. **Preoccupancy.** The lesser of the minimum rate of outdoor air required by Section 160.2(c) or three complete air changes shall be supplied to the entire building during the 1-hour period immediately before the building is normally occupied.

C. **Required demand control ventilation.** Demand ventilation controls complying with Section **160.2(c)5D** are required for a space with a design occupant density, or a maximum occupant load factor for egress purposes in the CBC, greater than or equal to 25 people per 1000 square feet (40 square feet or less per person) if the system serving the space has one or more of the following:

i. an air economizer; or

ii. modulating outside air control; or

iii. design outdoor airflow rate > 3,000 cfm.

Exception 1 to Section 160.2(c)5C: Where space exhaust is greater than the design ventilation rate specified in Section 160.2(c)3 minus 0.2 cfm per ft^2 of conditioned area.

Exception 2 to Section 160.2(c)5C: Spaces that have processes or operations that generate dusts, fumes, mists, vapors or gases and are not provided with local exhaust ventilation, such as indoor operation of internal combustion engines or areas designated for unvented food service preparation, daycare sickrooms, science labs, barber shops or beauty and nail salons, shall not install demand control ventilation.

Exception 3 to Section 160.2(c)5C: Spaces with an area of less than 150 square feet or a design occupancy of less than 10 people as specified by Section 160.2(c)3.

D. **Demand control ventilation devices.**

i. For each system with demand control ventilation (DCV), CO_2 sensors shall be installed in each room that meets the criteria of Section 160.2(c)5C with no less than one sensor per 10,000 ft^2 of floor space. When a zone or a space is served by more than one sensor, a signal from any sensor indicating that CO_2 is near or at the setpoint within the zone or space shall trigger an increase in ventilation.

ii. CO_2 sensors shall be located in the room between 3 ft and 6 ft above the floor or at the anticipated height of the occupants' heads.

iii. Demand ventilation controls shall maintain CO_2 concentrations less than or equal to 600 ppm plus the outdoor air CO_2 concentration in all rooms with CO_2 sensors.

Exception to Section 160.2(c)5Diii: The outdoor air ventilation rate is not required to be larger than the design outdoor air ventilation rate required by Section 160.2(c)3 regardless of CO_2 concentration.

iv. Outdoor air CO_2 concentration shall be determined by one of the following:

a. CO_2 concentration shall be assumed to be 400 ppm without any direct measurement; or

b. CO_2 concentration shall be dynamically measured using a CO_2 sensor located within 4 ft of the outdoor air intake.

v. When the system is operating during hours of expected occupancy, the controls shall maintain system outdoor air ventilation rates no less than the rate listed in Table 160.2-B for DCV, times the conditioned floor area for spaces with CO_2 sensors, plus the rate required by Section 160.2(c)3 for other spaces served by the system, or the exhaust air rate, whichever is greater.

vi. CO_2 sensors shall be certified by the manufacturer to be accurate within plus or minus 75 ppm at a 600 and 1000 ppm concentration when measured at sea level and 25°C, factory calibrated, and certified by the manufacturer to require calibration no more frequently than once every 5 years. Upon detection of sensor failure, the system shall provide a signal that resets to supply the minimum quantity of outside air to levels required by Section 160.2(c)3 to the zone serviced by the sensor at all times that the zone is occupied.

vii. The CO_2 sensor(s) reading for each zone shall be displayed continuously, and shall be recorded on systems with digital direct controls (DDC) to the zone level.

E**. Occupant sensing ventilation control devices.** Occupant sensing ventilation controls are required for space-conditioning zones that are both permitted to have their ventilation air reduced to zero while in occupied-standby mode per Table 160.2-B and required to install occupant sensors to comply with Sections 160.5(b)4Cv, vi and vii. Occupant sensing ventilation control devices used to reduce the rate of outdoor air flow when occupants are not present shall comply with the following:

i. Occupant sensors shall meet the requirements in Section 110.9(b)4 and shall have suitable coverage and placement to detect occupants in the entire space ventilated.

ii. When occupant sensors controlling lighting are also used for ventilation, the ventilation signal shall be independent of daylighting, manual lighting overrides or manual control of lighting.

iii. When a single zone damper or a single zone system serves multiple rooms, there shall be an occupant sensor in each room and the zone shall not be considered vacant until all rooms in the zone are vacant.

iv. One hour prior to normal scheduled occupancy, the occupant sensor ventilation control shall allow preoccupancy purge as described in Section 160.2(c)5B.

v. When the zone is scheduled to be occupied and occupant sensing controls in all rooms and areas served by the zone indicate the spaces are unoccupied, the zone shall be placed in occupied- standby mode.

vi. In 5 minutes or less after entering occupied-standby mode, mechanical ventilation to the zone shall be shut off until the space becomes occupied or until ventilation is needed to provide space heating or conditioning. When mechanical ventilation is shut off to the zone, the ventilation system serving the zone shall reduce the system outside air rate by the amount of outside air required for the zone.

vii. Where the system providing space conditioning also provides ventilation to the zone, in 5 minutes or less after entering occupied-standby mode, space-conditioning zone setpoints shall be reset in accordance with Section 120.2(e)3.

6. **Ducting for zonal heating and cooling units.** Where a return plenum is used to distribute outdoor air to a zonal heating or cooling unit that then supplies the air to a space in order to meet the requirements of Section 160.2(c)3, the outdoor air shall be ducted to discharge either:

A. Within 5 feet of the unit; or

B. Within 15 feet of the unit, substantially toward the unit and at a velocity not less than 500 feet per minute.

7. **Design and control requirements for quantities of outdoor air**.

A. All mechanical ventilation and space-conditioning systems shall be designed with and have installed ductwork, dampers and controls to allow outside air rates to be operated at the minimum levels specified in Section

160.2(c)3 or the rate required for make-up of exhaust systems that are required for an exempt or covered process, for control of odors or for the removal of contaminants within the space.

B. All variable air volume mechanical ventilation and space-conditioning systems shall include dynamic controls that maintain measured outside air ventilation rates within 10 percent of the required outside air ventilation rate at both full and reduced supply airflow conditions. Fixed minimum damper position is not considered to be dynamic and is not an allowed control strategy.

C. Measured outdoor air rates of constant volume mechanical ventilation and space-conditioning systems shall be within 10 percent of the required outside air rate.

8. **Air classification and recirculation limitations.** Air classification and recirculation limitations of air shall be based on the air classification as listed in Table 160.2-B or Table 160.2-D, in accordance with the following:

A. Class 1 air is air with significant contaminant concentration, significant sensory-irritation intensity or offensive odor. Recirculation or transfer of Class 1 air to any space shall be permitted; [ASHRAE 62.1:5.16.3.1]

B. Class 2 air is air with moderate contaminant concentration, mild sensory-irritation intensity or mildly offensive odor (Class 2 air also includes air that is not necessarily harmful or objectionable but that is inappropriate for transfer or recirculation to spaces used for different purposes). Recirculation or transfer of Class 2 air shall be permitted in accordance with Sections 160.2(c)8Bi through 160.2(c)8Bv:

i. Recirculation of Class 2 air within the space of origin shall be permitted [ASHRAE 62.1:5.16.3.2.1].

ii. Recirculation or transfer of Class 2 to other Class 2 or Class 3 spaces shall be permitted, provided that the other spaces are used for the same or similar purpose or task and involve the same or similar pollutant sources as the Class 2 space [ASHRAE 62.1:5.16.3.2.2]; or

iii. Transfer of Class 2 air to toilet rooms [ASHRAE 62.1:5.16.3.2.3]; or

iv. Recirculation or transfer of Class 2 air to Class 4 spaces [ASHRAE 62.1:5.16.3.2.4]; or

v. Class 2 air shall not be recirculated or transferred to Class 1 spaces. [ASHRAE 62.1:5.16.3.2.5]

Exception to Section 160.2(c)8Bv: When using any energy recovery device, recirculation from leakage, carryover or transfer from the exhaust side of the energy recovery device is permitted. Recirculated Class 2 air shall not exceed 10 percent of the outdoor air intake flow.

C. Class 3 air is air with significant contaminant concentration, significant sensory-irritation intensity or offensive odor. Recirculation or transfer of Class 3 air shall be permitted in accordance with Sections 160.2(c)8Ci and 160.2(c)8Cii:

i. Recirculation of Class 3 air within the space of origin shall be permitted. [ASHRAE 62.1:5.16.3.3.1]

ii. Class 3 air shall not be recirculated or transferred to any other space. [ASHRAE 62.1:5.16.3.3.2].

Exception to Section 160.2(c)8Cii: When using any energy recovery device, recirculation from leakage, carryover or transfer from the exhaust side of the energy recovery device is permitted. Recirculated Class 3 air shall not exceed 5 percent of the outdoor air intake flow.

D. Class 4 air is air with highly objectionable fumes or gases or with potentially dangerous particles, bioaerosols or gases at concentrations high enough to be considered as harmful. Class 4 air shall not be recirculated or transferred to any space or recirculated within the space of origin. [ASHRAE 62.1:5.16.3.4]

E. Ancillary spaces. Redesignation of Class 1 air to Class 2 air shall be permitted for Class 1 spaces that are ancillary to Class 2 spaces. [ASHRAE 62.1:5.16.2.3]

F. Transfer. A mixture of air that has been transferred through or returned from spaces or locations with different air classes shall be redesignated with the highest classification among the air classes mixed. [ASHRAE 62.1:5.16.2.2]

G. Classification. Air leaving each space or location shall be designated at an expected air-quality classification not less than that shown in Table 160.2-B, 160.2-C or 160.2-D. Air leaving spaces or locations that are not

listed in Table 160.2-B, 160.2-C or 160.2-D shall be designated with the same classification as air from the most similar space or location listed in terms of occupant activities and building construction.

(d) **Parking garages.** Mechanical ventilation systems for enclosed parking garages in multifamily buildings shall comply with Section 120.6(c).

TABLE 160.2-A: Infiltration Effectiveness Weather and Shielding Factors [ASHRAE 62.2: Table B1

TMY3	wsf	Weather Station	Latitude	Longitude	State
690150	0.50	Twentynine Palms	34.30	–116.17	California
722860	0.43	March AFB	33.90	–117.25	California
722868	0.45	Palm Springs Intl	33.83	–116.50	California
722869	0.42	Riverside Muni	33.95	–117.45	California
722880	0.39	Burbank–Glendale–Pasadena AP	34.20	–118.35	California
722885	0.39	Santa Monica Muni	34.02	–118.45	California
722886	0.39	Van Nuys Airport	34.22	–118.48	California
722895	0.55	Lompoc (AWOS)	34.67	–120.47	California
722897	0.51	San Luis Co Rgnl	35.23	–120.63	California
722899	0.45	Chino Airport	33.97	–117.63	California
722900	0.38	San Diego Lindbergh Field	32.73	–117.17	California
722903	0.39	San Diego/Montgomery	32.82	–117.13	California
722904	0.40	Chula Vista Brown Field NAAS	32.58	–116.98	California
722906	0.39	San Diego North Island NAS	32.70	–117.20	California
722926	0.40	Camp Pendleton MCAS	33.30	–117.35	California
722927	0.38	Carlsbad/Palomar	33.13	–117.28	California
722930	0.39	San Diego Miramar NAS	32.87	–117.13	California
722950	0.42	Los Angeles Intl Arpt	33.93	–118.40	California
722956	0.38	Jack Northrop Fld H	33.92	–118.33	California
722970	0.38	Long Beach Daugherty Fld	33.83	–118.17	California
722976	0.34	Fullerton Municipal	33.87	–117.98	California
722977	0.36	Santa Ana John Wayne AP	33.68	–117.87	California
723805	0.51	Needles Airport	34.77	–114.62	California
723810	0.59	Edwards AFB	34.90	–117.87	California

TABLE 160.2-A: Infiltration Effectiveness Weather and Shielding Factors [ASHRAE 62.2: Table B1] (continued)

TMY3	wsf	Weather Station	Latitude	Longitude	State
723815	0.58	Daggett Barstow–Daggett AP	34.85	–116.80	California
723816	0.62	Lancaster Gen Wm Fox Field	34.73	–118.22	California
723820	0.57	Palmdale Airport	34.63	–118.08	California
723830	0.68	Sandberg	34.75	–118.72	California
723840	0.43	Bakersfield Meadows Field	35.43	–119.05	California
723890	0.45	Fresno Yosemite Intl AP	36.78	–119.72	California
723895	0.42	Porterville (AWOS)	36.03	–119.07	California
723896	0.43	Visalia Muni (AWOS)	36.32	–119.40	California
723910	0.45	Point Mugu Nf	34.12	–119.12	California
723925	0.44	Santa Barbara Municipal AP	34.43	–119.85	California
723926	0.43	Camarillo (AWOS)	34.22	–119.08	California
723927	0.45	Oxnard Airport	34.20	–119.20	California
723940	0.52	Santa Maria Public Arpt	34.92	–120.47	California
723965	0.53	Paso Robles Municipal Arpt	35.67	–120.63	California
724800	0.55	Bishop Airport	37.37	–118.35	California
724815	0.46	Merced/Macready Fld	37.28	–120.52	California
724830	0.51	Sacramento Executive Arpt	38.50	–121.50	California
724837	0.45	Beale AFB	39.13	–121.43	California
724838	0.50	Yuba Co	39.10	–121.57	California
724839	0.51	Sacramento Metropolitan AP	38.70	–121.58	California
724915	0.49	Monterey Naf	36.60	–121.87	California
724917	0.54	Salinas Municipal AP	36.67	–121.60	California
724920	0.50	Stockton Metropolitan Arpt	37.90	–121.23	California
724926	0.47	Modesto City–County AP	37.63	–120.95	California
724927	0.53	Livermore Municipal	37.70	–121.82	California
724930	0.54	Oakland Metropolitan Arpt	37.72	–122.22	California
724935	0.47	Hayward Air Term	37.67	–122.12	California
724936	0.53	Concord–Buchanan Field	38.00	–122.05	California
724940	0.60	San Francisco Intl AP	37.62	–122.40	California
724945	0.48	San Jose Intl AP	37.37	–121.93	California
724955	0.55	Napa Co. Airport	38.22	–122.28	California
724957	0.49	Santa Rosa (AWOS)	38.52	–122.82	California
725845	0.44	Blue Canyon AP	39.30	–120.72	California
725846	0.66	Truckee–Tahoe	39.32	–120.13	California
725847	0.64	South Lake Tahoe	38.90	–120.00	California
725905	0.47	Ukiah Municipal AP	39.13	–123.20	California

TABLE 160.2-A: Infiltration Effectiveness Weather and Shielding Factors [ASHRAE 62.2:Table B1] (continued)

TMY3	wsf	Weather Station	Latitude	Longitude	State
725910	0.50	Red Bluff Municipal Arpt	40.15	–122.25	California
725920	0.47	Redding Municipal Arpt	40.52	–122.32	California
725945	0.56	Arcata Airport	40.98	–124.10	California
725946	0.60	Crescent City Faa Ai	41.78	–124.23	California
725955	0.55	Montague Siskiyou County AP	41.78	–122.47	California
725958	0.59	Alturas	41.50	–120.53	California
745090	0.45	Mountain View Moffett Fld NAS	37.40	–122.05	California
745160	0.67	Travis Field AFB	38.27	–121.93	California
746120	0.52	China Lake Naf	35.68	–117.68	California
747020	0.50	Lemoore Reeves NAS	36.33	–119.95	California
747185	0.46	Imperial	32.83	–115.58	California
747187	0.46	Palm Springs Thermal AP	33.63	–116.17	California
747188	0.48	Blythe Riverside Co Arpt	33.62	–114.72	California

TABLE 160.2-B – Minimum Ventilation Rates for Multifamily Common Use Areas

Occupancy Category[3]	Area Outdoor Air Rate[1] R_a cfm/ft^2	Min Air Rate for DC cfm/ft^{2}V^2	Air Class	Notes
Daycare (through age 4)	0.21	0.15	2	
Multiuse assembly	0.50	0.15	1	F
Dining rooms	0.50	0.15	2	
Bars, cocktail lounges	0.50	0.20	2	
Kitchen (cooking)	0.15		2	
Break rooms	0.50	0.15	1	F
Coffee stations	0.50	0.15	1	F
Conference/meeting	0.50	0.15	1	F
Corridors	0.15		1	F
Occupiable storage rooms for liquids or gels	0.15		2	B
Laundry rooms, central	0.15		2	
Lobbies/pre-function	0.50	0.15	1	F
Breakrooms	0.50	0.15		
Occupiable storage rooms for dry materials	0.15			
Office space	0.15		1	
Reception areas	0.15		1	F
Telephone/data entry	0.15		1	F
Computer (not printing)	0.15			
Freezer and refrigerated spaces (<50°F)	-		1	F
Shipping/receiving	0.15			

TABLE 160.2-B – Minimum Ventilation Rates for Multifamily Common Use Areas (Continued)

Occupancy Category[3]	Area Outdoor Air Rate[1] R_a cfm/ft^2	Min Air Rate for DC cfm/ft^{2}V^2	Air Class	Notes
Gym, sports arena (play area)	0.50	0.15	2	E
Swimming (pool)	0.15		2	C
Swimming (deck)	0.50	0.15	2	C
Disco/dance floors	1.50	0.15	2	F
Health club/aerobics room/weight rooms	0.15		2	
Game arcades	0.68	0.15	1	
All others	0.15			

General:

1 R_a was determined as being the larger of the area method and the default per person method. The occupant density used in the per person method was assumed to be one half of the maximum occupant load assumed for egress purposes in the CBC.

2 If this column specifies a minimum cfm/ft^2 then it shall be used to comply with Section160.2(c)5E.

3 For spaces not included in this table, the spaces in Table 120.1-A shall apply.

Specific Notes:

A – RESERVED

B – Rate may not be sufficient where stored materials include those having potentially harmful emissions.

C – Rate does not allow for humidity control. “Deck area” refers to the area surrounding the pool that is capable of being wetted during pool use or when the pool is occupied. Deck area that is not expected to be wetted shall be designated as an occupancy category.

D – RESREVED.

E – Where combustion equipment is intended to be used on the playing surface or in the space, additional dilution ventilation, source control, or both shall be provided.

F – Ventilation air for this occupancy category shall be permitted to be reduced to zero when the space is in occupied-standby mode.

TABLE 160.2-C – Minimum Exhaust Rates
[ASHRAE 62.1: TABLE 6.5]

Occupancy Category[3]	Exhaust Rete, cfm/unit	Exhaust Rate, cfm/ft²	Air Class	Notes
Copy, printing rooms	-	0.50	2	
Janitor closets, trash rooms, recycling	-	1.00	3	
Kitchenettes	-	0.30	2	
Kitchens – commercial	-	0.70	2	
Locker rooms for athletic or industrial facilities	-	0.50	2	
All other locker rooms	-	0.25	2	
Shower rooms	20/50	-	2	G, H
Parking garages	-	0.75	2	C
Pet shops (animal areas)	-	0.90	2	
Soiled laundry storage rooms	-	1.00	3	F
Storage rooms, chemical	-	1.50	4	F
Toilets – private	25/50	-	2	E
Toilets – public	50/70	-	2	D

General:

[3]For spaces not included in this table, the spaces in Table 120.1-B shall apply.

Notes:

A –Reserved

B –Reserved

C – Exhaust shall not be required where two or more sides comprise walls that are at least 50% open to the outside.

D – Rate is per water closet, urinal, or both. Provide the higher rate where periods of heavy use are expected to occur. The lower rate shall be permitted to be used otherwise.

E – Rate is for a toilet room intended to be occupied by one person at a time. For continuous systems operation during hours of use, the lower rate shall be permitted to be used. Otherwise the higher rate shall be used.

F – See other applicable standards for exhaust rate.

G – For continuous system operation, the lower rate shall be permitted to be used. Otherwise the higher rate shall be used.

H – Rate is per showerhead.

TABLE 160.2-D – Airstreams or Sources
[ASHRAE 62.1:Table 5.16.1]

Description	Air Class
Commercial kitchen grease hoods	4
Commercial kitchen hoods other than grease	3
Hydraulic elevator machine room	2

Table 160.2-E: Demand-Controlled Local Ventilation Exhaust Airflow Rates and Capture Efficiency

Application	Compliance Criteria
Enclosed Kitchen or Nonenclosed Kitchen	Vented range hood, including appliance-range hood combinations shall meet either the capture efficiency (CE) or the airflow rate specified in Table 160.2-G as applicable.
Enclosed Kitchen	Other kitchen exhaust fans, including downdraft: 300 cfm (150 L/s) or a capacity of 5 ACH
Nonenclosed Kitchen	Other kitchen exhaust fans, including downdraft: 300 cfm (150 L/s)
Bathroom	50 cfm (25 L/s)

Table 160.2-F: Continuous Local Ventilation Exhaust Airflow Rates

Application	Airflow
Enclosed kitchen	5 ach, based on kitchen volume
Bathroom	20 cfm (10 L/s)

Table 160.2-G: Kitchen Range Hood Airflow Rates (cfm) and ASTM E3087 Capture Efficiency (CE) Ratings According to Dwelling Unit Floor Area and Kitchen Range Fuel Type

Dwelling Unit Floor Area (ft^2)	Hood Over Electric Range	Hood Over Natural Gas Range
>1500	50% CE or 110 cfm	70% CE or 180 cfm
>1000 - 1500	50% CE or 110 cfm	80% CE or 250 cfm
750 - 1000	55% CE or 130 cfm	85% CE or 280 cfm
<750	65% CE or 160 cfm	85% CE or 280 cfm

Table 160.2-H: Prescriptive Ventilation System Duct Sizing [ASHRAE 62.2:Table 5-3]

Fan Airflow Rating, cfm at minimum static pressure[f] 0.25 in. water (L/s at minimum 62.5 Pa)	≤50 (25)	≤80 (40)	≤100 (50)	≤125 (60)	≤150 (70)	≤175 (85)	≤200 (95)	≤250 (120)	≤350 (165)	≤400 (190)	≤450 (210)	≤700 (330)	≤800 (380)
Minimum Duct Diameter, in. (mm) [a,b] For Rigid duct	4 [e] (100)	5 (125)	5 (125)	6 (150)	6 (150)	7 (180)	7 (180)	8 (205)	9 (230)	10 (255)	10 (255)	12 (305)	12 [d] (305)
Minimum Duct Diameter, in. (mm) [a,b] For Flex duct [c]	4 (100)	5 (125)	6 (150)	6 (150)	7 (150)	7 (180)	8 (205)	8 (205)	9 (230)	10 (255)	NP	NP	NP

Footnotes for Table 150.0-H:

a. For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.
b. NP = application of the prescriptive table is not permitted for this scenario.
c. Use of this table for verification of flex duct systems requires flex duct to be fully extended and any flex duct elbows to have a minimum bend radius to duct diameter ratio of 1.0.
d. For this scenario, use of elbows is not permitted.
e. For this scenario, 4 in. (100 mm) oval duct shall be permitted, provided the minor axis of the oval is greater than or equal to 3 in. (75 mm)
f. When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with 160.2(b)2Avic2, a static pressure greater than or equal to 0.25 in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 160.2-H for determining compliance.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 160.3 – MANDATORY REQUIREMENTS FOR SPACE CONDITIONING SYSTEMS IN MULTIFAMILY BUILDINGS

Space conditioning systems serving multifamily dwelling units and common use areas shall comply with the applicable requirements of Sections 160.3(a) through 160.3(c).

(a) **Controls.** Space-conditioning systems serving dwelling units and common use areas in multifamily buildings shall comply with applicable requirements of Section 160.3(a)1 or 160.3(a)2.

1. **Dwelling unit thermostats.** All heating or cooling systems, including heat pumps, not controlled by a central energy management control system (EMCS) shall have a setback thermostat, as specified in Section 110.2(c).
2. **Common use area controls**. Heating or cooling systems serving common use areas of multifamily buildings shall comply with application requirements of Sections 160.3(a)2A through 160.3(a)2J.

   Exception to Section 160.3(a)2: Heating or cooling systems exclusively serving dwelling units and common use areas providing shared provisions for living, eating, cooking or sanitation to dwelling units that would otherwise lack these provisions may instead comply with Section 160.3(a)1.

   A. **Thermostatic controls for each zone.** The supply of heating and cooling energy to each space-conditioning zone shall be controlled by an individual thermostatic control that responds to temperature within the zone and that meets the applicable requirements of Section 160.3(a)2B. An energy management control system (EMCS) may be installed to comply with the requirements of one or more thermostatic controls if it complies with all applicable requirements for each thermostatic control.

      Exception to Section 160.3(a)2A: An independent perimeter heating or cooling system may serve more than one zone without individual thermostatic controls if:

      i. All zones are also served by an interior cooling system; and

      ii. The perimeter system is designed solely to offset envelope heat losses or gains; and

      iii. The perimeter system has at least one thermostatic control for each building orientation of 50 feet or more; and

      iv. The perimeter system is controlled by at least one thermostat located in one of the zones served by the system.

   B. **Criteria for zonal thermostatic controls.** The individual thermostatic controls required by Section 160.3(a)2A shall meet the following requirements as applicable:

      i. Where used to control comfort heating, the thermostatic controls shall be capable of being set, locally or remotely, down to 55°F or lower.

      ii. Where used to control comfort cooling, the thermostatic controls shall be capable of being set, locally or remotely, up to 85°F or higher.

      iii. Where used to control both comfort heating and comfort cooling, the thermostatic controls shall meet Items i and ii and shall be capable of providing a temperature range or deadband of at least 5°F within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum.

      Exception to Section 160.3(a)2Biii: Systems with thermostats that require manual changeover between heating and cooling modes.

      iv. Thermostatic controls for all single zone air conditioners and heat pumps shall comply with the requirements of Sections 110.2(c) and 110.12(a) and, if equipped with DDC to the zone level, with the automatic demand shed controls of Section 110.12(b).

      Exception to Section 160.3(a)2Biv: Package terminal air conditioners, package terminal heat pumps, room air conditioners and room air-conditioner heat pumps.

C. **Heat pump controls.** All heat pumps with supplementary electric resistance heaters shall be installed with controls that comply with Section 110.2(b).

D. **Shut-off and reset controls for space-conditioning systems.** Each space-conditioning system shall be installed with controls that comply with the following:

i. The control shall be capable of automatically shutting off the system during periods of nonuse and shall have:

a. An automatic time switch control device complying with Section 110.9, with an accessible manual override that allows operation of the system for up to 4 hours; or

b. An occupancy sensor; or

c. A 4-hour timer that can be manually operated.

ii. The control shall automatically restart and temporarily operate the system as required to maintain:

a. A setback heating thermostat setpoint if the system provides mechanical heating; and

Exception to Section 160.3(a)2Diia: Thermostat setback controls are not required in multifamily buildings in areas where the Winter Median of Extremes outdoor air temperature determined in accordance with Section **170.2(c)1C** is greater than 32°F.

b. A setup cooling thermostat setpoint if the system provides mechanical cooling.

Exception to Section 160.3(a)2Diib: Thermostat setup controls are not required in multifamily buildings in areas where the summer design dry-bulb 0.5-percent temperature determined in accordance with Section **170.2(c)1C** is less than 100°F.

iii. **Occupant sensing zone controls**. Where the system providing space conditioning also provides the ventilation required by Section 160.2(c)3 and includes occupant sensor ventilation control as specified in Section 160.2(c)5E, the occupant sensing zone controls shall additionally comply with the following:

a. Occupant sensing zone controls shall comply with the occupant sensor ventilation control device requirements of Section 160.3(c)5E and allow preoccupancy ventilation requirements of Section 160.3(c)5B; and

b. In 5 minutes or less after entering occupied-standby mode as described in Section 160.2(c)5:

I. Automatically set up the operating cooling temperature setpoint by 2°F or more and set back the operating heating temperature setpoint by 2°F or more; or

II. For multiple zone systems with Direct Digital Controls (DDC) to the zone level, set up the operating cooling temperature setpoint by 0.5°F or more and set back the operating heating temperature setpoint by 0.5°F or more.

c. In 5 minutes or less after entering occupied-standby mode, mechanical ventilation to the zone shall remain off whenever the space temperature is between the active heating and cooling setpoints.

Exception to Section 160.3(a)2Diii: Zones that are only ventilated by a natural ventilation system in accordance with Section 120.1(c)2.

Exception 1 to Sections 160.3(a)2Di, ii and iii: Where it can be demonstrated to the satisfaction of the enforcing agency that the system serves an area that must operate continuously.

Exception 2 to Sections 160.3(a)2Di, ii and iii: Systems with full load demands of 2 kW or less, if they have a readily accessible manual shut-off switch.

E. **Dampers for air supply and exhaust equipment.** Outdoor air supply and exhaust equipment shall be installed with dampers that automatically close upon fan shutdown.

Exception 1 to Section 160.3(a)2E: Equipment that serves an area that must operate continuously.

Exception 2 to Section 160.3(a)2E: Gravity and other nonelectrical equipment that has readily accessible manual damper controls.

Exception 3 to Section 160.3(a)2E: At combustion air intakes and shaft vents.

Exception 4 to Section 160.3(a)2E: Where prohibited by other provisions of law.

F. **Isolation area devices**. Each space-conditioning system serving multiple zones with a combined conditioned floor area of more than 25,000 square feet shall be designed, installed and controlled to serve isolation areas.

i. Each zone, or any combination of zones not exceeding 25,000 square feet, shall be a separate isolation area.

ii. Each isolation area shall be provided with isolation devices, such as valves or dampers that allow the supply of heating or cooling to be reduced or shut off independently of other isolation areas.

iii. Each isolation area shall be controlled by a device meeting the requirements of Section 160.3(a)2Di.

Exception to Section 160.3(a)2F: Zones designed to be conditioned continuously.

G. **Automatic demand shed controls.** See Section 110.12 for requirements for automatic demand shed controls.

H. **Economizer Fault Detection and Diagnostics (FDD).** All newly installed air handlers with a mechanical cooling capacity over 33,000 Btu/hr and an installed air economizer shall include a stand-alone or integrated Fault Detection and Diagnostics (FDD) system in accordance with Subsections 160.3(a)2Hi through 160.3(a)2Hviii.

i. The following temperature sensors shall be permanently installed to monitor system operation: outside air, supply air and, when required for differential economizer operation, a return air sensor; and

ii. Temperature sensors shall have an accuracy of ±2°F over the range of 40°F to 80°F; and

iii. The controller shall have the capability of displaying the value of each sensor; and

iv. The controller shall provide system status by indicating the following conditions:

a. Free cooling available;

b. Economizer enabled;

c. Compressor enabled;

d. Heating enabled, if the system is capable of heating; and

e. Mixed air low limit cycle active.

v. The unit controller shall allow manual initiation of each operating mode so that the operation of cooling systems, economizers, fans and heating systems can be independently tested and verified; and

vi. Faults shall be reported in one of the following ways:

a. Reported to an Energy Management Control System regularly monitored by facility personnel.

b. Annunciated locally on one or more zone thermostats, or a device within five feet of zone thermostat(s), clearly visible, at eye level and meeting the following requirements:

I. On the thermostat, the device or an adjacent written sign, display instructions to contact appropriate building personnel or an HVAC technician; and

II. In buildings with multiple tenants, the annunciation shall either be within property management offices or in a common space accessible by the property or building manager.

c. Reported to a fault management application that automatically provides notification of the fault to remote HVAC service provider.

vii. The FDD system shall detect the following faults:

a. Air temperature sensor failure/fault;

b. Not economizing when it should;

c. Economizing when it should not;

d. Damper not modulating; and

e. Excess outdoor air.

viii. The FDD system shall be certified by the Energy Commission as meeting the requirements of Sections 160.3(a)2Hi through 160.3(a)2Hvii in accordance with Section 110.0 and JA6.3.

Exception to Section 160.3(a)2Hviii: FDD algorithms based in direct digital control systems are not required to be certified to the Energy Commission.

I. **Direct Digital Controls (DDC).** Direct digital controls to the zone shall be provided as specified by Table 160.3-C.

i. The provided DDC system shall meet the control logic requirements of Sections 160.3(a)2E and 160.3(a)2G, and be capable of the following:

ii. Monitoring zone and system demand for fan pressure, pump pressure, heating and cooling;

iii. Transferring zone and system demand information from zones to air distribution system controllers and from air distribution systems to heating and cooling plant controllers;

iv. Automatically detecting the zones and systems that may be excessively driving the reset logic and generate an alarm or other indication to the system operator;

v. Readily allow operator removal of zone(s) from the reset algorithm;

vi. For new buildings, trending and graphically displaying input and output points; and

vii. Resetting heating and cooling setpoints in all noncritical zones upon receipt of a signal from a centralized contact or software point as described in Section 160.3(a)2G.

J. **Optimum start/stop controls.** Space-conditioning systems with DDC to the zone level shall have optimum start/stop controls. The control algorithm shall, as a minimum, be a function of the difference between space temperature and occupied setpoint, the outdoor air temperature, and the amount of time prior to scheduled occupancy. Mass radiant floor slab systems shall incorporate floor temperature onto the optimum start algorithm.

Exception to Section 160.3(a)2J: Systems that must operate continuously.

(b) **Dwelling unit space-conditioning and air distribution systems.**

1. **Building cooling and heating loads.** Building heating and cooling loads shall be determined using a method based on any one of the following, using cooling and heating loads as two of the criteria for equipment sizing and selection:

A. The ASHRAE Handbook, Equipment Volume, Applications Volume and Fundamentals Volume; or

B. The SMACNA Residential Comfort System Installation Standards Manual; or

C. The ACCA Manual J.

Note: Heating systems are required to have a minimum heating capacity adequate to meet the minimum requirements of the CBC.

2. **Design conditions.** Design conditions shall be determined in accordance with the following:

A. For the purpose of sizing the space-conditioning (HVAC) system, the indoor design temperatures shall be 68°F for heating and 75°F for cooling.

B. Outdoor design conditions shall be selected from Reference Joint Appendix JA2, which is based on data from the ASHRAE Climatic Data for Region X.

C. The outdoor design temperatures for heating shall be no lower than the Heating Winter Median of Extremes values.

D. The outdoor design temperatures for cooling shall be no greater than the 1.0 percent Cooling Dry Bulb and Mean Coincident Wet Bulb values.

3. **Outdoor condensing units**.

A. **Clearances.** Installed air conditioner and heat pump outdoor condensing units shall have a clearance of at least five feet (1.5 meters) from the outlet of any dryer vent.

B. **Liquid line drier.** Installed air conditioner and heat pump systems shall be equipped with liquid line filter driers if required, as specified by manufacturer's instructions.

4. **Central forced-air heating furnaces**.

A. **Temperature rise**. Central forced-air heating furnace installations shall be configured to operate in conformance with the furnace manufacturer's maximum inlet-to-outlet temperature rise specifications.

5. **Air-distribution and ventilation system ducts, plenums and fans.**

A. **CMC compliance.**

i. All air-distribution system ducts and plenums, including, but not limited to, mechanical closets and air-handler boxes, shall meet the requirements of the CMC Sections 601.0, 602.0, 603.0, 604.0 and 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition, incorporated herein by reference.

ii. Portions of supply-air and return-air ducts and plenums of a space heating or cooling system shall be insulated in accordance with either Subsection a or b below:

a. Ducts shall have a minimum installed level of R-6.0, or

Exception to Section 160.3(b)5Aiia: Portions of the duct system located in conditioned space below the ceiling separating the occupiable space from the attic are not required to be insulated if all of the following conditions are met:

i. The noninsulated portion of the duct system is located entirely inside the building's thermal envelope as confirmed by visual inspection.

ii. At all locations where noninsulated portions of the duct system penetrate into unconditioned space, the penetration shall be draft stopped compliant with CFC Sections 703.1 and 704.1 and air-sealed to the construction materials that are penetrated, using materials compliant with CMC Section E502.4.2 to prevent air infiltration into the cavity. All connections in unconditioned space are insulated to a minimum of R-6.0 as confirmed by visual inspection.

b. Ducts do not require insulation when the duct system is located entirely in conditioned space. For buildings with three or fewer habitable stories, duct systems located entirely in conditioned space shall be confirmed through field verification and diagnostic testing in accordance with the requirements of Reference Residential Appendix RA3.1.4.3.8.

iii. Connections of metal ducts and the inner core of flexible ducts shall be mechanically fastened.

iv. Openings shall be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used.

v. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct shall not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts.

Exception to Section 160.3(b)5A: Ducts and fans integral to a wood heater or fireplace.

B. **Factory-fabricated duct systems**.

i. All factory-fabricated duct systems shall comply with UL 181 for ducts and closure systems, including collars, connections and splices, and be labeled as complying with UL 181. UL 181 testing may be performed by UL laboratories or a laboratory approved by the Executive Director.

ii. All pressure-sensitive tapes, heat-activated tapes and mastics used in the manufacture of rigid fiberglass ducts shall comply with UL 181 and UL 181A.

iii. All pressure-sensitive tapes and mastics used with flexible ducts shall comply with UL 181 and UL 181B.

iv. Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and drawbands.

C. **Field-fabricated duct systems.**

i. Factory-made rigid fiberglass and flexible ducts for field-fabricated duct systems shall comply with UL 181. All pressure-sensitive tapes, mastics, aerosol sealants or other closure systems used for installing field-fabricated duct systems shall meet the applicable requirements of UL 181, UL 181A and UL 181B.

ii. Mastic sealants and mesh.

a. Sealants shall comply with the applicable requirements of UL 181, UL 181A and UL 181B, and be nontoxic and water resistant.

b. Sealants for interior applications shall be tested in accordance with ASTM C731 and D2202, incorporated herein by reference.

c. Sealants for exterior applications shall be tested in accordance with ASTM C731, C732 and D2202, incorporated herein by reference.

d. Sealants and meshes shall be rated for exterior use.

iii. Pressure-sensitive tape. Pressure-sensitive tapes shall comply with the applicable requirements of UL 181, UL 181A and UL 181B.

iv. Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and drawbands.

v. Drawbands used with flexible duct.

a. Drawbands shall be either stainless-steel worm-drive hose clamps or UV-resistant nylon duct ties.

b. Drawbands shall have a minimum tensile strength rating of 150 pounds.

c. Drawbands shall be tightened as recommended by the manufacturer with an adjustable tensioning tool.

vi. Aerosol-sealant closures.

a. Aerosol sealants shall meet the requirements of UL 723 and be applied according to manufacturer specifications.

b. Tapes or mastics used in combination with aerosol sealing shall meet the requirements of this section.

D. **Duct insulation R-value ratings.** All duct insulation product R-values shall be based on insulation only (excluding air films, vapor retarder or other duct components) and tested C-values at 75°F mean temperature at the installed thickness, in accordance with ASTM C518 or ASTM C177, incorporated herein by reference, and certified pursuant to Section 110.8.

E. **Duct insulation thickness.** The installed thickness of duct insulation used to determine its R-value shall be determined as follows:

i. For duct board, duct liner and factory-made rigid ducts not normally subjected to compression, the nominal insulation thickness shall be used**.**

ii. For duct wrap, installed thickness shall be assumed to be 75 percent (25 percent compression) of nominal thickness.

iii. For factory-made flexible air ducts, the installed thickness shall be determined by dividing the difference between the actual outside diameter and nominal inside diameter by two.

F. **Duct labeling.** Insulated flexible duct products installed to meet this requirement shall include labels, in maximum intervals of 3 feet, showing the thermal performance R-value for the duct insulation itself (excluding air films, vapor retarder or other duct components), based on the tests in Section 160.3(b)5D and the installed thickness determined by Section 160.3(b)5Eiii.

G. **Backdraft dampers.** All fan systems, regardless of volumetric capacity, that exchange air between the building conditioned space and the outside of the building shall be provided with backdraft or automatic dampers to prevent unintended air leakage through the fan system when the fan system is not operating.

H. **Gravity ventilation dampers.** All gravity ventilating systems that serve conditioned space shall be provided with either automatic or readily accessible, manually operated dampers in all openings to the outside except combustion inlet and outlet air openings and elevator shaft vents.

I. **Protection of insulation.** Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance and wind but not limited to the following: Insulation exposed to weather shall be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas or plastic cover). Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.

J. **Porous inner core flex duct.** Flexible ducts having porous inner cores shall have a nonporous layer or air barrier between the inner core and the outer vapor barrier.

K. **Duct system sealing and leakage testing.** When space-conditioning systems utilize forced air duct systems to supply conditioned air to an individual dwelling unit, the ducts shall be sealed, as confirmed through field verification and diagnostic testing, in accordance with all applicable procedures specified in Reference Residential Appendix RA3.1. Air handler airflow for calculation of duct leakage rate compliance targets shall be determined according to methods specified in Reference Residential Appendix RA3.1.4.2**.**

For multifamily dwellings with the air-handling unit installed and the ducts connected directly to the air handler, regardless of duct system location:

i. The total leakage of the duct system shall not exceed 12 percent of the air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1; or

ii. The duct system leakage to outside shall not exceed 6 percent of the air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.4.

Exception 1 to Section 160.3(b)5K: The HERS Rater field verification and HERS Provider data registry requirements of Reference Residential Appendix RA2 and RA3 are not required for multifamily dwelling units in buildings four habitable stories and greater. The installer shall certify that diagnostic testing was performed in accordance with the applicable procedures.

Exception 2 to Section 160.3(b)5K: Multifamily dwelling units in buildings four habitable stories and greater in Climate Zones 1, 3, 5 and 7.

L. **System airflow rate and fan efficacy.** Space-conditioning systems that utilize forced air ducts to supply cooling to an individual dwelling unit shall:

i. **Static pressure probe.** Have a hole for the placement of a static pressure probe (HSPP), or a permanently installed static pressure probe (PSPP) in the supply plenum downstream of the air conditioning evaporator coil. The size, location and labeling of the HSPP or PSPP shall conform to the requirements specified in Reference Residential Appendix RA3.3.1.1 as confirmed by field verification and diagnostic testing; and

Exception to Section 160.3(b)5Li: Systems that cannot conform to the specifications for hole location in Reference Residential Appendix Figure RA3.3-1 shall not be required to provide holes as described in Figure RA3.3-1.

ii. **Single zone central forced air systems**. Demonstrate, in every control mode, airflow greater than or equal to 350 cfm per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy less than or equal to the maximum W/cfm specified in Subsection a or b below. The airflow rate and fan efficacy requirements in this section shall be confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

a. 0.45 W/cfm for gas furnace air-handling units.

b. 0.58 W/cfm for air-handling units that are not gas furnaces.

Exception 1 to Section 160.3(b)5Lii: Standard ducted systems without zoning dampers may comply by meeting the applicable requirements in Table 160.3-A or 160.3-B as confirmed by field verification and diagnostic testing in accordance with the procedures in Reference Residential Appendix Sections RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure drop requirements specified by Section 160.2(b)1Div for the system air filter(s) shall conform to the requirements given in Table 160.3-A or 160.3-B.

Exception 2 to Section 160.3(b)5Lii: Multispeed compressor systems or variable speed compressor systems shall verify airflow (cfm/ton) and fan efficacy (watt/cfm) for system operation at the maximum compressor speed and the maximum air handler fan speed.

Exception 3 to Section 160.3(b)5Lii: Gas furnace air-handling units manufactured prior to July 3, 2019 shall comply with a fan efficacy value less than or equal to 0.58 w/cfm as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

iii. **Zonally controlled central forced air systems.** Zonally controlled central forced air cooling systems shall be capable of simultaneously delivering, in every zonal control mode, an airflow from the dwelling, through the air handler fan and delivered to the dwelling, of greater than or equal to 350 cfm per ton of nominal cooling capacity, and operating at an air-handling unit fan efficacy of less than or equal to the maximum W/cfm specified in Subsection a or b below. The airflow rate and fan efficacy requirements in this section shall be confirmed by field verification and diagnostic testing in accordance with the applicable procedures specified in Reference Residential Appendix RA3.3.

a. 0.45 W/cfm for gas furnace air-handling units.

b. 0.58 W/cfm for air-handling units that are not gas furnaces.

Exception 1 to Section 160.3(b)5Liii: Multispeed or variable speed compressor systems, or single speed compressor systems that utilize the performance compliance approach, shall demonstrate compliance with the airflow (cfm/ton) and fan efficacy (watt/cfm) requirements of Section 160.3(b)5Liii by operating the system at maximum compressor capacity and system fan speed with all zones calling for conditioning, rather than in every zonal control mode.

Exception 2 to Section 160.3(b)5Liii: Gas furnace air-handling units manufactured prior to July 3, 2019 shall comply with a fan efficacy value less than or equal to 0.58 w/cfm as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

iv**. Small duct high velocity forced air systems.** Demonstrate, in every control mode, airflow greater than or equal to 250 cfm per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy less than or equal to 0.62 W/cfm as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

Exception 1 to Section 160.3(b)5Liv: Standard ducted systems without zoning dampers may comply by meeting the applicable requirements in Table 160.3-A or 160.3-B as confirmed by field verification and diagnostic testing in accordance with the procedures in Reference Residential Appendix Sections RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure drop requirements specified by Section

160.2(b)1Div for the system air filter(s) shall conform to the requirements given in Table 160.3-A or 160.3-B.

Exception 2 to Section 160.3(b)5Liv: Multispeed compressor systems or variable speed compressor systems shall verify airflow (cfm/ton) and fan efficacy (watt/cfm) for system operation at the maximum compressor speed and the maximum air handler fan speed.

Exception 1 to Section 160.3(b)5L: The HERS Rater field verification and HERS Provider data registry requirements of Reference Residential Appendix RA2 and RA3 are not required for multifamily dwelling units in buildings four habitable stories and greater. The installer shall certify that diagnostic testing was performed in accordance with the applicable procedures.

Exception 2 to Section 160.3(b)5L: Multifamily dwelling units in buildings four habitable stories and greater in Climate Zone 1.

6. Piping for space-conditioning systems, solar water-heating system collector loop, and distribution piping for steam and hydronic heating system shall meet the requirements of Section 160.3(c)1.

(c) **Fluid distribution systems; common area space-conditioning systems.** Multifamily buildings shall comply with the applicable requirements of Section 160.3(a)1. Multifamily common areas shall comply with the applicable requirements of Sections 160.3(a)2A through 160.3(a)2J.

1. **Pipe insulation**. Multifamily buildings shall comply with the applicable requirements of Sections 160.3(c)1A through 160.3(c)1D.

   A. **General requirements.** The piping conditions listed below for space-conditioning systems with fluid normal operating temperatures listed in Table 160.3-D shall have at least the amount of insulation specified in Section 160.3(c)1D:

      i. **Space cooling systems.** All refrigerant suction, chilled water and brine fluid distribution systems.

      ii. **Space heating systems.** All refrigerant, steam, steam condensate and hot water fluid distribution systems.

      Exception to Section 160.3(c)1Aii: Heat pumps refrigerant vapor line shall be installed with a minimum of 0.75 inch thick or R-6.0 insulation. No insulation is required on the refrigerant liquid line.

   B. Insulation conductivity shall be determined in accordance with ASTM C335 at the mean temperature listed in Table 160.3-D, and shall be rounded to the nearest 1/100 Btu-inch per hour per square foot per °F. Fluid distribution systems include all elements that are in series with the fluid flow, such as pipes, pumps, valves, strainers, coil u-bends and air separators, but not including elements that are not in series with the fluid flow, such as expansion tanks, fill lines, chemical feeders and drains.

   C. **Insulation protection.** Pipe insulation shall be protected from damage due to sunlight, moisture, equipment maintenance and wind. Protection shall, at minimum, include the following:

      i. Pipe insulation exposed to weather shall be protected by a cover suitable for outdoor service. The cover shall be water retardant and provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be used to provide this protection.

      ii. Pipe insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall include, or be protected by, a Class I or Class II vapor retarder. All penetrations and joints shall be sealed.

      iii. Pipe insulation buried below grade must be installed in a waterproof and noncrushable casing or sleeve.

   D. **Insulation thickness.**

      i. For insulation with a conductivity in the range shown in Table 160.3-D for the applicable fluid temperature range, the insulation shall have the applicable minimum thickness or R-value shown in Table 160.3-D.

ii. For insulation with a conductivity outside the range shown in Table 160.3-D for the applicable fluid temperature range, the insulation shall have a minimum R-value shown in Table 160.3-D or thickness as calculated with Equation 160.3-A:

$$T = PR\left[\left(1+\frac{t}{PR}\right)^{\frac{K}{k}}-1\right]$$

(Equation 160.3-A)

WHERE:

T = Minimum insulation thickness for material with conductivity K, inches.

PR = Pipe actual outside radius, inches.

t = Insulation thickness from TABLE 160.3-D, inches.

K = Conductivity of alternate material at the mean rating temperature indicated in TABLE 160.3-D for the applicable fluid temperature range, in Btu-inch per hour per square foot per °F.

k = The lower value of the conductivity range listed in TABLE 160.3-D for the applicable fluid temperature range, Btu-inch per hour per square foot per °F.

Exception 1 to Section 160.3(c)1: Factory-installed piping within space-conditioning equipment certified under Section 110.1 or 110.2.

Exception 2 to Section 160.3(c)1: Piping that conveys fluids with a design operating temperature range between 60°F and 105°F.

Exception 3 to Section 160.3(c)1: Where the heat gain or heat loss to or from piping without insulation will not increase building source energy use.

Exception 4 to Section 160.3(c)1: Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Metal piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to ensure that no contact is made with the metal framing.

2. **Requirements for air distribution system, ducts and plenum.** Multifamily common areas shall comply with the applicable requirements of Sections 160.3(c)2A through 160.3(c)2F.

A**. CMC compliance.** All air distribution system ducts and plenums, including, but not limited to, building cavities, mechanical closets, air-handler boxes and support platforms used as ducts or plenums shall meet the requirements of CMC Sections 601.0, 602.0, 603.0, 604.0 and 605.0, and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition, incorporated herein by reference. Connections of metal ducts and the inner core of flexible ducts shall be mechanically fastened. Openings shall be sealed with mastic, tape, aerosol sealant or other duct-closure system that meets the applicable requirements of UL 181, UL 181A or UL 181B. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used.

B. Portions of supply-air and return-air ducts conveying heated or cooled air located in one or more of the following spaces shall be insulated to a minimum installed level of R-8:

i. Outdoors; or

ii. In a space between the roof and an insulated ceiling; or

iii. In a space directly under a roof with fixed vents or openings to the outside or unconditioned spaces; or

iv. In an unconditioned crawl space; or

v. In other unconditioned spaces.

Portions of supply-air ducts that are not in one of these spaces, including ducts buried in concrete slab, shall be insulated to a minimum installed level of R-4.2 or be enclosed in directly conditioned space.

C. **Duct and plenum materials.**

i. **Factory-fabricated duct systems.**

a. All factory-fabricated duct systems shall comply with UL 181 for ducts and closure systems, including collars, connections and splices, and be labeled as complying with UL 181. UL 181 testing may be performed by UL laboratories or a laboratory approved by the Executive Director.

b. All pressure-sensitive tapes, heat-activated tapes and mastics used in the manufacture of rigid fiberglass ducts shall comply with UL 181 and UL 181A.

c. All pressure-sensitive tapes and mastics used with flexible ducts shall comply with UL 181 and UL 181B.

d. Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A. Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and drawbands.

Exception to Section 160.3(c)2Cid: Ductwork located in occupied space and exposed to view.

ii. **Field-fabricated duct systems.**

a. Factory-made rigid fiberglass and flexible ducts for field-fabricated duct systems shall comply with UL 181. All pressure-sensitive tapes, mastics, aerosol sealants or other closure systems used for installing field-fabricated duct systems shall meet the applicable requirements of UL 181, UL 181A and UL 181B.

b. Mastic sealants and mesh.

I. Sealants shall comply with the applicable requirements of UL 181, UL 181A and UL 181B, and be nontoxic and water resistant.

II. Sealants for interior applications shall pass ASTM C731 (extrudability after aging) and D2202 (slump test on vertical surfaces), incorporated herein by reference.

III. Sealants for exterior applications shall pass ASTM C731, C732 (artificial weathering test) and D2202, incorporated herein by reference.

IV. Sealants and meshes shall be rated for exterior use.

c. Pressure-sensitive tape. Pressure-sensitive tapes shall comply with the applicable requirements of UL 181, UL 181A and UL 181B.

d. Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A. Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and drawbands.

e. Drawbands used with flexible duct.

I. Drawbands shall be either stainless-steel worm-drive hose clamps or UV-resistant nylon duct ties.

II. Drawbands shall have a minimum tensile strength rating of 150 pounds.

III. Drawbands shall be tightened as recommended by the manufacturer with an adjustable tensioning tool.

f. Aerosol-sealant closures.

I. Aerosol sealants shall meet the requirements of UL 723 and be applied according to manufacturer specifications.

II. Tapes or mastics used in combination with aerosol sealing shall meet the requirements of this section.

D. All duct insulation product R-values shall be based on insulation only (excluding air films, vapor retarders or other duct components) and tested C-values at 75°F mean temperature at the installed thickness, in accordance with ASTM C518 or ASTM C177, incorporated herein by reference, and certified pursuant to Section 110.8.

E. The installed thickness of duct insulation used to determine its R-value shall be determined as follows:

i. For duct board, duct liner and factory-made rigid ducts not normally subjected to compression, the nominal insulation thickness shall be used.

ii. For duct wrap, installed thickness shall be assumed to be 75 percent (25 percent compression) of nominal thickness.

iii. For factory-made flexible air ducts, the installed thickness shall be determined by dividing the difference between the actual outside diameter and nominal inside diameter by two.

F. Insulated flexible duct products installed to meet this requirement must include labels, in maximum intervals of 3 feet, showing the thermal performance R-value for the duct insulation itself (excluding air films, vapor retarder or other duct components), based on the tests in Section 160.3(c)2D and the installed thickness determined by Section 160.3(c)2Eiii.

G. Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance and wind but not limited to the following: Insulation exposed to weather shall be suitable for outdoor service; e.g., protected by aluminum, sheet metal, painted canvas or plastic cover. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.

H. Duct systems shall be tested in accordance with i or ii below:

i. New duct systems that meet the criteria in Subsections a, b and c below or ductwork that is part of a system that meets the criteria of Section 180.2(b)2B shall be sealed to a leakage rate not to exceed 6 percent of the nominal air handler airflow rate as confirmed through field verification and diagnostic testing, in accordance with the applicable procedures in Reference Nonresidential Appendices NA1 and NA2.

a. The duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system; and

b. The space-conditioning system serves less than 5,000 square feet of conditioned floor area; and

c. The combined surface area of the ducts located in the following spaces is more than 25 percent of the total surface area of the entire duct system:

I. Outdoors; or

II. In a space directly under a roof that has a U-factor greater than the U-factor of the ceiling, or if the roof does not meet the requirements of Section 170.2(a)1; or

III. In a space directly under a roof that has fixed vents or openings to the outside or unconditioned spaces; or

IV. In an unconditioned crawl space; or

V. In other unconditioned spaces.

ii. All duct systems that do not meet the criteria in Section 160.3(c)2H shall meet the duct leakage testing requirements of CMC Section 603.9.2.

(d) **Mechanical acceptance testing.**

1. Common areas. Before an occupancy permit is granted, the following systems and equipment serving multifamily common areas shall be certified as meeting the Acceptance Requirements for Code Compliance, as specified by Reference Nonresidential Appendix NA7. These systems and equipment shall also comply with the applicable requirements of Section 160.3(d)3. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements:
   A. Outdoor air ventilation systems shall be tested in accordance with NA7.5.1.
   B. Constant volume, single zone air conditioning and heat pump unit controls shall be tested in accordance with NA7.5.2.
   C. Duct systems shall be tested in accordance with NA7.5.3 where either:
      a. They are new duct systems; or
      b. They are part of an altered system.
   D. Air economizers shall be tested in accordance with NA7.5.4.

      Exception to Section 160.3(d)1D: Air economizers installed by the HVAC system manufacturer and certified to the Commission as being factory calibrated and tested are exempt from the Functional Testing section of the Air Economizer Controls acceptance test as described in NA7.5.4.2.
   E. Demand control ventilation systems required by Section 160.2(c)3 shall be tested in accordance with NA7.5.5.
   F. Supply fan variable flow controls shall be tested in accordance with NA7.5.6.
   G. Hydronic system variable flow controls shall be tested in accordance with NA7.5.7 and NA7.5.9.
   H. Boilers or chillers that require isolation controls as specified by Section 170.2(c)4Iii or 170.2(c)4Iiii shall be tested in accordance with NA7.5.7.
   I. Hydronic systems with supply water temperature reset controls shall be tested in accordance with NA7.5.8.
   J. Automatic demand shed controls shall be tested in accordance with NA7.5.10.
   K. Fault detection and diagnostics (FDD) for packaged direct expansion units shall be tested in accordance with NA7.5.11.
   L. Automatic fault detection and diagnostics (FDD) for air handling units and zone terminal units shall be tested in accordance with NA7.5.12.
   M. Distributed energy storage DX AC systems shall be tested in accordance with NA7.5.13.
   N. Thermal energy storage (TES) systems shall be tested in accordance with NA7.5.14.
   O. Supply air temperature reset controls shall be tested in accordance with NA7.5.15.
   P. Water-cooled chillers served by cooling towers with condenser water reset controls shall be tested in accordance with NA7.5.16.
   Q. When an energy management control system is installed, it shall functionally meet all of the applicable requirements of Part 6.
   R. Occupant sensing zone controls shall be tested in accordance with NA7.5.17.
2. Multifamily dwelling units. Before an occupancy permit is granted, the following systems and equipment serving multifamily dwelling units shall be certified as meeting the acceptance requirements for code compliance, as specified by the Reference Nonresidential Appendix NA7. These systems and equipment shall also comply with the applicable requirements of Section 160.3(d)3. A Certificate of Acceptance shall be submitted to the enforcement agency that certifies that the equipment and systems meet the acceptance requirements:
   A. In multifamily buildings with four or more habitable stories, dwelling unit ventilation systems shall be tested in accordance with NA7.18.1.

B. In multifamily buildings with four or more habitable stories, dwelling unit enclosure leakage shall be tested in accordance with NA7.18.2 when exhaust or supply ventilation systems are used for compliance with whole-dwelling unit ventilation requirements as specified in Section 160.2(b)2Aivb2.

C. Multifamily building central ventilation ducts in multifamily buildings with four or more habitable stories shall be leak tested in accordance with NA7.18.3.

D. Multifamily building central ventilation system heat recovery or energy recovery systems in multifamily buildings with four or more habitable stories shall be tested in accordance with NA7.18.4.

3. When certification is required by Title 24, Part 1, Section 10-103.2, the acceptance testing specified by Section 160.3(d)1 and 2 shall be performed by a Certified Mechanical Acceptance Test Technician (CMATT). If the CMATT is operating as an employee, the CMATT shall be employed by a Certified Mechanical Acceptance Test Employer. The CMATT shall disclose on the Certificate of Acceptance a valid CMATT certification identification number issued by an approved Acceptance Test Technician Certification Provider. The CMATT shall complete all Certificate of Acceptance documentation in accordance with the applicable requirements in Section 10-103(a)4.

TABLE 160.3-A: Return Duct Sizing for Single Return Duct Systems

Return duct length shall not exceed 30 feet and shall contain no more than 180 degrees of bend. If the total bending exceeds 90 degrees, one bend shall be a metal elbow.

Return grille devices shall be labeled in accordance with the requirements in Section 160.2(b)1Biv to disclose the grille's design airflow rate and a maximum allowable clean-filter pressure drop of 25 Pa (0.1 inches water) for the air filter when tested using ASHRAE Standard 52.2, or as rated in accordance with AHRI Standard 680 for the design airflow rate for the return grille.

System Nominal Cooling Capacity (Ton)*	Return Duct Minimum Nominal Diameter (inch)	Minimum Total Return Filter Grille Nominal Area ($inch^2$)
1.5	16	500
2.0	18	600
2.5	20	800

*****Not applicable to systems with nominal cooling capacity greater than 2.5 tons or less than 1.5 ton

TABLE 160.3-B: Return Duct Sizing for Multiple Return Duct Systems

Each return duct length shall not exceed 30 feet and shall contain no more than 180 degrees of bend. If the total bending exceeds 90 degrees, one bend shall be a metal elbow.

Return grille devices shall be labeled in accordance with the requirements in Section 160.2(b)1Biv to disclose the grille's design airflow rate and a maximum allowable clean-filter pressure drop of 25 Pa (0.1 inches water) for the air filter when tested using ASHRAE Standard 52.2, or as rated in accordance with AHRI Standard 680 for the design airflow rate for the return grille.

System Nominal Cooling Capacity (Ton)*	Return Duct 1 Minimum Nominal Diameter (inch)	Return Duct 2 Minimum Nominal Diameter (inch)	Minimum Total Return Filter Grille Nominal Area (inch^2)
1.5	12	10	500
2.0	14	12	600
2.5	14	14	800
3.0	16	14	900
3.5	16	16	1000
4.0	18	18	1200
5.0	20	20	1500

*****Not applicable to systems with nominal cooling capacity greater than 5.0 tons or less than 1.5 tons.

TABLE 160.3-C DDC Applications and Qualifications

Building Status	Applications	Qualifications
Newly Constructed Buildings	Air handling system and all zones served by the system	Individual systems supplying more than three zones and with design heating or cooling capacity of 300 kBtu/h and larger
Newly Constructed Buildings	Chilled water plant and all coils and terminal units served by the system	Individual plants supplying more than three zones and with design cooling capacity of 300 kBtu/h (87.9 kW) and larger
Newly Constructed Buildings	Hot water plant and all coils and terminal units served by the system	Individual plants supplying more than three zones and with design heating capacity of 300 kBtu/h (87.9 kW) and larger
Additions or Alterations	Zone terminal unit such as VAV box	Where existing zones served by the same air handling, chilled water, or hot water systems that have DDC
Additions or Alterations	Air handling system or fan coil	Where existing air handling system(s) and fan coil(s) served by the same chilled or hot water plant have DDC
Additions or Alterations	New air handling system and all new zones served by the system	Individual systems with design heating or cooling capacity of 300 kBtu/h and larger and supplying more than three zones and more than 75 percent of zones are new
Additions or Alterations	New or upgraded chilled water plant	Where all chillers are new and plant design cooling capacity is 300 kBtu/h (87.9 kW) and larger
Additions or Alterations	New or upgraded hot water plant	Where all boilers are new and plant design heating capacity is 300 kBtu/h (87.9 kW) and larger

TABLE 160.3-D PIPE INSULATION THICKNESS

Fluid Operating Temperature Range (°F)	Insulation Conductivity			Nominal Pipe Diameter (in inches)				
	Conductivity (in Btu·in/h·ft²·°F)	Mean Rating Temperature (°F)		< 1	1 to <1.5	1.5 to < 4	4 to < 8	8 and larger
Space heating (Steam, Steam Condensate, Refrigerant, Space Heating)				**Minimum Pipe Insulation Required (Thickness in inches or R-value)**				
Above 350	0.32-0.34	250	Inches	4.5	5.0	5.0	5.0	5.0
			R-value	R 37	R 41	R 37	R 27	R 23
251-350	0.29-0.32	200	Inches	3.0	4.0	4.5	4.5	4.5
			R-value	R 24	R 34	R 35	R 26	R 22
201-250	0.27-0.30	150	Inches	2.5	2.5	2.5	3.0	3.0
			R-value	R 21	R 20	R 17.5	R 17	R 14.5
141-200	0.25-0.29	125	Inches	1.5	1.5	2.0	2.0	2.0
			R-value	R 11.5	R 11	R 14	R 11	R 10
105-140	0.22-0.28	100	Inches	1.0	1.5	1.5	1.5	1.5
			R-value	R 7.7	R 12.5	R 11	R 9	R 8
Fluid Operating Temperature Range (°F)	**Insulation Conductivity**			**Nominal Pipe Diameter (in inches)**				
	Conductivity (in Btu·in/h·ft²·°F)	**Mean Rating Temperature (°F)**		**< 1**	**1 to <1.5**	**1.5 to < 4**	**4 to < 8**	**8 and larger**
Space cooling systems (chilled water, refrigerant and brine)				**Minimum Pipe Insulation Required (Thickness in inches or R-value)[1]**				
40-60	0.21-0.27	75	Inches	0.75	0.75	1.0	1.0	1.0
			R-value	R 6	R 5	R 7	R 6	R 5
Below 40	0.20-0.26	50	Inches	1.0	1.5	1.5	1.5	1.5
			R-value	R 8.5	R 14	R 12	R 10	R 9

Footnote to TABLE 160.3-D:

1. **These thicknesses are based on energy efficiency considerations only. Issues such as water vapor permeability or surface condensation sometimes require vapor retarders or additional insulation.**

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 160.4 – MANDATORY REQUIREMENTS FOR WATER HEATING SYSTEMS

(a) Systems using gas or propane water heaters to serve individual dwelling units shall include the following components:

1. A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within 3 feet from the water heater and accessible to the water heater with no obstructions. In addition, all of the following:
   A. Both ends of the unused conductor shall be labeled with the word “spare” and be electrically isolated; and
   B. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words “Future 240V Use”; and
2. A Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; and
3. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance; and
4. A gas supply line with a capacity of at least 200,000 Btu/hr.

(b) Water-heating recirculation loops serving multiple dwelling units shall meet the requirements of Section 110.3(c)4.

(c) Solar water-heating systems and collectors shall be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or a listing agency that is approved by the Executive Director.

(d) Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2kW) shall meet the requirements of Section 110.3(c)6.

(e) Commercial boilers

1. Combustion air positive shut-off shall be provided on all newly installed boilers as follows:
   A. All boilers with an input capacity of 2.5 MMBtu/h (2,500,000 Btu/h) and above, in which the boiler is designed to operate with a nonpositive vent static pressure.
   B. All boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h (2,500,000 Btu/h).
2. Boiler combustion air fans with motors 10 horsepower or larger shall meet one of the following for newly installed boilers:
   A. The fan motor shall be driven by a variable speed drive, or
   B. The fan motor shall include controls that limit the fan motor demand to no more than 30 percent of the total design wattage at 50 percent of design air volume.
3. Newly installed boilers with an input capacity 5 MMBtu/h (5,000,000 Btu/h) and greater shall maintain excess (stack-gas) oxygen concentrations at less than or equal to 5.0 percent by volume on a dry basis over firing rates of 20 percent to 100 percent. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

   Exception to Section 160.4(e)3: Boilers with steady state full-load thermal combustion efficiency 90 percent or higher.

(f) **Insulation for piping and tanks**

1. Piping for multifamily domestic hot water systems shall be insulated to meet the requirements of Table 160.4-A.

   Exception 1 to Section 160.4(f)1: Factory-installed piping within space-conditioning equipment certified under Section 110.1 or 110.2.

Exception 2 to Section 160.4(f)1: Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to ensure that no contact is made with the metal framing. Insulation shall abut securely against all framing members.

Exception 3 to Section 160.4(f)1: Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with quality insulation installation (QII) as specified in Reference Residential Appendix RA3.5.

Exception 4 to Section 160.4(f)1: Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawl space insulation or 4 inches of attic insulation shall not be required to have pipe insulation.

TABLE 160.4-A PIPE INSULATION THICKNESS – Multifamily Domestic Hot Water

Fluid Operating Temperature Range (°F)	Insulation Conductivity			Nominal Pipe Diameter (in inches)				
	Conductivity (in Btu·in/h·ft^{2}· °F)	Mean Rating Temperature (°F)		< 1	1 to <1.5	1.5 to < 4	4 to < 8	8 and larger
Multifamily Domestic Hot Water Systems				**Minimum Pipe Insulation Required (Thickness in inches or R-value)**				
105-140[1]	0.22-0.28	100	Inches	1.0	1.5	2.0	2.0	2.0
			R-value	R 7.7	R 12.5	R 16	R 12.5	R 11

Footnote to TABLE 160.4-A:

1. Multifamily and hotel/motel domestic hot water systems with water temperature above 140°F shall use the row in table 120.3-A for the applicable water temperature.

2. **Insulation Protection.** Pipe Insulation shall be protected from damage due to sunlight, moisture, equipment maintenance and wind. Protection shall, at minimum, include the following:

   A. Pipe insulation exposed to weather shall be protected by a cover suitable for outdoor service. The cover shall be water retardant and provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be used to provide this protection.

   B. Pipe insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall include, or be protected by, a Class I or Class II vapor retarder. All penetrations and joints shall be sealed.

   C. Pipe insulation buried below grade must be installed in a waterproof and noncrushable casing or sleeve.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

SECTION 160.5 – MANDATORY LIGHTING REQUIREMENTS FOR INDOOR AND OUTDOOR SPACES

The design and installation of all lighting systems and equipment in multifamily buildings within the scope of Section 100.0(a) shall comply with the applicable provisions of Section 160.5. All functional areas except dwelling units and common living areas shall comply with the applicable requirements of Sections 160.5(b) through 160.5(e).

(a) **Dwelling unit lighting.**

The design and installation of all lighting systems and equipment in multifamily dwelling units shall comply with Section 160.5(a). Multifamily dwelling units include dormitory and senior housing dwelling accommodations. Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit shall comply with the lighting requirements of Section 160.5(a).

1. Luminaire requirements.

A. Luminaire efficacy**.** All installed luminaires shall meet the requirements in Table 160.5-A.
Exception 1 to Section 160.5(a)1A: **Integrated device lighting:** Lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors and garage door openers, and nonremovable lighting attached to ceiling fans.

Exception 2 to Section 160.5(a)1A: Navigation lighting: Night lights, step lights, path lights less than 5 watts.

Exception 3 to Section 160.5(a)1A: Cabinet lighting: Lighting internal to drawers, cabinetry and linen closets with an efficacy of 45 lumens per watt or greater.

B. Screw based luminaires. Screw based luminaires shall contain lamps that comply with Reference Joint Appendix JA8.

C. Recessed downlight luminaires. In addition to complying with Section 160.5(a)1A, luminaires recessed into ceilings shall meet all of the following requirements:

i. Shall not contain screw base lamp sockets; and

ii. Have a label that certifies the luminaire is airtight with air leakage less than 2.0 cfm at 75 Pascals when tested in accordance with ASTM E283. An exhaust fan housing with integral light shall not be required to be certified airtight; and

iii. Be sealed with a gasket or caulk between the luminaire housing and ceiling, and have all air leak paths between conditioned and unconditioned spaces sealed with a gasket or caulk, or be installed per manufacturer's instructions to maintain airtightness between the luminaire housing and ceiling; and

iv. Meet the clearance and installation requirements of California Electrical Code Section 410.116 for recessed luminaires.

Exception to Section 160.5(a)1Cii and Iii: Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in noninsulated ceilings.

D. Light sources in enclosed or recessed luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, shall not be installed in enclosed or recessed luminaires.

E. Blank electrical boxes. The number of electrical boxes that are more than 5 feet above the finished floor and do not contain a luminaire or other device shall be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, low voltage wiring or fan speed control.

2. Indoor lighting controls.

A. Lighting shall have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.

Exception to Section 160.5(a)2A: Ceiling fans may provide control of integrated lighting via a remote control.

B. No controls shall bypass a dimmer, occupant sensor or vacancy sensor function where that dimmer or sensor has been installed to comply with Section 160.5(a)2.

C. Lighting controls shall comply with the applicable requirements of Section 110.9.

D. An energy management control system (EMCS) or a multiscene programmable controller may be used to comply with dimming, occupancy and lighting control requirements in Section 160.5(a)2 if it provides the functionality of the specified controls in accordance with Section 110.9 and the physical controls specified in Section 160.5(a)2A.

E. Automatic off controls.

iv. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire shall be controlled by an occupancy or vacancy sensor providing automatic-off functionality.

v. For lighting internal to drawers and cabinetry with opaque fronts or doors, controls that turn the lighting off when the drawer or door is closed shall be provided.

F. Dimming controls. Lighting in habitable spaces, including but not limited to living rooms, dining rooms, kitchens and bedrooms, shall have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources shall comply with NEMA SSL 7A.

Exception 1 to Section 160.5(a)2F: Ceiling fans may provide control of integrated lighting via a remote control.
Exception 2 to Section 160.5(a)2F: Luminaires controlled by an occupancy or vacancy sensor providing automatic-off functionality.
Exception 3 to Section 160.5(a)2F: Navigation lighting such as night lights, step lights and path lights less than 5 watts; and lighting internal to drawers and cabinetry with opaque fronts or doors, or with automatic off controls.

G. Independent controls. Integrated lighting of exhaust fans shall be controlled independently from the fans. The following shall be controlled separately from ceiling-installed lighting such that one can be turned on without turning on the other:

v. Undercabinet lighting

vi. Undershelf lighting

vii. Interior lighting of display cabinets

viii. Switched outlets

3. **Outdoor lighting controls.** In addition to meeting the requirements of Section 160.5(a)1, luminaires providing residential outdoor lighting shall meet the following requirements, as applicable:

A. Outdoor lighting attached to a building and separately controlled from the inside of a dwelling unit shall meet the requirement in Item i and the requirements in either Item ii or Item iii:

i. Controlled by a manual ON and OFF control switch that permits the automatic actions of Item ii or iii below; and

ii. Controlled by a photocell and either a motion sensor or an automatic time switch control; or

iii. Controlled by an astronomical time clock control.

Controls that override to ON shall not be allowed unless the override automatically returns the automatic control to its normal operation within 6 hours. An energy management control system that provides the specified

lighting control functionality and complies with all requirements applicable to the specified controls may be used to meet these requirements.

TABLE 160.5-A CLASSIFICATION OF DWELLING UNIT HIGH LUMINOUS EFFICACY LIGHT SOURCES

Light sources in this column other than those installed in ceiling recessed downlight luminaires are classified as high luminous efficacy and are **not** required to comply with Reference Joint Appendix JA8	Light sources in this column are required to comply with Reference Joint Appendix JA8 and shall be certified and marked as required by JA8.
1. LED light sources installed outdoors. 2. Inseparable Solid State Lighting (SSL) luminaires containing colored light sources that are installed to provide decorative lighting. 3. Pin-based linear fluorescent or compact fluorescent light sources using electronic ballasts. 4. High intensity discharge (HID) light sources including pulse start metal halide and high pressure sodium light sources. 5. Luminaires with hardwired high frequency generator and induction lamp. 6. Ceiling Fan Light Kits subject to federal appliance regulations.	7. All light sources installed in ceiling recessed downlight luminaires. Note that ceiling recessed downlight luminaires shall not have screw base sockets regardless of lamp type as specified in Section 150.0(k)1C. 8. Any light source not otherwise listed in this table.

(b) **Common services area lighting.** Lighting systems and equipment in multifamily common services areas shall comply with the applicable provisions of Sections 160.5(b)1 through 160.5(b)4.

Exception to Section 160.5(b): Lighting systems in common use areas providing shared provisions for living, eating, cooking or sanitation to dwelling units that would otherwise lack these provisions may instead comply with Section 160.5(a).

Note: The requirements of Section 160.5(b) apply to newly constructed buildings. Sections 180.1 and 180.2 specify which requirements of Sections 160.5(b)1 through 160.5(e) also apply to additions and alterations to existing buildings.

1. **Luminaire classification and power**. Luminaires shall be classified, and their wattage determined as follows:

   A. Luminaire wattage shall be labeled as follows:

      i. The maximum rated wattage or relamping rated wattage of a luminaire shall be listed on a permanent, preprinted, factory-installed label, as specified by UL 1574, 1598, 2108 or 8750, as applicable; and

      ii. The factory-installed maximum rated wattage or relamping rated wattage label shall not consist of peel-off or peel-down layers or other methods that allow the rated wattage to be changed after the luminaire has been shipped from the manufacturer.

      Exception to Section 160.3(b)1Aii: Luminaires with a single lamp and an integrated ballast or transformer may use a peel-down label provided that they are layered such that the rated wattage reduces as successive layers are removed.

         a. Low-voltage luminaires (except low voltage track systems), ≤ 24 volts, with a maximum relamping rated wattage of 50 watts.

b. **C**ompact fluorescent luminaires, having an integral electronic ballast, with a maximum relamping rated wattage of 42 watts.

c. High intensity discharge luminaires, having an integral electronic ballast, with a maximum relamping rated wattage of 150 watts.

B. For luminaires with line voltage lamps not served by drivers, ballasts or transformers, the wattage of such luminaires shall be determined as the maximum rated wattage as labeled in accordance with Section 160.5(b)1A.

C. For luminaires with permanently installed or remotely installed ballasts, the wattage of such luminaires shall be the operating input wattage of the rated lamp/ballast combination published in the ballast manufacturer's catalogs based on independent testing lab reports as specified by UL 1598.

D. For inseparable SSL luminaires and SSL luminaires with remotely mounted drivers, the maximum rated wattage shall be the maximum rated input wattage of the SSL luminaire as specified in Section 160.5(b)1A when tested in accordance with UL 1598, 2108 or 8750, or IES LM-79.

E. For LED tape lighting and LED linear lighting with LED tape lighting components, the maximum rated wattage shall be the sum of the installed length of the tape lighting times its rated linear power density in watts per linear foot, or the maximum rated input wattage of the driver or power supply providing power to the lighting system, with tape lighting tested in accordance with UL 2108 or 8750, or IES LM-79.

F. For modular lighting systems that allow the addition or relocation of luminaires without altering the wiring of the system, wattage shall be determined as follows:

i. The wattage shall be the greater of:

a. 30 watts per linear foot of track or plug-in busway; or

b. the rated wattage of all of the luminaires included in the system, where the luminaire wattage is determined as specified in Section 160.5(b)1A; or

ii. For line-voltage lighting track and plug-in busway served by a track lighting integral current limiter or a dedicated track lighting supplementary overcurrent protection panel, the wattage shall be determined as follows:

a. The volt-ampere rating of current limiter as specified by UL 1077; or

b. The sum of the ampere (A) rating of all of the current protection devices times the branch circuit voltages for track lighting supplementary overcurrent protection panel.

iii. For other modular lighting systems with power supplied by a driver, power supply or transformer, including but not limited to low-voltage lighting systems, the wattage of the system shall be the maximum rated input wattage of the driver, power supply or transformer published in the manufacturer's catalogs, as specified by UL 2108 or 8750.

Exception to Section 160.5(b)1F: For power-over-Ethernet lighting systems, power provided to installed nonlighting devices may be subtracted from the total power rating of the power-over-Ethernet system.

G. For all other lighting equipment not addressed by Sections 160.5(b)1B through F, the wattage of the lighting equipment shall be the maximum rated wattage of the lighting equipment, or operating input wattage of the system, labeled in accordance with Section 160.5(b)1A, or published in manufacturer's catalogs, based on independent testing lab reports as specified by UL 1574, 1598, 2108, 8750, or IES LM-79.

2. **Lighting controls**. All lighting controls and equipment shall comply with the applicable requirements in Sections 110.9, 160.5(b) and 160.5(c), and shall be installed in accordance with any applicable manufacturer instructions.

3. **Energy Management Control System (EMCS)**. An EMCS may be installed to comply with the requirements of one or more lighting controls if it meets the following minimum requirements:

A. Provides all applicable functionality for each specific lighting control or system for which it is installed in accordance with Sections 110.9, 160.5(b) and 160.5(c); and

B. Complies with all applicable lighting control installation requirements in accordance with Section 160.5(e) for each specific lighting control or system for which it is installed; and

C. Complies with all applicable application requirements for each specific lighting control or system for which it is installed, in accordance with Part 6.

4. **Mandatory indoor lighting controls**. Multifamily common use areas shall comply with the applicable requirements of Sections 160.5(b)4A through 160.5(b)4F, in addition to the applicable requirements of Section 110.9.

A. **Manual area controls.** Each area enclosed by ceiling-height partitions shall provide lighting controls that allow the lighting in that area to be manually turned on and off. The manual control shall:

i. Be readily accessible; and

Exception to Section 160.5(b)4Ai: Restrooms having two or more stalls, parking areas, stairwells, corridors and areas of the building intended for access or use by the public may use a manual control not accessible to unauthorized personnel.

ii. Be located in the same enclosed area with the lighting it controls; and

Exception to Section 160.5(b)4Aii: For areas where placement of a manual area control poses a health and safety hazard, the manual area control may instead be located so that a person using the control can see the lights or area controlled by that control, or visually signal or display showing the current state of the controlled lighting.

iii. Provide separate control of general, floor display, wall display, window display, case display, ornamental, and special effects lighting, such that each type of lighting can be turned on or off without turning on or off other types of lighting. Scene controllers may comply with this requirement provided that at least one scene turns on general lighting only, and the control provides a means to manually turn off all lighting.

Exception to Section 160.5(b)4A: Up to 0.1 watts per square foot of indoor lighting may be continuously illuminated to allow for means of egress illumination consistent with California Building Code Section 1008. Egress lighting complying with this wattage limitation is not required to comply with manual area control requirements if:

i. The area is designated for means of egress on the plans and specifications submitted to the enforcement agency under Section 10-103(a)2 of Part 1; and

ii. The controls for the egress lighting are not accessible to unauthorized personnel.

B. **Multi-level lighting controls.** The general lighting of any enclosed area 100 square feet or larger with a connected lighting load that exceeds 0.5 watts per square foot shall provide multi-level lighting controls that allow the level of lighting to be adjusted up and down. The multi-level controls shall:

i. Provide the number of control steps specified in Table 160.5-B; and

ii. Meet the uniformity requirements specified in Table 160.5-B.

Exception 1 to Section 160.5(b)4B: An area enclosed by ceiling height partitions that has only one luminaire with no more than two lamps or has only one inseparable SSL luminaire.

Exception 2 to Section 160.5(b)4B: Restrooms.

C. **Automatic shut-OFF controls.** All installed indoor lighting shall be equipped with controls able to automatically reduce lighting power when the space is typically unoccupied.

i. In addition to lighting controls installed to comply with Sections 160.5(b)4A and B, all installed indoor lighting shall be equipped with controls that meet the following requirements:

a. Shall be controlled with an occupant sensing control, automatic time-switch control, or other control capable of automatically shutting OFF all of the lighting when the space is typically unoccupied; and

b. Separate controls for the lighting on each floor, other than lighting in stairwells; and

c. Separate controls for a space enclosed by ceiling height partitions not exceeding 5,000 square feet;

Exception 1 to Section 160.5(b)4Ci: Where the lighting is serving an area that is in continuous use, 24 hours per day/365 days per year.

Exception 2 to Section 160.5(b)4Ci: Lighting complying with Section 160.5(b)4Cv or vii.

Exception 3 to Section 160.5(b)4Ci: Up to 0.1 watts per square foot of lighting in any area within a building may be continuously illuminated, provided that the area is designated for means of egress on the plans and specifications submitted to the enforcement agency under Section 10-103(a)2 of Part 1. Lighting providing means of egress illumination, as the term is used in the California Building Code, shall be configured to provide no less than the amount of light required by California Building Code Section 1008 while in the partial-off mode.

Exception 4 to Section 160.5(b)4Ci: Electrical equipment rooms subject to Article 110.26(D) of the California Electrical Code.

Exception 5 to Section 160.5(b)4Ci: Illumination provided by lighting equipment that is designated for emergency lighting, connected to an emergency power source or battery supply, and intended to function in emergency mode only when normal power is absent.

ii. Countdown timer switches may be used to comply with the automatic shut-OFF control requirements in Section 160.5(b)4Ci only in closets less than 70 square feet. The maximum timer setting shall be 10 minutes for closets.

iii. If an automatic time-switch control, other than an occupant sensing control, is installed to comply with Section 160.5(b)4Ci, it shall incorporate a manual override lighting control that:

a. Complies with 160.5(b)4A; and

b. Allows the lighting to remain ON for no more than 2 hours when an override is initiated.

iv. If an automatic time-switch control, other than an occupant sensing control, is installed to comply with Section 160.5(b)4Ci, it shall incorporate an automatic holiday "shut-OFF" feature that turns OFF all loads for at least 24 hours, and then resumes the normally scheduled operation.

v**.** Occupant sensing controls are required for specified offices, multipurpose rooms, conference rooms and restrooms. In offices 250 square feet or smaller, multipurpose rooms of less than 1,000 square feet, conference rooms of any size and restrooms of any size, lighting shall be controlled with occupant sensing controls to automatically shut OFF all of the lighting in 20 minutes or less after the control zone is unoccupied.

In areas required by Section 160.5(b)4B to have multi-level lighting controls, the occupant sensing controls shall function either as:

a. a partial-ON occupant sensing control capable of automatically activating between 50 and 70 percent of controlled lighting power, or

b. a vacancy sensing control, where all lighting responds to a manual ON input only.

In areas not required by Section 160.5(b)4B to have multi-level lighting controls, the occupant sensing controls shall function either as:

a. an occupant sensing control; or

b. a partial-ON occupant sensing control, or

c. a vacancy sensing control, where all lighting responds to a manual ON input only.

In addition, controls shall be provided that allow the lights to be manually shut OFF in accordance with Section 160.5(b)4A regardless of the sensor status.

vi. Full or partial OFF occupant sensing controls are required for corridors and stairwells, and offices greater than 250 square feet. Lighting installed in the following areas shall meet the requirements below in addition to complying with Section 160.5(b)4Ci.

a. In corridors and stairwells, lighting shall be controlled by occupant sensing controls that separately reduce the lighting power in each space by at least 50 percent when the space is unoccupied. The occupant sensing controls shall be capable of automatically turning the lighting fully ON only in the separately controlled space and shall be automatically activated from all designed paths of egress.

b. In office spaces greater than 250 square feet, general lighting shall be controlled by occupancy sensing controls that meet all of the following:

I. The occupancy sensing controls shall be configured so that lighting shall be controlled separately in control zones not greater than 600 square feet. For luminaires with an embedded occupancy sensor that are capable of reducing power independently from other luminaires, each luminaire can be considered its own control zone; and

II. In 20 minutes ~~of~~ or less after the control zone is unoccupied, the occupancy sensing controls shall uniformly reduce lighting power in the control zone to by at least 80 percent of full power. Control functions that switch control zone lights completely off when the zone is vacant meet this requirement; and

III. In 20 minutes or less after the entire office space is unoccupied, the occupancy sensing controls shall automatically turn off lighting in all control zones in the space; and

IV. In each control zone, lighting shall be allowed to automatically turn on to any level up to full power upon occupancy within the control zone. When occupancy is detected in any control zone in the space, the lighting in other control zones that are unoccupied shall operate at no more than 20 percent of full power.

Exception to Section 160.5(b)4Cvi: Under-shelf or furniture-mounted task lighting controlled by a local switch and either a time switch or an occupancy sensor.

vii. Partial OFF occupant sensing controls are required for parking garages, parking areas, and loading and unloading areas. Lighting installed in the following areas shall meet the requirements below instead of complying with Section 160.5(b)4Ci.

a. Reserved

b. In parking garages, parking areas, and loading and unloading areas, general lighting shall be controlled by occupant sensing controls having at least one control step between 20 percent and 50 percent of design lighting power. No more than 500 watts of rated lighting power shall be controlled together as a single zone. A reasonably uniform level of illuminance shall be achieved in accordance with the applicable requirements in Table 160.5-B. The occupant sensing controls shall be capable of automatically turning the lighting fully ON only in the separately controlled space, and shall be automatically activated from all designed paths of egress.

Interior areas of parking garages are classified as indoor lighting for compliance with Section 160.5(b)4Cviib. Parking areas on the roof of a parking structure are classified as outdoor hardscape and shall comply with the applicable provisions in Section 160.5(c).

Exception to Section 160.5(b)4Cviib: Metal halide luminaires with a lamp plus ballast mean system efficacy of greater than 75 lumens per watt, used for general lighting in parking garages, parking areas, and loading and unloading areas, shall be controlled by occupant sensing controls having at least one control step between 20 percent and 60 percent of design lighting power.

D. **Automatic Daylighting Controls. The general lighting in** skylit daylit zones, primary sidelit daylit zones, and secondary sidelit daylit zones, as well as the general lighting in the combined primary and secondary sidelit daylit zones in parking garages, shall be provided with controls that automatically adjust the power of the installed general lighting up and down to keep the total light level stable as the amount of incoming daylight

changes. For skylights located in an atrium, the skylit daylit zones shall apply to the floor area directly under the atrium and the top floor area directly adjacent to the atrium.

i. All skylit daylit zones, primary sidelit daylit zones, secondary sidelit daylit zones and the combined primary and secondary sidelit daylit zones in parking garages shall be shown on the plans.

Note: Parking areas on the roof of a parking structure are outdoor hardscape, not skylit daylit areas.

ii. The automatic daylighting controls shall provide separate control for general lighting in each type of daylit zone. General lighting in overlapping skylit daylit zone and sidelit daylit zone shall be controlled as part of the skylit daylit zone. General lighting in overlapping primary and secondary sidelit daylit zone shall be controlled as part of the primary sidelit daylit zone. Linear LED luminaires and other solid state lighting (SSL) light sources in linear form may be treated as linear lamps in increments of 4 feet segment or smaller, and each segment is separately controlled based on the type of the daylit zone the segment is primarily located.

iii. The automatic daylighting controls shall:

   a. For spaces required to install multilevel controls under Section 160.5(b)4B, adjust lighting via continuous dimming or the number of control steps provided by the multilevel controls;

   b. For each space, ensure the combined illuminance from the controlled lighting and daylight is not less than the illuminance from controlled lighting when no daylight is available;

   c. For areas other than parking garages, ensure that when the daylight illuminance is greater than 150 percent of the illuminance provided by the controlled lighting system when no daylight is available, the controlled lighting power in that daylight zone shall be reduced by a minimum of 90 percent; and

   d. For parking garages, ensure that when daylight illuminance levels measured at the farthest edge of the secondary sidelit zone away from the glazing or opening are greater than 150 percent of the illuminance provided by the controlled lighting when no daylight is available, the controlled lighting power in the combined primary and secondary sidelit daylight zones shall be reduced by 100 percent.

iv. Photosensor shall be located so that they are not readily accessible to unauthorized personnel.

v. The location where calibration adjustments are made to the automatic daylighting controls shall be readily accessible to authorized personnel but may be inside a locked case or under a cover that requires a tool for access.

Exception 1 to Section 160.5(b)4D: Areas under skylights where it is documented that existing adjacent structures or natural objects block direct sunlight for more than 1,500 daytime hours per year between 8 a.m. and 4 p.m.

Exception 2 to Section 160.5(b)4D: Areas adjacent to vertical glazing below an overhang, where the overhang covers the entire width of the vertical glazing, no vertical glazing is above the overhang, and the ratio of the overhang projection to the overhang rise is greater than 1.5 for south, east and west orientations or greater than 1 for north orientations.

Exception 3 to Section 160.5(b)4D: Rooms where the combined total installed wattage of the general lighting in the skylit and primary sidelit zones is less than 120 watts are not required to have daylighting controls for those zones. Rooms where the total installed wattage of the general lighting in the secondary sidelit zones is less than 120 watts are not required to have daylighting controls for that zone.

Exception 4 to Section 160.5(b)4D: Parking garage areas where the total installed wattage of the general lighting in the primary and the secondary sidelit daylit zones is less than 60 watts do not require automatic daylighting controls in the daylit zones.

Exception 5 to Section 160.5(b)4D: Rooms that have a total glazing area of less than 24 square feet, or parking garage areas with a combined total of less than 36 square feet of glazing or opening.

Exception 6 to Section 160.5(b)4D: For parking garages, luminaires located in the daylight adaptation zone and luminaires for only dedicated ramps. Daylight adaptation zone and dedicated ramps are defined in Section 100.1.

Exception 7 to Section 160.5(b)4D: Luminaires in sidelit daylit zones in retail merchandise sales and wholesale showroom areas.

E. **Demand Responsive Controls.** See Section 110.12 for requirements for demand responsive lighting controls.

F. **Control interactions.** Each lighting control installed to comply with Section 160.5(b)4 shall permit or incorporate the functions of the other lighting controls required by this section.

i. For general lighting, the manual area control shall permit the level or amount of light provided while the lighting is on to be set or adjusted by the controls specified in Sections 160.5(b)4B, C, D, and E.

ii. The manual area control shall permit the shutoff control to turn the lighting down or off.

iii. The multi-level lighting control shall permit the automatic daylighting control to adjust the electric lighting level in response to changes in the amount of daylight in the daylit zone.

iv. The multi-level lighting control shall permit the demand responsive control to adjust the lighting during a demand response event and to return it to the level set by the multilevel control after the event.

v. The shutoff control shall permit the manual area control to turn the lighting on. If the on request occurs while an automatic time switch control would turn the lighting off, then the on request shall be treated as an override request consistent with Section160.5(c)4Ciii.

vi. The automatic daylighting control shall permit the multi-level lighting control to adjust the level of lighting.

vii. For lighting controlled by multi-level lighting controls and by occupant sensing controls that provide an automatic-on function, the controls shall provide a partial-on function that is capable of automatically activating between 50 and 70 percent of controlled lighting power.

viii. Reserved.

ix. For space-conditioning system zones serving only spaces that are required to have occupancy sensing controls as specified in Sections 160.5(b)4Cv, vi and vii, and where Table 120.1-A allows the ventilation air to be reduced to zero when the space is in occupied-standby mode, the space conditioning system shall be controlled by occupancy sensing controls as specified in Section 120.2(e)3.

TABLE 160.5-B MULTI-LEVEL LIGHTING CONTROLS AND UNIFORMITY REQUIREMENTS

Luminaire Type	Minimum Required Control Steps (percent of full rated power[1])	Uniform level of illuminance shall be achieved by:
LED luminaires and LED light source systems	Continuous dimming 10-100 percent	Continuous dimming 10-100 percent
Line-voltage sockets except GU-24	Continuous dimming 10-100 percent	Continuous dimming 10-100 percent
Low-voltage incandescent systems	Continuous dimming 10-100 percent	Continuous dimming 10-100 percent
Fluorescent luminaires	Continuous dimming 20-100 percent	Continuous dimming 20-100 percent

TABLE 160.5-B MULTI-LEVEL LIGHTING CONTROLS AND UNIFORMITY REQUIREMENTS (Continued)

GU-24 sockets rated for fluorescent ≤ 20 watts; Pin-based compact fluorescent ≤ 20 watts[2] Linear fluorescent and U-bent fluorescent ≤ 13 watts	Minimum one step between 30-70 percent	Continuous dimming; or Stepped dimming; or Switching alternate lamps in a luminaire, or Separately switching circuits in multi-circuit track with a minimum of two circuits.
Track Lighting	Minimum one step between 30-70 percent	Continuous dimming; or Stepped dimming; or Switching alternate lamps in a luminaire, or Separately switching circuits in multi-circuit track with a minimum of two circuits.
Linear fluorescent and U-bent fluorescent > 13 watts	Minimum one step in each range: 20-40 % 50-70 % 75-85 % 100 %	Stepped dimming; or Continuous dimming; or Switching alternate lamps in each luminaire, having a minimum of 4 lamps per luminaire illuminating the same area and in the same manner
Other light sources, including HID and induction	Minimum one step between 50 - 70 percent	Stepped dimming; or Continuous dimming; or Switching alternate lamps in each luminaire, having a minimum of 2 lamps per luminaire, illuminating the same area and in the same manner.

1. Full rated input power of driver, ballast and lamp, corresponding to maximum ballast factor
2. Includes only pin based lamps: twin tube, multiple twin tube, and spiral lamps

(c) **Outdoor lighting and control equipment.** Multifamily buildings shall comply with the applicable requirements of Sections 160.5(c)1 through 160.5(c)2.

1. **Luminaire shielding requirements.** All outdoor luminaires of 6,200 initial luminaire lumens or greater shall comply with Backlight, Uplight, and Glare (BUG) (in accordance with ANSI/IES TM-15-20, Annex A) requirements in accordance with Title 24, Part 11, Section 5.106.8.

   Exception 1 to Section 160.5(c)1: Signs.

   Exception 2 to Section 160.5(c)1: Lighting for building facades, public monuments, public art, statues and vertical surfaces of bridges.

   Exception 3 to Section 160.5(c)1: Lighting not permitted by a health or life safety statute, ordinance or regulation to be a cutoff luminaire.

   Exception 4 to Section 160.5(c)1: Temporary outdoor lighting**.**

Exception 5 to Section 160.5(c)1: Replacement of existing pole mounted luminaires in hardscape areas meeting all of the following conditions:

A. Where the existing luminaire does not meet the luminaire BUG requirements in Section 160.5(c)1; and

B. Spacing between existing poles is greater than six times the mounting height of the existing luminaires; and

C. Where no additional poles are being added to the site; and

D. Where new wiring to the luminaires is not being installed; and

E. Provided that the connected lighting power wattage is not increased.

Exception 6 to Section 160.5(c)1: Luminaires that illuminate the public right of way, including publicly maintained or utility-maintained roadways, sidewalks and bikeways.

Exception 7 to Section 160.5(c)1: Outdoor lighting attached to a multifamily building and separately controlled from the inside of a dwelling unit.

2. **Controls for outdoor lighting.** Outdoor lighting shall be independently controlled from other electrical loads, and the controls for outdoor lighting shall meet the following functional requirements:

Exception 1 to Section 160.5(c)2: Outdoor lighting not permitted by a health or life safety statute, ordinance or regulation to be turned OFF or reduced.

Exception 2 to Section 160.5(c)2: Lighting in tunnels required to be illuminated 24 hours per day and 365 days per year.

A. **Daylight availability.** All installed outdoor lighting shall be controlled by a photo control, astronomical time-switch control or other control capable of automatically shutting OFF the outdoor lighting when daylight is available.

B. **Automatic scheduling controls.**

i. Automatic scheduling controls shall be installed for all outdoor lighting. Automatic scheduling controls may be installed in combination with motion sensing controls or other outdoor lighting controls.

ii. Automatic scheduling controls shall be capable of reducing the outdoor lighting power by at least 50 percent and no more than 90 percent, and separately capable of turning the lighting OFF, during scheduled unoccupied periods.

iii. Automatic scheduling controls shall allow scheduling of a minimum of two nighttime periods with independent lighting levels, and may include an override function that turns lighting ON during its scheduled dim or OFF state for no more than two hours when an override is initiated.

C. **Motion sensing controls**.

i. Motion sensing controls shall be installed for the following luminaires. Motion sensing controls may be installed for other outdoor lighting and in combination with other outdoor lighting controls:

a. Outdoor luminaires other than those providing building façade, ornamental hardscape or outdoor dining lighting, where the bottom of the luminaire is mounted 24 feet above grade or lower; and

b. Outdoor wall-mounted luminaires installed for general hardscape parking lot lighting, located within one mounting height of a parking space, mounted 24 feet above grade or lower.

ii. Motion sensing controls shall be capable of reducing the outdoor lighting power of each controlled luminaire by at least 50 percent and no more than 90 percent, and separately capable of turning the luminaire OFF, during unoccupied periods.

iii. Motion sensing controls shall be capable of reducing the lighting to its dim or OFF state no longer than 15 minutes after the area has been vacated, and of returning the lighting to its ON state when the area becomes occupied.

iv. No more than 1,500 watts of lighting power shall be controlled by a single sensor or as a single zone.

Exception 1 to Section 160.5(c)2C: Luminaires with a maximum rated wattage of 40 watts each are not required to have motion sensing controls.

Exception 2 to Section 160.5(c)2C: Applications listed as exceptions to Section 170.2(e)2A are not required to have motion sensing controls.

Exception 3 to Section 160.5(c)2C: Lighting subject to a health or life safety statute, ordinance or regulation may have a minimum time-out period longer than 15 minutes or a minimum dimming level above 50 percent when necessary to comply with the applicable law.

(d) **Sign lighting controls.** All sign lighting shall meet the requirements below as applicable:

1. **Indoor signs.** All indoor sign lighting other than exit sign lighting shall be controlled with an automatic time-switch control or astronomical time-switch control.
2. **Outdoor signs.** Outdoor sign lighting shall meet the following requirements as applicable:
   A. All outdoor sign lighting shall be controlled with a photocontrol in addition to an automatic time-switch control, or an astronomical time-switch control.

      Exception to Section 160.5(d)2A: Outdoor signs in tunnels, and signs in large permanently covered outdoor areas that are intended to be continuously lit, 24 hours per day and 365 days per year.

   B. All outdoor sign lighting that is ON both day and night shall be controlled with a dimmer that provides the ability to automatically reduce sign lighting power by a minimum of 65 percent during nighttime hours. Signs that are illuminated at night and for more than 1 hour during daylight hours shall be considered ON both day and night.

      Exception to Section 160.5(d)2B: Outdoor signs in tunnels and large covered areas that are intended to be illuminated both day and night.
3. **Demand Responsive Electronic Message Center (EMC) control.** See Section 110.12 for requirements for demand responsive EMC controls.

(e) **Lighting control acceptance and installation certificate requirement.** Multifamily common **use** areas shall comply with the applicable requirements of Sections 160.5(e)1 through 160.5(e)3.

1. **Lighting control acceptance requirements.** Before an occupancy permit is granted, indoor and outdoor lighting controls serving the building, area or site and installed to comply with Section 160.5(b)4D, 160.5(b)4C, 160.5(b)4E, 160.5(c)2 or 170.2(e)1Aiij shall be certified as meeting the Acceptance Requirements for Code Compliance as specified by Reference Nonresidential Appendix NA7.6 and NA7.8. A Certificate of Acceptance shall be submitted to the enforcement agency under Section 10-103(a) of Part 1 that the equipment and systems meet the acceptance requirements:
   A. Reserved;
   B. Reserved;
   C. Automatic daylight controls shall be tested in accordance with Reference Nonresidential Appendix NA7.6.1;
   D. Lighting shut-OFF controls shall be tested in accordance with Reference Nonresidential Appendix NA7.6.2;
   E. Demand responsive lighting controls shall be tested in accordance with Reference Nonresidential Appendix NA7.6.3; and
   F. Outdoor lighting controls shall be tested in accordance with Reference Nonresidential Appendix NA7.8; and
   G. Lighting systems receiving the Institutional Tuning Power Adjustment Factor shall be tested in accordance with Reference Nonresidential Appendix NA7.6.4.
   H. Demand responsive controls required to control controlled receptacles shall be tested in accordance with Reference Nonresidential Appendix NA7.6.5.
2. **Lighting control installation certificate requirements.** To be recognized for compliance with Part 6, an Installation Certificate shall be submitted in accordance with Section 10-103(a) for any lighting control system, energy

management control system, interlocked lighting system, lighting power adjustment factor, or additional wattage available for a videoconference studio, in accordance with the following requirements, as applicable:

A. Certification that when a lighting control system is installed to comply with lighting control requirements in Part 6, it complies with the applicable requirements of Section 110.9 and complies with Reference Nonresidential Appendix NA7.7.1.

B. Certification that when an energy management control system is installed to function as a lighting control required by Part 6, it functionally meets all applicable requirements for each application for which it is installed, in accordance with Sections 110.9, 160, 170 and 180, and complies with Reference Nonresidential Appendix NA7.7.2.

C. Certification that interlocked lighting systems used to serve an approved area comply with Section 170.2(e)2A and comply with Reference Nonresidential Appendix NA7.7.4.

D. Certification that lighting controls installed to earn a lighting Power Adjustment Factor (PAF) comply with Section 170.2(e)2B and comply with Reference Nonresidential Appendix NA7.7.5.

E. Reserved.

3. When certification is required by Title 24, Part 1, Section 10-103.1, the acceptance testing specified by Section 160.5(e) shall be performed by a Certified Lighting Controls Acceptance Test Technician (CLCATT). If the CLCATT is operating as an employee, the CLCATT shall be employed by a Certified Lighting Controls Acceptance Test Employer. The CLCATT shall disclose on the Certificate of Acceptance a valid CLCATT certification identification number issued by an approved Acceptance Test Technician Certification Provider. The CLCATT shall complete all Certificate of Acceptance documentation in accordance with the applicable requirements in Section 10-103(a)4.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 160.6 – MANDATORY REQUIREMENTS FOR ELECTRIC POWER DISTRIBUTION SYSTEMS

Multifamily buildings shall comply with the applicable requirements of Sections 160.6(a) through 160.6(e).

(a) **Service electrical metering**. Each electrical service or feeder that provides power to the common use areas (interior and exterior) shall have a permanently installed metering system that measures electrical energy use in accordance with Table 160.6-A.

Exception to **Section 160.6(a)**: Service or feeder for which the utility company provides a metering system for the multifamily building that indicates instantaneous kW demand and kWh for a utility-defined period.

TABLE 160.6-A MINIMUM REQUIREMENTS FOR METERING OR SUBMETERING OF ELECTRICAL LOAD

Metering Functionality	Electrical Services[1] rated 50 kVA or less	Electrical Services[1] rated more than 50kVA and less than or equal to 250 kVA	Electrical Services[1] rated more than 250 kVA and less than or equal to 1000kVA	Electrical Services[1] rated more than 1000kVA
Instantaneous (at the time) kW demand	Required	Required	Required	Required
Historical peak demand (kW)	Not required	Not required	Required	Required
Tracking kWh for a user-definable period.	Required	Required	Required	Required
kWh per rate period	Not required	Not required	Not required	Required

[1] *"Electrical Services" applies to the building service-entrance rating or to the submetering service. For a building with submetering, this applies to the submetering service size to the common use areas.*

(b) **Separation of electrical circuits for electrical energy monitoring**. Electrical power distribution systems shall be designed so that measurement devices can monitor the electrical energy usage of load types according to Table 160.6-B.

Exception 1 to Section 160.6(b): For each separate load type, up to 10 percent of the connected load may be of any type.

Exception 2 to Section 160.6(b): Submetered electrical power distribution systems that provide power to dwelling units.

TABLE 160.6-B MINIMUM REQUIREMENTS FOR SEPARATION OF ELECTRICAL LOAD

Electrical Load Type	Electrical Services[1] rated 50 kVA or less	Electrical Services[1] rated more than 50kVA and less than or equal to 250 kVA	Electrical Services[1] rated more than 250 kVA and less than or equal to 1000kVA	Electrical Services[1] rated more than 1000kVA
Lighting including exit and egress lighting and exterior lighting	Not required	All lighting in aggregate	All lighting disaggregated by floor, type or area	All lighting disaggregated by floor, type or area
HVAC systems and components including chillers, fans, heaters, furnaces, package units, cooling towers, and circulation pumps associated with HVAC	Not required	All HVAC in aggregate	All HVAC in aggregate and each HVAC load rated at least 50 kVA	All HVAC in aggregate and each HVAC load rated at least 50kVA
Domestic and service water system pumps and related systems and components	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Plug load including appliances rated less than 25 kVA	Not required	All plug load in aggregate Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug load separated by floor, type or area Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug load separated by floor, type or area All groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf
Elevators, escalators, moving walks, and transit systems	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Renewable power source (net or total)	Each group	Each group	Each group	Each group
Loads associated with renewable power source	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Charging stations for electric vehicles	All loads in aggregate	All loads in aggregate	All loads in aggregate	All loads in aggregate

[1] "Electrical Services" applies to the building service-entrance rating or to the submetering service. For a building with submetering, this applies to the submetering service size to the common use area.

(c) **Voltage drop**. The maximum combined voltage drop on both installed feeder conductors and branch circuit conductors to the farthest connected load or outlet shall not exceed 5 percent.

Exception to Section 160.6(c): Voltage drop permitted by California Electrical Code Sections 647.4, 695.6 and 695.7.

(d) **Circuit controls for 120-volt receptacles and controlled receptacles**. In all common areas, both controlled and uncontrolled 120 volt receptacles shall be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, and copy rooms. Controlled receptacles shall meet the following requirements, as applicable:

1. Install a control capable of automatically shutting OFF the controlled receptacles when the space is typically unoccupied, either at the receptacle or circuit level. When an automatic time switch control is installed it shall incorporate an override control that allows the controlled receptacle to remain ON for no more than 2 hours when an override is initiated and an automatic holiday "shut-OFF" feature that turns OFF all loads for at least 24 hours and then resumes the normally scheduled operation. Countdown timer switches shall not be used to comply with the automatic time switch control requirements; and
2. Install at least one controlled receptacle within 6 feet from each uncontrolled receptacle, or install a splitwired receptacle with at least one controlled and one uncontrolled receptacle. Where receptacles are installed in

modular furniture in open office areas, at least one controlled receptacle shall be installed at each workstation; and

3. Provide a permanent and durable marking for controlled receptacles or circuits to differentiate them from uncontrolled receptacles or circuits; and

NOTE: A hardwired power strip controlled by an occupant sensing control may be used to comply with Section 160.6(d). Plug-in strips and other plug-in devices shall not be used to comply with the requirements of this section.

Exception 1 to Section 160.6(d): Receptacles that are only for the following purposes:

A. Receptacles specifically for refrigerators and water dispensers in kitchen areas.

B. Receptacles located a minimum of six feet above the floor that are specifically for clocks.

C. Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms.

D. Receptacles on circuits rated more than 20 amperes.

E. Receptacles connected to an uninterruptible power supply (UPS) that are intended to be in continuous use, 24 hours per day/365 days per year, and are marked to differentiate them from other uncontrolled receptacles or circuits.

Exception 2 to Section 160.6(d): Receptacles in common use areas providing shared provisions for living, eating, cooking or sanitation to dwelling units that would otherwise lack these provisions.

(e) **Demand responsive controls and equipment.** See Section 110.12 for requirements for demand responsive controls and equipment.

NOTE: Definitions of terms and phrases in Section 160.6 are determined as specified in Section 100.1(b). Terms and phrases not found in Section 100.1(b) shall be defined as specified in Title 24, Part 3, Article 100 of the California Electrical Code.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

SECTION 160.7 – MANDATORY REQUIREMENTS FOR COVERED PROCESSES

(a) **Elevators.** Elevators shall meet the requirements of **Section** 120.6(f).

(b) **Pool and spa systems.** Pool and spa systems available to multiple tenants or to the public shall comply with the applicable requirements of Section 110.4. Pool and spa systems installed for exclusive use by a single tenant shall comply with the applicable requirements of Section 150.0(p).

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

SECTION 160.8 – MANDATORY REQUIREMENTS FOR SOLAR READY BUILDINGS

(a) **Solar ready buildings**. Newly constructed multifamily buildings shall meet the requirements of Section 110.10 applicable to the building project.

SECTION 160.9 – MANDATORY REQUIREMENTS FOR ELECTRIC READY BUILDINGS

(a) **Heat pump space heater ready.** Systems using gas or propane furnaces to serve individual dwelling units shall include the following:

1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the *California Electrical Code*.

2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V use."

(b) **Electric cooktop ready.** Systems using gas or propane cooktops to serve individual dwelling units shall include the following:

1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the cooktop and accessible to the cooktop with no obstructions. The branch circuit conductors shall be rated at 50 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the *California Electrical Code*.

2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric cooktop installation. The reserved space shall be permanently marked as "For Future 240V use."

(c) **Electric clothes dryer ready.** Clothes dryer locations with gas or propane plumbing shall include the following:

1. Systems serving individual dwelling units shall include:

   A. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the clothes dryer location and accessible to the clothes dryer location with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the *California Electrical Code*.

   B. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric clothes dryer installation. The reserved space shall be permanently marked as "For Future 240V use."

2. Systems in common use areas shall include:

   A. Conductors or raceway shall be installed with termination points at the main electrical panel, via subpanels panels if applicable, to a location no more than 3 feet from each gas outlet or a designated location of future electric replacement equipment. Both ends of the conductors or raceway shall be labelled "Future 240V Use." The conductors or raceway and any intervening subpanels, panelboards, switchboards and busbars shall be sized to meet the future electric power requirements, at the service voltage to the point at which the conductors serving the building connect to the utility distribution system, as specified below. The capacity requirements may be adjusted for demand factors in accordance with the California Electric Code. Gas flow rates shall be determined in accordance with the California Plumbing Code. Capacity shall be one of the following:

      i. 24 amps at 208/240 volts per clothes dryer;

      ii. 2.6 kVA for each 10,000 Btu per hour of rated gas input or gas pipe capacity; or

iii. The electrical power required to provide equivalent functionality of the gas-powered equipment as calculated and documented by the responsible person associated with the project.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

SUBCHAPTER 11
MULTIFAMILY BUILDINGS - PERFORMANCE AND PRESCRIPTIVE COMPLIANCE APPROACHES

SECTION 170.0 – GENERAL

Multifamily buildings shall comply with the applicable requirements of Sections 170.0 through 170.2. Sections 170.0 through 170.2 apply to dwelling units and common use areas in multifamily buildings. Nonresidential occupancies in mixed occupancy buildings shall comply with nonresidential requirements in Sections 120, 130, 140 and 141.

(a) Multifamily buildings shall meet all of the following:

1. The applicable requirements of Sections 110.0 through 110.10.
2. The applicable requirements of Section 160.0 (mandatory features).
3. Either the performance standards Section 170.1 or the prescriptive standards Section 170.2 set forth in this subchapter for the climate zone in which the building is located. Climate zones are shown in Reference Joint Appendix JA2—Weather/Climate Data.

   Exception to Section 170.0 (a)3: If a single development falls in more than one climate zone, all buildings in the subdivision or tract may be designed to meet the performance or prescriptive standards for the climate zone that contains 50 percent or more of the dwelling units.

   NOTE: The Commission periodically updates, publishes and makes available to interested persons and local enforcement agencies precise descriptions of the climate zones, as specified in Reference Joint Appendix JA2—Weather/Climate Data.

NOTE: The requirements of Sections 170.1(a) through 170.2(e) apply to newly constructed buildings and Sections 180.1 and 180.2 specify changes to the requirements of Sections 170.1(a) through 170.2(e) that apply to additions or alterations.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

SECTION 170.1 – PERFORMANCE APPROACH

A building complies with the performance approach if the energy budget calculated for the proposed design building under Subsection (b) is no greater than the energy budget calculated for the standard design building under Subsection (a).

(a) **Energy budget for the standard design building.** The energy budget for the standard design building is expressed in terms of source energy and time-dependent valuation (TDV) energy, and they are determined by applying the mandatory and prescriptive requirements to the proposed design building. The source energy budget and the TDV energy budget is the sum of the TDV energy for space-conditioning, indoor lighting, mechanical ventilation, photovoltaic (PV) and battery storage system, service water heating and covered process loads.

(b) **Energy budget for the proposed design building.** The energy budget for a proposed design building is expressed in terms of source energy and time-dependent valuation (TDV) energy, and they are determined by calculating the source energy and TDV energy for the proposed design building. The source energy budget and the TDV energy budget is the sum of the energy for space-conditioning, indoor lighting, mechanical ventilation, photovoltaic (PV) and battery storage system, and service water heating and covered process loads. The proposed building shall separately comply with the source energy budget and the TDV energy budget.

Exception to Section 170.1(b): A community shared solar electric generation system, or other renewable electric generation system, and/or community shared battery storage system, that provides dedicated power, utility energy reduction credits or payments for energy bill reductions to the permitted building and is approved by the Energy Commission as specified in Title 24, Part 1, Section 10-115, may offset part or all of the solar electric generation system or battery storage system TDV energy required to comply with the standards, as calculated according to methods established by the Commission in the Nonresidential ACM Reference Manual.

(c) **Calculation of energy budget.** The TDV energy for both the standard design building and the proposed design building shall be computed by compliance software certified for this use by the Commission. The processes for compliance software approval by the Commission are documented in the ACM Approval Manual.

(d) **Compliance demonstration requirements for performance standards.**

1. Certificate of Compliance and Application for a Building Permit. The application for a building permit shall include documentation pursuant to Sections 10-103(a)1 and 10-103(a)2 that demonstrates, using an approved calculation method, that the building has been designed so that its source energy budget and TDV energy budget do not exceed the standard design for the applicable climate zone.
2. Field verification of individual dwelling unit systems. When performance of installed features, materials, components, manufactured devices or systems above the minimum specified in Section 170.2 is necessary for the building to comply with Section 170.1, or is necessary to achieve a more stringent local ordinance, field verification shall be performed in accordance with the applicable requirements in the following subsections, and the results of the verification(s) shall be documented on applicable Certificates of Installation pursuant to Section 10-103(a)3 and applicable Certificates of Verification pursuant to Section 10-103(a)5.
    A. EER/EER2/SEER/SEER2/CEER/HSPF/HSPF2 Rating. When performance compliance requires installation of a space-conditioning system with a rating that is greater than the minimum rating required by Table 170.2-K or specified for the standard design, the installed system shall be field verified in accordance with the procedures specified in the applicable sections of Reference Residential Appendix RA3.
    B. Variable capacity heat pump (VCHP) compliance option. When performance compliance requires installation of a heat pump system that meets all the requirements of the VCHP compliance option specified in the ACM Reference Manual, the system shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.4.4.3.
    C. Low leakage air handler. When performance compliance requires installation of a low leakage air-handling unit, the installed air handling unit shall be field verified in accordance with the procedures specified in Reference Residential Appendix RA3.1.4.3.9.

D. Reserved.

E. Heat pump—rated heating capacity. When performance compliance requires installation of a heat pump system, the heating capacity values at 47°F and 17°F shall be field verified in accordance with the procedures specified in Reference Residential Appendix RA3.4.4.2.

F. Whole-house fan. When performance compliance requires installation of a whole-house fan, the whole-house fan ventilation airflow rate and fan efficacy shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.9.

G. Central fan ventilation cooling system. When performance compliance requires installation of a central fan ventilation cooling system, the installed system shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.3.4.

H. Dwelling unit enclosure air leakage. When performance compliance requires a building enclosure leakage rate that is lower than the standard design, the building enclosure shall be field verified in accordance with the procedures specified in Reference Residential Appendix RA3.8.

I. Quality insulation installation (QII). When performance compliance requires field verification of QII, the building insulation system shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.5.

J. Precooling. When performance compliance requires field verification of the installation and programming of a precooling thermostat, it shall be field verified in accordance with the procedures in Reference Residential Appendix RA3.4.5.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 170.2 – PRESCRIPTIVE APPROACH

Multifamily buildings, including both dwelling units and common use areas, that comply with the prescriptive standards shall be designed, constructed and equipped to meet all of the requirements for the appropriate climate zone shown in Table 170.2-A. In Table 170.2-A, NA (not allowed) means that feature is not permitted in a particular climate zone and NR (no requirement) means that there is no prescriptive requirement for that feature in a particular climate zone. Installed components shall meet the following requirements:

(a) **Envelope component requirements**.

1. **Exterior roofs and ceilings**. Exterior roofs and ceilings shall comply with each of the applicable requirements in this subsection:

   A. Roofing products. All roofing products shall meet the requirements of Section 110.8 and the applicable minimum aged solar reflectance and thermal emittance requirements of Table 170.2-A.

      Exception 1 to Section 170.2(a)1A: Building integrated photovoltaic panels and building integrated solar thermal panels are exempt from the minimum requirements for solar reflectance and thermal emittance or SRI.

      Exception 2 to Section 170.2(a)1A: Roof constructions with a weight of at least 25 lb/ft² are exempt from the minimum requirements for solar reflectance and thermal emittance or SRI.

   B. Roof insulation. roofs shall have an overall assembly U-factor no greater than the applicable value in Table 170.2-A, meeting i, ii, iii or iv below. Where required by Sections 110.8 and 160.1(a), insulation shall be placed in direct contact with a continuous roof or drywall ceiling.

      i. Option A: Reserved.

      ii. Option B: A minimum R-value of insulation installed between the roof rafters in contact with the roof deck and an additional layer of ceiling insulation located between the attic and the conditioned space when meeting Section 170.2(c)3Biia; or

      iii. Option C: A minimum R-value of ceiling insulation located between the attic and the conditioned space when meeting Section 170.2(c)3Biib.

      iv. Option D: A minimum U-factor for roof assemblies above conditioned space without attic space.

   C. Radiant barrier. A radiant barrier required in Table 170.2-A shall meet the requirements specified in Section 110.8(j) and shall meet the installation criteria specified in Reference Residential Appendix RA4**.**

2. **Wall insulation.**

   A. Exterior walls shall have an overall assembly U-factor no greater than the applicable value in Table 170.2-A.

   B. Demising walls shall meet the requirements of Section 160.1(b)7. Vertical windows in demising walls between conditioned and unconditioned spaces shall have an area-weighted average U-factor no greater than the applicable value in Table 170.2-A.

3. **Fenestration.**

   A. Vertical fenestration and glazed doors in exterior walls shall comply with Subsections i, ii and iii:

      i. Percent fenestration area shall be limited in accordance with the applicable requirements of a and b below:

         a. A total fenestration area no greater than 20 percent of the conditioned floor area; and

         b. A total fenestration area no greater than 40 percent of the gross exterior wall area.

         Note: Demising walls are not exterior walls, and therefore demising wall area is not part of the gross exterior wall area, and fenestration in demising walls is not part of the fenestration area limitation.

ii. Fenestration properties. Installed fenestration products, including glazed doors, shall have an area-weighted average U-factor, Relative Solar Heat Gain Coefficient (RSHGC), and Visual Transmittance (VT) meeting the applicable fenestration values in Table 170.2-A and shall be determined in accordance with Sections 110.6(a)2 and 110.6(a)3.

Vertical fenestration in demising walls between conditioned and unconditioned spaces is only required to comply with the area-weighted average U-factor requirement in Table 170.2-A.

Exception 1 to Section 170.2(a)3Aii: For each dwelling unit, up to 3 square feet of new glazing area installed in doors shall not be required to meet the U-factor and RSHGC requirements of Table 170.2-A.

Exception 2 to Section 170.2(a)3Aii: For fenestration containing chromogenic type glazing:

a. The lower-rated labeled U-factor and SHGC shall be used with automatic controls to modulate the amount of solar gain and light transmitted into the space in multiple steps in response to daylight levels or solar intensity;

b. Chromogenic glazing shall be considered separately from other fenestration; and

c. Area-weighted averaging with other fenestration that is not chromatic shall not be permitted and shall be determined in accordance with Section 110.6(a).

Exception 3 to Section 170.2(a)3Aii: For dwelling units containing unrated site-built fenestration that meets the maximum area restriction, the U-factor and SHGC can be determined in accordance with Nonresidential Reference Appendix NA6 or using default values in Table 110.6-A and Table 110.6-B.

Exception 4 to Section 170.2(a)3Aii: Fenestration in dwelling units of buildings that are three habitable stories or fewer in Climate Zones 1, 3, 5 and 16 is not required to comply with the RSHGC requirements.

Exception 5 to Section 170.2(a)3Aii: Fenestration in dwelling units of buildings that are three habitable stories or fewer is not required to comply with the VT requirements.

iii. Shading. Where Table 170.2-A requires a maximum RSHGC, the requirements shall be met with an area-weighted average RSHGC excluding the effects of interior shading, no greater than the applicable value in Table 170.2-A.

For the purposes of this paragraph, the RSHGC of a vertical window is:

a. The solar heat gain coefficient of the window; or

b. Relative solar heat gain coefficient is calculated using Equation 170.2-A, if the window has an overhang that extends beyond each side of the window jamb by a distance equal to the overhang's horizontal projection.

Exception 1 to Section 170.2(a)3Aiiib: An area-weighted average relative solar heat gain coefficient of 0.56 or less shall be used for windows:

I. That are in the first story of exterior walls that form a display perimeter; and

II. For which codes restrict the use of overhangs to shade the windows.

Exception 2 to Section 170.2(a)3Aiiib: For vertical glazing containing chromogenic type glazing:

I. the lower-rate labeled RSHGC shall be used with automatic controls to modulate the amount of heat flow into the space in multiple steps in response to daylight levels or solar intensity; and

II. chromogenic glazing shall be considered separately from other glazing; and

III. area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

Note: Demising walls are not exterior walls, and therefore fenestration in demising walls is not subject to SHGC requirements.

$RSHGC = SHGC \times [1 + a \times (2.72^{-PF} - 1) \times (\sin(b \times Az) + c)]$ (Equation 170.2-A)

WHERE:

	a	b	c
Overhang	0.150	0.008727	5.67
Exterior Horizontal Slat	0.144	0.008727	5.13

RSHGC = Relative Solar Heat Gain Coefficient.
SHGC = Solar Heat Gain Coefficient of the vertical fenestration.
Az = Azimuth of the vertical fenestration I degrees.
PF = Projection factor as calculated by Equation 140.3-D.

iv. Vertical fenestration shall have an area-weighted average Visible Transmittance (VT) no less than the applicable value in Table 170.2-A, or Equation 170.2-B, as applicable.

Exception 1 to Section 170.2(a)3Aiv: When the window's primary and secondary sidelit daylit zones are completely overlapped by one or more skylit daylit zones, then the window need not comply with Section 170.2(a)3Aivw.

Exception 2 to Section 170.2(a)3Aiv: If the window's VT is not within the scope of NFRC 200 or ASTM E972, then the VT shall be calculated according to Reference Nonresidential Appendix NA6.

Exception 3 to Section 170.2(a)3Aiv: For vertical windows containing chromogenic type glazing:

a. The higher rated labeled VT shall be used with automatic controls to modulate the amount of light transmitted into the space in multiple steps in response to daylight levels or solar intensity;

b. Chromogenic glazing shall be considered separately from other glazing; and

c. Area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

Exception 4 to Section 170.2(a)3iv: Fenestration in dwelling units of buildings that are three habitable stories or fewer is not required to comply with the VT requirements.

NOTE: Demising walls are not exterior walls, and therefore windows in demising walls are not subject to VT requirements.

$VT \geq 0.11/WWR$ (Equation 170.2-B)

where:

WWR = Window Wall Ratio, the ratio of (i) the total window area of the entire building to (ii) the total gross exterior wall area of the entire building. If the WWR is greater than 0.40, then 0.40 shall be used as the value for WWR in Equation 170.2-B.

VT = Visible Transmittance of framed window.

B. **Skylights shal**l:

i. Have an area no greater than 5 percent of the gross exterior roof area Skylight Roof Ratio (SRR); and

Exception 1 to Section 170.2(a)3Bi: Buildings with an atrium over 55 feet high shall have a skylight area no greater than 10 percent of the gross exterior roof area.

ii. Have an area-weighted performance rating U-factor no greater than the applicable value in Table 170.2-A.

Exception 2 to Section 170.2(a)3Bii: For each dwelling unit up to 16 square feet of new skylight area with a maximum U-factor of 0.55 and a maximum SHGC of 0.30.

iii. Solar heat gain coefficient. Have an area-weighted performance rating solar heat gain coefficient no greater than the applicable value in Table 170.2-A.

Exception to Sections 170.2(a)3Bii and 170.2(a)3Biii: For skylights containing chromogenic type glazing:

a. the lower-rated labeled SHGC shall be used with automatic controls to modulate the amount of heat flow into the space in multiple steps in response to daylight levels or solar intensity; and

b. chromogenic glazing shall be considered separately from other glazing; and

c. area-weighted averaging with other glazing that is not chromogenic shall not be permitted.

iv. Haze value. Have a glazing material or diffuser that has a measured haze value greater than 90 percent, determined according to ASTM D1003 or other test method approved by the Energy Commission.

Exception to Section 170.2(a)3Biv: Skylights designed and installed to exclude direct sunlight entering the occupied space by the use of fixed or automated baffles or the geometry of the skylight and light well.

4. All exterior doors, excluding glazed doors, that separate conditioned space from unconditioned space or from ambient air shall have a U-factor not greater than the applicable value in Table 170.2-A. Glazed doors must comply with the requirements of Section 170.2(a)3A.

Exception to Section 170.2(a)4: Swinging doors that are required to have fire protection are not required to meet the applicable door value in Table 170.2-A.

5. Floors shall meet the following requirements:

A. Raised floors shall be insulated such that the floor assembly has an assembly U-factor equal to or less than shown in Table 170.2-A, or shall be insulated between wood framing with insulation having an R-value equal to or greater than shown in Table 170.2-A.

B. All buildings with three habitable stories or fewer shall have slab floor perimeter insulation installed with a U-factor equal to or less than or R-value equal to or greater than shown in Table 170.2-A. The minimum depth of concrete slab floor perimeter insulation shall be 16 inches or the depth of the footing of the building, whichever is less.

Exception to Section 170.2(a)5: Raised-floor insulation may be omitted if the foundation walls are insulated to meet the wall insulation minimums shown in Table 170.2-A.

6. All buildings up to three habitable stories shall comply with the quality insulation installation (QII) requirements shown in Table 170.2-A. When QII is required, insulation installation shall meet the criteria specified in Reference Appendix RA3.5.

Exception to Section 170.2(a): The insulation requirements of Table 170.2-A and Table 170.2-B may be met by ceiling, roof deck, wall or floor assemblies that meet the required maximum U-factors using a U-factor calculation method that considers the thermal effects of all elements of the assembly and is approved by the Executive Director.

TABLE 170.2-A ENVELOPE COMPONENT PACKAGE – Multifamily Standard Building Design

Multifamily				Climate Zone															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Roof/Ceiling	Option B (meets § 170.2(a)1Bii)	Below Roof Deck Insulation [1,2] (With Air Space)		NR	NR	NR	R19	NR	NR	NR	R19	R19	R13	R19	R19	R19	R19	R19	R13
		Ceiling Insulation		R 38	R 38	R 30	R 38	R 30	R 30	R 30	R 38	R 38	R 38	R 38	R 38	R 38	R 38	R 38	R 38
		Radiant Barrier		NR	REQ	REQ	NR	REQ	REQ	REQ	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Low-sloped	Aged Solar Reflectance	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.63	NR	0.63	NR
			Thermal Emittance	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.75	NR	0.75	NR
			Solar Reflectance Index (SRI)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	75	NR	75	NR
		Steep-sloped	Aged Solar Reflectance	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.20	0.20	0.20	0.20	0.20	0.20	NR
			Thermal Emittance	NR	NR	NR	NR	NR	NR	NR	NR	NR	0. 75	0.75	0.75	0.75	0.75	0.75	NR
			Solar Reflectance Index (SRI)	NR	NR	NR	NR	NR	NR	NR	NR	NR	16	16	16	16	16	16	NR
	Option C (meets § 170.2(a)1Biii)	Ceiling Insulation		R 38	R 30	R 30	R 30	R 30	R 30	R 30	R 30	R 30	R 30	R 38	R 38	R 38	R 38	R 38	R 38
		Radiant Barrier		NR	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	NR
		Low-sloped	Aged Solar Reflectance	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.63	NR	0.63	NR
			Thermal Emittance	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.75	NR	0.75	NR
			Solar Reflectance Index (SRI)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	75	NR	75	NR
		Steep-sloped	Aged Solar Reflectance	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.20	0.20	0.20	0.20	0.20	0.20	NR
			Thermal Emittance	NR	NR	NR	NR	NR	NR	NR	NR	NR	0. 75	0.75	0.75	0.75	0.75	0.75	NR
			Solar Reflectance Index (SRI)	NR	NR	NR	NR	NR	NR	NR	NR	NR	16	16	16	16	16	16	NR
	Option D (Non Attic Roof)	Metal Building U-factor		0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041
		Wood Framed and Other U-factor		0.028	0.028	0.034	0.028	0.034	0.034	0.039	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028
		Low-sloped	Aged Solar Reflectance	NR	NR	NR	NR	NR	NR	NR	NR	0.63	0.63	0.63	NR	0.63	0.63	0.63	NR
			Thermal Emittance	NR	NR	NR	NR	NR	NR	NR	NR	0.75	0.75	0.75	NR	0.75	0.75	0.75	NR
			Solar Reflectance Index (SRI)	NR	NR	NR	NR	NR	NR	NR	NR	75	75	75	NR	75	75	75	NR
		Steep-sloped	Aged Solar Reflectance	NR	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	NR
			Thermal Emittance	NR	0. 75	0. 75	0. 75	0. 75	0. 75	0. 75	0. 75	0. 75	0. 75	0.75	0.75	0.75	0.75	0.75	NR
			Solar Reflectance Index (SRI)	NR	16	16	16	16	16	16	16	16	16	16	16	16	16	16	NR

Walls	Metal-Building, any fire rating	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.057	0.057	0.057	0.057	0.057	0.057
	Framed (wood, metal) and other >1hr fire rating	0.059	0.059	0.059	0.059	0.059	0.065	0.065	0.059	0.059	0.059	0.051	0.059	0.059	0.051	0.051	0.051
	Framed (wood, metal) and other, ≤1hr fire rating[3]	0.051	0.051	0.051	0.051	0.051	0.065	0.065	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051
	Mass Light [4,5]	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.077 R 13	U 0.059 R 17
	Mass Heavy	0.253	0.650	0.650	0.650	0.650	0.690	0.690	0.690	0.690	0.650	0.184	0.253	0.211	0.184	0.184	0.160
Floors/Soffits	Slab Perimeter, Three Habitable Stories or less	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U 0.58 R 7.0
	Wood Framed	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19	U 0.037 R 19
	Raised Mass	U 0.092 R 8.0	U 0.092 R 8.0	U 0.269 R 0	U 0.269 R 0	U- 0.269 R 0	U 0.269 R 0	U 0.269 R 0	U 0.269 R 0	U 0.269 R 0	U 0.269 R 0	U 0.092 R 8.0	U 0.138 R 4.0	U 0.092 R 8.0	U 0.092 R 8.0	U 0.138 R 4.0	U 0.092 R 8.0
	Other	0.048	0.039	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.039	0.071	0.071	0.039	0.039	0.039

Quality Insulation Installation (QII) for buildings up to three habitable stories			Yes	Yes	Yes	Yes	Yes	Yes	NR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fenestration	Curtain Wall/ Storefront	Maximum U-factor	0.38	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.38
		Maximum RSHGC, three or fewer habitable stories	NR	0.26	NR	0.26	NR	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.26	NR
		Maximum RSHGC, four or more habitable stories	0.35	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.26	0.25
		Minimum VT, four or more habitable stories	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
	NAFS 2017 Performance Class AW[5]	Maximum U-factor	0.38	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.38
		Maximum RSHGC, three or less habitable stories	NR	0.24	NR	0.24	NR	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	NR
		Maximum RSHGC, four or more habitable stories	0.35	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
		Minimum VT, four or more habitable stories	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
	All Other Fenestration	Maximum U-factor	0.30	0.30	0.30	0.30	0.30	0.30	0.34	0.34	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
		Maximum RSHGC, three or less habitable stories	NR	0.23	NR	0.23	NR	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	NR
		Maximum RSHGC, four or more habitable stories	0.35	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
	Maximum Window to Floor Ratio		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
	Maximum Window to Wall Ratio		40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
	Maximum Skylight Roof Ratio		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Exterior Doors[6]	**Maximum U-factor**	Dwelling Unit Entry	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
		Common Use Area Entry Non-Swinging	0.50	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	0.50
		Common Use Area Entry Swinging	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70

Footnote requirements to TABLE 170.2-A:

1. Install the specified R-value with an air space present between the roofing and the roof deck. Such as standard installation of concrete or clay tile.
2. R-values shown for below roof deck insulation are for wood-frame construction with insulation installed between the framing members. Alternatives including insulation above rafters or above roof deck shall comply with the performance standards.
3. Assembly U-factors for exterior framed walls can be met with cavity insulation alone or with continuous insulation alone, or with both cavity and continuous insulation that results in an assembly U-factor equal to or less than the U-factor shown. Use Reference Joint Appendices JA4 Table 4.3.1, 4.3.1(a), or Table 4.3.4 to determine alternative insulation products to be less than or equal to the required maximum U-factor.
4. Mass wall has a heat capacity greater than or equal to 7.0 Btu/h-ft^2.
5. Product must be certified to meet the North American Fenestration Standard/Specification for an Architectural Window (AW).
6. Glazed doors must meet the fenestration requirements.

(b) **Minimum daylighting requirement for large enclosed spaces.** In Climate Zones 2 through 15, conditioned enclosed spaces and unconditioned enclosed spaces that are greater than 5,000 ft² and that are directly under a roof with ceiling heights greater than 15 feet shall meet the following requirements:

1. A combined total of at least 75 percent of the floor area, as determined in building floor plan (drawings) view, shall be within one or more of the following:
   A. Primary sidelight daylight zone in accordance with Section 160.5(b)4Dib, or
   B. The total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights.
2. All skylit daylit zones and primary sidelit daylit zones shall be shown on building plans.
3. General lighting in daylit zones shall be controlled in accordance with Section 160.5(b)4D.
4. The total skylight area is at least 3 percent of the total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights; or the product of the total skylight area and the average skylight visible transmittance is no less than 1.5 percent of the total floor area in the space within a horizontal distance of 0.7 times the average ceiling height from the edge of rough opening of skylights.
5. All skylights shall have a glazing material or diffuser that has a measured haze value greater than 90 percent, tested according to ASTM D1003 (notwithstanding its scope) or another test method approved by the Commission.

Exception 1 to Section **170.2(b)**: In buildings with unfinished interiors, future enclosed spaces for which there are plans to have:

A. A floor area of less than or equal to 5,000 square feet; or
B. Ceiling heights of less than or equal to 15 feet. This exception shall not be used for S-1 or S-2 (storage), or for F-1 or F-2 (factory) occupancies.

Exception 2 to Section 170.2(b): Enclosed spaces having a designed general lighting system with a lighting power density less than 0.5 watts per square foot.

Exception 3 to Section 170.2(b): Enclosed spaces where it is documented that permanent architectural features of the building, existing structures or natural objects block direct beam sunlight on at least half of the roof over the enclosed space for more than 1500 daytime hours per year between 8 a.m. and 4 p.m.

(c) **Space-conditioning systems.** All space heating, space cooling and ventilation equipment shall comply with minimum Appliance Efficiency Regulations as specified in Sections 110.0 through 110.2 and the applicable requirements of Subsections 1 through 4.

1. Sizing and equipment selection—common use areas. Mechanical heating and mechanical cooling equipment serving common use areas of multifamily buildings shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building, as calculated according to Subsection 2 below.

   Exception 1 to Section 170.2(c)1: Where it can be demonstrated to the satisfaction of the enforcing agency that oversizing will not increase building TDV energy use.

   Exception 2 to Section 170.2(c)1: Standby equipment with controls that allow the standby equipment to operate only when the primary equipment is not operating.

   Exception 3 to Section 170.2(c)1: Multiple units of the same equipment type, such as multiple chillers and boilers, having combined capacities exceeding the design load, if they have controls that sequence or otherwise optimally control the operation of each unit based on load.

2. **Calculations**—common use areas**.** In making equipment sizing calculations under Subsection (c)1, all of the following rules shall apply:

A. **Heating and cooling loads.** Heating and cooling system design loads shall be determined in accordance with the method in the 2017 ASHRAE Handbook, Fundamentals Volume, or as specified in a method approved by the Commission.

B. **Indoor design conditions.** Indoor design temperature and humidity conditions for comfort applications shall be determined using ASHRAE Standard 55 or the 2017 ASHRAE Handbook, Fundamentals Volume, except that winter humidification and summer dehumidification shall not be required.

C. **Outdoor design conditions.** Outdoor design conditions shall be in accordance with the design conditions from Reference Joint Appendix JA2, which is based on data from the ASHRAE Climatic Data for Region X. Heating design temperatures shall be no lower than the Heating Winter Median of Extremes values. Cooling design temperatures shall be no greater than the 0.5 percent Cooling Dry Bulb and Mean Coincident Wet Bulb values.

Exception to Section 170.2(c)2C: Cooling design temperatures for cooling towers shall be no greater than the 0.5 percent Cooling Design Wet Bulb values.

D**. Ventilation.** Outdoor air ventilation loads shall be calculated using the ventilation rates required in Section 160.2(c)3.

E**. Envelope**. Envelope heating and cooling loads shall be calculated using envelope characteristics, including square footage, thermal conductance, solar heat gain coefficient or shading coefficient, and air leakage, consistent with the proposed design.

F. **Lighting.** Lighting heating and cooling loads shall be based on actual design lighting levels or power densities as specified in Section 170.2(e)1.

G. **People.** Occupant density shall be based on the expected occupancy of the building and shall be the same as determined under Section 160.2(c)3A, if used. Sensible and latent heat gains shall be as listed in the 2017 ASHRAE Handbook—Fundamentals, Chapter 18.

H. **Process loads.** Loads caused by a process shall be based upon actual information on the intended use of the building.

I. **Miscellaneous equipment.** Equipment loads other than process loads shall be calculated using design data compiled from one or more of the following sources:

i. Actual information based on the intended use of the building; or

ii. Published data from manufacturers' technical publications or from technical societies, such as the ASHRAE Handbook, Applications Volume; or

iii. Other data based on the designer's experience of expected loads and occupancy patterns.

J. **Internal heat gains.** Internal heat gains may be ignored for heating load calculations.

K**. Safety factor.** Calculated design loads based on Sections 170.2(c)2A through K may be increased by up to 10 percent to account for unexpected loads or changes in space usage.

L. **Other loads.** Loads such as warm-up or cool-down shall be calculated from principles based on the thermal capacity of the building and its contents, the degree of setback, and desired recovery time; or may be assumed to be no more than 30 percent for heating and 10 percent for cooling of the steady-state design loads. In addition, the steady-state load may include a safety factor in accordance with Section 170.2(c)2K.

3. **Dwelling unit space-conditioning systems**.

A. **Heating** system type**.** Space-conditioning systems serving dwelling units shall meet i or ii. Systems that cannot meet the requirements of i or ii, including multi-zone systems and systems using central boilers or chillers, shall comply with the performance requirements of Section 170.1.

i. Multifamily buildings three habitable stories or fewer. For Climate Zones 1 through 15, the space-conditioning system shall be a heat pump. For Climate Zone 16, the space-conditioning system shall be an air conditioner with furnace. Additionally, balanced ventilation systems serving these dwelling units shall meet the applicable requirements of Section 170.2(c)3Bivc.

ii. Multifamily buildings four habitable stories or greater. For Climate Zones 2 through 15, the space-conditioning system shall be a heat pump. For Climate Zones 1 and 16, the space-conditioning system shall be a dual-fuel heat pump.

Exception to Section 170.2(c)3A: A supplemental heating unit may be installed in a space served directly or indirectly by a primary heating system, provided that the unit thermal capacity does not exceed 2 kW or 7,000 Btu/hr and is controlled by a time-limiting device not exceeding 30 minutes.

B. S**pace-conditioning and ventilation systems**. All space heating and space cooling equipment serving dwelling units shall comply with minimum Appliance Efficiency Regulations as specified in Sections 110.0 through 110.2 and meet all applicable requirements of Sections 160.3(b) and 170.2(c)2.

i. Refrigerant charge—systems serving individual dwelling units. When refrigerant charge verification or fault indicator display is shown as required by Table 170.2-K, the system shall comply with either Section 170.2(c), 170.2(c)3Bia or 170.2(c)3Bib:

a. Air-cooled air conditioners and air-source heat pumps, including but not limited to ducted split systems, ducted packaged systems, small duct high velocity systems and mini-split systems, shall comply with Subsections I, II and III, unless the system is of a type that cannot be verified using the specified procedures:

I. Have measurement access holes (MAH) installed according to the specifications in Reference Residential Appendix Section RA3.2.2.3; and

II. System airflow rate in accordance with Subsection A or B below shall be confirmed through field verification and diagnostic testing in accordance with all applicable procedures specified in Reference Residential Appendix Section RA3.3 or an approved alternative procedure as specified by RA1; and

A. For small duct high velocity systems, the system airflow rate shall be greater than or equal to 250 cfm per ton; or

B. For all other air-cooled air conditioner or air-source heat pump systems, the system airflow rate shall be greater than or equal to 350 cfm per ton.

III. The installer shall charge the system according to manufacturer's specifications. Refrigerant charge shall be verified according to one of the following options, as applicable:

A. The installer and rater shall perform the standard charge procedure as specified by Reference Residential Appendix Section RA3.2.2 or an approved alternative procedure as specified by RA1; or

B. The system shall be equipped with a fault indicator display (FID) device that meets the specifications of Reference Joint Appendix JA6. The installer shall verify the refrigerant charge and FID device in accordance with the procedures in Reference Residential Appendix Section RA3.4.2. The HERS Rater shall verify the FID device in accordance with the procedures in Section RA3.4.2; or

C. The installer shall perform the weigh-in charging procedure as specified by Reference Residential Appendix Section RA3.2.3.1, provided the system is of a type that can be verified using the RA3.2.2 standard charge verification procedure and RA3.3 airflow rate verification procedure or approved alternatives in RA1. The HERS Rater shall verify the charge using RA3.2.2 and RA3.3 or approved alternatives in RA1.

Exception to Section 170.2(c)3BiaI: Systems that cannot conform to the specifications for hole location in Reference Residential Appendix Figure RA3.2-1 shall not be required to provide holes as described in Figure RA3.2-1.

Exception to Section 170.2(c)3BiaII: Standard ducted systems without zoning dampers may comply with the minimum airflow rate by meeting the applicable requirements in Table 160.3-A and Table 160.3-B as confirmed by field verification and diagnostic testing in accordance with the procedures in Reference Residential Appendix Sections RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure

drop requirements of Section 160.2(b)1D for the system air filter device(s) shall conform to the requirements given in Table 160.3-A and Table 160.3-B.

Exception to Section 170.2(c)3BiaIII: When the outdoor temperature is less than 55 degrees F and the installer utilizes the weigh-in charging procedure in Reference Residential Appendix Section RA3.2.3.1 to verify the refrigerant charge, the installer may elect to utilize the HERS Rater verification procedure in Reference Residential Appendix Section RA3.2.3.2. If the HERS Rater verification procedure in Section RA3.2.3.2 is used for compliance, the system's thermostat shall conform to the specifications in Section 110.12. Ducted systems shall comply with the minimum system airflow rate requirement in Section 170.2(c)3BiaII.

b. For air-cooled air conditioners and air-source heat pumps, including but not limited to ducted split systems, ducted packaged systems, small duct high velocity systems and mini-split systems, which are of a type that cannot comply with the requirements of Section **170.2(c)3Bi:**

I. The installer shall confirm the refrigerant charge using the weigh-in charging procedure specified in Reference Residential Appendix Section RA3.2.3.1, as verified by a HERS Rater according to the procedures specified in Reference Residential Appendix Section RA3.2.3.2; and

II. Systems that utilize forced air ducts shall comply with the minimum system airflow rate requirement in Section 170.2(c)3BiaII, provided the system is of a type that can be verified using the procedures in RA3.3 or an approved alternative procedure in RA1.

Exception 1 to Section 170.2(c)3Bi: Packaged systems for which the manufacturer has verified correct system refrigerant charge prior to shipment from the factory are not required to have refrigerant charge confirmed through field verification and diagnostic testing. The installer of these packaged systems shall certify that the packaged system was precharged at the factory and has not been altered in a way that would affect the charge. Ducted systems shall comply with minimum system airflow rate requirement in Section **170.2(c)3Bib**, provided that the system is of a type that can be verified using the procedure specified in RA3.3 or an approved alternative in RA1.

Exception 2 to Section 170.2(c)3Bi: The HERS Rater field verification and HERS Provider data registry requirements of Reference Residential Appendix RA2 and RA3 are not required for multifamily dwelling units in buildings four habitable stories and greater. The installer shall certify that diagnostic testing was performed in accordance with the applicable procedures.

ii. Space-conditioning distribution systems. All space-conditioning systems shall meet all applicable requirements of a or b below:

a. High performance attics. Air handlers or ducts are allowed to be in ventilated attic spaces when the roof and ceiling insulation level meet Option B in Table 170.2-A.

b. Duct and air handlers located in conditioned space. Duct systems and air handlers of HVAC systems shall be located in conditioned space, and confirmed by field verification and diagnostic testing to meet the criterion of Reference Residential Appendix RA3.1.4.3.8.

Note: Gas heating appliances installed in conditioned spaces must meet the combustion air requirements of California Mechanical Code Chapter 7, as applicable.

iii. Central fan integrated ventilation systems—systems serving individual dwelling units. Central forced air system fans used to provide outside air shall have an air-handling unit fan efficacy less than or equal to the maximum W/cfm specified in a or b below. The airflow rate and fan efficacy requirements in this section shall be confirmed through field verification and diagnostic testing in accordance with all applicable procedures specified in Reference Residential Appendix RA3.3. Central Fan Integrated Ventilation Systems shall be certified to the Energy Commission as Intermittent Ventilation Systems as specified in Reference Residential Appendix RA3.7.4.2.

a. 0.45 W/cfm for gas furnace air-handling units; or

b. 0.58 W/cfm for air-handling units that are not gas furnaces.

iv. Balanced ventilation systems. When balanced ventilation systems are used to meet Section 160.2(b)2Aivb, they shall meet the applicable requirements of a, b or c below:

a. In Climate Zones 1, 2 and 11–16, balanced ventilation systems serving individual dwelling units shall:

1. Be an energy recovery ventilator (ERV) or heat recovery ventilator (HRV),

2. Have a minimum sensible recovery efficiency of 67 percent, rated at 32 degrees Fahrenheit (0 degrees Celsius), and

3. Have a fan efficacy less than or equal to 0.6 W per cfm.

These measures shall be confirmed through HERS field verification in accordance with the procedures in RA3.7.4.4 for buildings with three habitable stories or less, or the procedures in NA2.2.4.1.5 for buildings with four or more habitable stories.

b. In Climate Zones 1, 2 and 11–16, balanced ventilation systems serving multiple dwelling units in buildings with four or more habitable stories shall:

1. Be an ERV or HRV,

2. Have a minimum sensible recovery efficiency or effectiveness of 67 percent, rated at 32 degrees Fahrenheit (0 degrees Celsius),

3. Meet the fan power requirements of Section 170.2(c)4A, and

4. Have recovery bypass or control to directly economize with ventilation air based on outdoor air temperature limits specified in Table 170.2-G.

These measures shall be filed verified in accordance with NA7.18.4.

c. In buildings with three habitable stories or less in Climate Zones 4–10, when a heat pump space-conditioning system is installed to meet the requirements of Section 170.2(c)3Ai, balanced ventilation systems without an ERV or HRV shall have a fan efficacy less than or equal to 0.4 W/cfm.

Exception to Section 170.2(c)3B: The HERS Rater field verification and HERS Provider data registry requirements of Reference Residential Appendix RA2 and RA3 are not required for multifamily dwelling units in buildings four habitable stories and greater. The installer shall certify that diagnostic testing was performed in accordance with the applicable procedures.

C. HVAC system bypass ducts. Bypass ducts that deliver conditioned supply air directly to the space-conditioning system return duct airflow shall not be used.

4. **Common use area space-conditioning systems**. A building complies with this section by being designed with and having constructed and installed a space-conditioning system that meets the applicable requirements of Subsections A through O.

A. **Fan systems**. Each fan system moving air into, out of, or between spaces or circulating air for the purpose of conditioning air within a space shall meet the requirements of Items i, ii and iii below.

i. **Fan power budget.** For each fan system that includes at least one fan or fan array with fan electrical input power ≥ 1 kW, fan system electrical input power (Fan $kW_{design,system}$) determined per Section 170.2(c)4Aib at the fan system design airflow shall not exceed Fan kW_{budget} as calculated per Section 170.2(c)4Aia.

a. Calculation of fan power budget (Fan kW_{budget}). For each fan system:

I. Determine the fan system airflow and choose the appropriate table(s) for fan power allowance.

A. For single-cabinet fan systems, use the fan system airflow and the power allowances in both Tables 170.2-B and Table 170.2-C.

B. For supply-only fan systems, use the fan system airflow and power allowances in Table 170.2-B.

C. For relief fan systems, use the design relief airflow and the power allowances in Table 170.2-C.

D. For exhaust, return and transfer fan systems, use the fan system airflow and the power allowances in Table 170.2-C.

E. For complex fan systems, separately calculate the fan power allowance for the supply and return/exhaust systems and sum them. For the supply airflow, use supply airflow at the fan system design conditions, and the power allowances in Table 170.2-B. For the return/exhaust airflow, use return/exhaust airflow at the fan system design conditions, and the power allowances in Table 170.2-C.

II. For each fan system, determine the components included in the fan system and sum the fan power allowances of those components. All fan systems shall include the system base allowance. If, for a given component, only a portion of the fan system airflow passes through the component, calculate the fan power allowance for that component per this equation:

$$FPA_{adj} = \frac{Q_{comp}}{Q_{sys}} \times FPA_{comp}$$

Where:

FPA_{adj} = The correct/ed fan power allowance for the component in w/cfm

Q_{comp} = The airflow through component in cfm

Q_{sys} = The fan system airflow in cfm

FPA_{comp} = The fan power allowance of the component from Table 170.2-B or Table 170.2-C

III. Multiply the fan system airflow by the sum of the fan power allowances for the fan system.

IV. Divide by 1000 to convert to Fan kW_{budget}.

V. For building sites at elevations greater than 3,000 feet, multiply Fan kW_{budget} by the correction factor in Table 170.2-D.

b. Determining fan system electrical input power (Fan $kW_{design,system}$). Fan $kW_{design,system}$ is the sum of Fan kW_{design} for each fan or fan array included in the fan system with Fan $kW_{design} \geq 1$ kW. If variable speed drives are used, their efficiency losses shall be included. Fan input power shall be calculated with two times the clean filter pressure drop, which is the mean of the clean filter pressure drop and design final filter pressure drop. The Fan kW_{design} for each fan or fan array shall be determined using one of the following methods. There is no requirement to use the same method for all fans in a fan system:

I. Use the default Fan kW_{design} in Table 170.2-E-1 for one or more of the fans. This method cannot be used for complex fan systems.

II. Use the Fan kW_{design} at fan system design conditions provided by the manufacturer of the fan, fan array, or equipment that includes the fan or fan array calculated per a test procedure included in USDOE 10 CFR Part 430, USDOE 10 CFR Part 431, ANSI/AMCA Standard 208-2018, ANSI/AMCA Standard 210-2016, AHRI Standard 430-2020, AHRI Standard 440-2019 or ISO 5801-2017.

III. Use the Fan kW_{design} provided by the manufacturer, calculated at fan system design conditions per one of the methods listed in Section 5.3 of ANSI/AMCA 208-2018.

IV. Determine the Fan kW_{design} by using the maximum electrical input power provided on the motor nameplate.

ii. **VAV systems.**

a. Static pressure sensor location. Static pressure sensors used to control variable air volume fans shall be placed in a position such that the controller setpoint is no greater than one-third the total design fan static pressure, except for systems with zone reset control complying with Section 170.2(c)4Aiib. If this

results in the sensor being located downstream of any major duct split, multiple sensors shall be installed in each major branch with fan capacity controlled to satisfy the sensor furthest below its setpoint; and

b. Setpoint reset. For systems with direct digital control of individual zone boxes reporting to the central control panel, static pressure setpoints shall be reset based on the zone requiring the most pressure; i.e., the setpoint is reset lower until one zone damper is nearly wide open.

iii. **Fractional HVAC motors for fans.** HVAC motors for fans that are less than 1 hp and 1/12 hp or greater shall be electronically commutated motors or shall have a minimum motor efficiency of 70 percent when rated in accordance with NEMA Standard MG 1-2006 at full load rating conditions. These motors shall also have the means to adjust motor speed for either balancing or remote control. Belt-driven fans may use sheave adjustments for airflow balancing in lieu of a varying motor speed.

Exception 1 to Section 170.2(c)4Aiii: Motors in fan-coils and terminal units that operate only when providing heating to the space served.

Exception 2 to Section 170.2(c)4Aiii: Motors in space-conditioning equipment certified under Section 110.1 or 110.2.

Exception 1 to 170.2(c)4A: Fan **system power caused solely by process loads.**

TABLE 170.2-B: Supply Fan Power Allowances (watts/cfm)

	Multi-Zone VAV Systems ≤5,000 cfm	Multi-Zone VAV Systems >5,000 and ≤10,000 cfm	Multi-Zone VAV Systems >10,000 cfm	All Other Fan Systems ≤5,000 cfm	All Other Fan Systems >5,000 and ≤10,000 cfm	All Other Fan Systems >10,000 cfm
Supply System Base Allowance for AHU Serving Spaces < 6 Floors Away.	0.395	0.453	0.413	0.232	0.256	0.236
Supply System Base Allowance for AHU Serving Spaces > 6 Floors Away	0.508	0.548	0.501	0.349	0.356	0.325
MERV 13 to MERV 16 Filter Upstream of Thermal Conditioning Equipment (two times the clean filter pressure drop)[2]	0.136	0.114	0.105	0.139	0.120	0.107
MERV 13 to MERV 16 Final Filter Downstream of Thermal Conditioning Equipment. (two times the clean filter pressure drop) [2]	0.225	0.188	0.176	0.231	0.197	0.177
Filtration Allowance for > Merv 16 or HEPA Filter (two times the clean filter pressure drop) [2]	0.335	0.280	0.265	0.342	0.292	0.264
Central Hydronic Heating Coil Allowance	0.046	0.048	0.052	0.046	0.050	0.054
Electric Heat Allowance	0.046	0.038	0.035	0.046	0.040	0.036

TABLE 170.2-B: Supply Fan Power Allowances (watts/cfm) (Continued)

	Multi-Zone VAV Systems ≤5,000 cfm	Multi-Zone VAV Systems >5,000 and ≤10,000 cfm	Multi-Zone VAV Systems >10,000 cfm	All Other Fan Systems ≤5,000 cfm	All Other Fan Systems >5,000 and ≤10,000 cfm	All Other Fan Systems >10,000 cfm
Gas Heat Allowance	0.069	0.057	0.070	0.058	0.060	0.072
Hydronic/DX Cooling Coil, or Heat Pump Coil (wet) Allowance	0.135	0.114	0.105	0.139	0.120	0.107
Solid or Liquid Desiccant System Allowance	0.157	0.132	0.123	0.163	0.139	0.124
Reheat Coil for Dehumidification Allowance	0.045	0.038	0.035	0.046	0.040	0.036
Allowance for evaporative humidifier/cooler in series with a cooling coil. Value shown is allowed watts/cfm per 1.0 in. wg. Determine pressure loss (in. wg) at 400 fpm or maximum velocity allowed by the manufacturer, whichever is less. *[Calculation required, see note 4]*	0.224	0.188	0.176	0.231	0.197	0.177
Allowance for 100% outdoor air system meeting the requirements of Note 5.	0.000	0.000	0.000	0.070	0.100	0.107
Energy Recovery Allowance for 0.50 ≤ ERR <0.55 [6]	0.135	0.114	0.105	0.139	0.120	0.107
Energy Recovery Allowance for 0.55 ≤ ERR <0.60 [6]	0.160	0.134	0.124	0.165	0.141	0.126
Energy Recovery Allowance for 0.60 ≤ ERR <0.65 [6]	0.184	0.155	0.144	0.190	0.163	0.146
Energy Recovery Allowance for 0.65 ≤ ERR <0.70 [6]	0.208	0.175	0.163	0.215	0.184	0.165
Energy Recovery Allowance for 0.70 ≤ ERR <0.75 [6]	0.232	0.196	0.183	0.240	0.205	0.184
Energy Recovery Allowance for 0.75 ≤ ERR <0.80 [6]	0.257	0.216	0.202	0.264	0.226	0.203
Energy Recovery Allowance for ERR ≥ 0.80 [6]	0.281	0.236	0.222	0.289	0.247	0.222
Coil Runaround Loop	0.135	0.114	0.105	0.139	0.120	0.107
Allowance for gas phase filtration required by code or accredited standard. Value shown is allowed w/cfm per 1.0 in. wg air pressure drop. *[Calculation required, see note 4]*	0.224	0.188	0.176	0.231	0.197	0.177

TABLE 170.2-B: Supply Fan Power Allowances (watts/cfm) (Continued)

	Multi-Zone VAV Systems ≤5,000 cfm	*Multi-Zone VAV Systems >5,000 and ≤10,000 cfm*	*Multi-Zone VAV Systems >10,000 cfm*	*All Other Fan Systems ≤5,000 cfm*	*All Other Fan Systems >5,000 and ≤10,000 cfm*	*All Other Fan Systems >10,000 cfm*
Economizer Return Damper	0.045	0.038	0.035	0.046	0.040	0.036
Air Blender Allowance	0.045	0.038	0.035	0.046	0.040	0.036
Allowance for sound attenuation section [fans serving spaces with design background noise goals below NC35].	0.034	0.029	0.026	0.035	0.030	0.027
Deduction for systems that feed a terminal unit with a fan with electrical input power < 1kW.	-0.100	-0.100	-0.100	-0.100	-0.100	-0.100
Low-turndown single-zone VAV fan systems meeting the requirements in note 7.	0.000	0.000	0.000	.070	0.100	0.089

Footnote to TABLE 170.2-B

1. See FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV) in definition a Multi-Zone VAV System.
2. Filter fan power allowance can only be counted once per fan system.
3. RESERVED.
4. Power allowance requires further calculation by multiplying the actual in. wg. of the device/ component by the watts/ cfm in Table 170.2-B.
5. The 100% outdoor air system must serve 3 or more HVAC zones and airflow during non-economizer operating periods must not exceed 135% of minimum requirements in Section 120.1(c)(3).
6. Energy Recovery Ratio (ERR) calculated per ANSI/ASHRAE 84-2020.
7. A low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.

TABLE 170.2-C: EXHAUST, RETURN, RELIEF, TRANSFER FAN POWER ALLOWANCES (WATT/CFM)

	Multi-Zone VAV Systems ≤5,000 cfm[1]	Multi-Zone VAV Systems >5,000 and ≤10,000 cfm[1]	Multi-Zone VAV Systems >10,000 cfm[1]	All Other Fan Systems ≤5,000 cfm	All Other Fan Systems >5,000 and ≤10,000 cfm	All Other Fan Systems >10,000 cfm
Exhaust System Base Allowance	0.221	0.246	0.236	0.186	0.184	0.190
Filter (any MERV value)[2]	0.046	0.041	0.036	0.046	0.041	0.035
Energy Recovery Allowance for 0.50 ≤ ERR <0.55 [3]	0.139	0.120	0.107	0.139	0.123	0.109
Energy Recovery Allowance for 0.55 ≤ ERR <0.60 [3]	0.165	0.142	0.126	0.165	0.144	0.128
Energy Recovery Allowance for 0.60 ≤ ERR <0.65 [3]	0.190	0.163	0.146	0.191	0.166	0.148
Energy Recovery Allowance for 0.65 ≤ ERR <0.70 [3]	0.215	0.184	0.165	0.216	0.188	0.167
Energy Recovery Allowance for 0.70 ≤ ERR <0.75 [3]	0.240	0.206	0.184	0.241	0.209	0.186
Energy Recovery Allowance for 0.75 ≤ ERR <0.80 [3]	0.265	0.227	0.203	0.266	0.231	0.205
Energy Recovery Allowance for ERR ≥ 0.80 [3]	0.289	0.248	0.222	0.291	0.252	0.225
Coil Runaround Loop	0.139	0.120	0.107	0.139	0.123	0.109

TABLE 170.2-C: EXHAUST, RETURN, RELIEF, TRANSFER FAN POWER ALLOWANCES (WATT/CFM) (Continued)

	Multi-Zone VAV Systems ≤5,000 cfm[1]	Multi-Zone VAV Systems >5,000 and ≤10,000 cfm[1]	Multi-Zone VAV Systems >10,000 cfm[1]	All Other Fan Systems ≤5,000 cfm	All Other Fan Systems >5,000 and ≤10,000 cfm	All Other Fan Systems >10,000 cfm
Return or exhaust systems required by code or accreditation standards to be fully ducted, or systems required to maintain air pressure differentials between adjacent rooms	0.116	0.100	0.089	0.116	0.102	0.091
Return and/or exhaust airflow control devices required for space pressurization control	0.116	0.100	0.089	0.116	0.102	0.091
Laboratory and vivarium exhaust systems in high-rise buildings for vertical duct exceeding 75 ft. Value shown is allowed w/cfm per 0.25 in. wg for each 100 feet exceeding 75 feet. [Calculation required, see note 4]	0.058	0.051	0.045	0.058	0.052	0.046
Biosafety cabinet. Value shown is allowed w/cfm per 1.0 in. wg air pressure drop. [Calculation required, see note 4]	0.231	0.198	0.177	0.232	0.202	0.179
Exhaust filters, scrubbers, or other exhaust treatment required by code or standard. Value shown is allowed w/cfm per 1.0 in. wg air pressure drop. [Calculation required, see note 4]	0.231	0.198	0.177	0.232	0.202	0.179
Sound attenuation section [Fans serving spaces with design background noise goals below NC35.]	0.035	0.030	0.027	0.035	0.031	0.028

Footnote to TABLE 170.2-C:

1. For requirements to be classified as a Multi-Zone VAV System see definition for Multi-Zone Variable Air Volume Fan System.
2. Filter pressure loss can only be counted once per fan system.
3. Energy Recovery Ratio (ERR) calculated per ANSI/ASHRAE 84-2020.
4. Power allowance requires further calculation, multiplying the actual pressure drop (in. wg.) of the device/ component by the watts/cfm in the Table 170.2-C.

TABLE 170.2-D AIR DENSITY CORRECTION FACTORS

Altitude (ft)	Correction factor
<3,000	1.000
≥3,000 and <4,000	0.896
≥4,000 and <5,000	0.864
≥5,000 and <6,000	0.832
≥6,000	0.801

TABLE 170.2-E-1: Default values for Fan kW_{design} Based on Motor Nameplate HP[1,2]

Motor Nameplate HP	Default Fan kW_{design} with variable speed drive (Fan kW_{design})	Default Fan kW_{design} without variable speed drive (Fan kW_{design})
<1	0.96	0.89
≥1 and <1.5	1.38	1.29
≥1.5 and <2	1.84	1.72
≥2 and <3	2.73	2.57
≥3 and <5	4.38	4.17
≥5 and <7.5	6.43	6.15
≥7.5 and <10	8.46	8.13
≥10 and <15	12.47	12.03
≥15 and <20	16.55	16.04
≥20 and <25	20.58	19.92
≥25 and <30	24.59	23.77
≥30 and <40	32.74	31.70
≥40 and <50	40.71	39.46
≥50 and <60	48.50	47.10
≥60 and <75	60.45	58.87
≥75 and ≤100	80.40	78.17

Footnote to TABLE 170.2-E-1:
1. This table cannot be used for Motor Nameplate Horsepower values greater than 100.
2. This table is to be used only with motors with a service factor ≤1.15. If the service factor is not provided, this table may not be used.

B. **Space-conditioning zone controls.** Each space-conditioning zone shall have controls designed in accordance with i or ii:

i. Each space-conditioning zone shall have controls that prevent:

a. Reheating; and

b. Recooling; and

c. Simultaneous provisions of heating and cooling to the same zone, such as mixing or simultaneous supply of air that has been previously mechanically heated and air that has been previously cooled either by cooling equipment or by economizer systems; or

ii. Zones served by variable air-volume systems that are designed and controlled to reduce, to a minimum, the volume of reheated, recooled or mixed air are allowed only if the controls meet all of the following requirements:

a. For each zone with direct digital controls (DDC), the volume of primary air that is reheated, recooled or mixed air supply shall not exceed the larger of:

I. 50 percent of the peak primary airflow; or

II. The design zone outdoor airflow rate as specified by Section 160.2(c)3.

b. The volume of primary air in the deadband shall not exceed the design zone outdoor airflow rate as specified by Section 160.2(c)3.

c. The first stage of heating consists of modulating the zone supply air temperature setpoint up to a maximum setpoint no higher than 95 F degrees F while the airflow is maintained at the deadband flow rate.

d. The second stage of heating consists of modulating the airflow rate from the deadband flow rate up to the heating maximum flow rate.

e. For each zone without DDC, the volume of primary air that is reheated, recooled or mixed air supply shall not exceed the larger of the following:

I. 30 percent of the peak primary airflow; or

II. The design zone outdoor airflow rate as specified by Section 160.2(c)3.

Exception 1 to Section 170.2(c)4B: Zones with special pressurization relationships or cross-contamination control needs.

Exception 2 to Section 170.2(c)4B: Zones served by space-conditioning systems in which at least 75 percent of the energy for reheating, or providing warm air in mixing systems, is provided from a site-recovered or site-solar energy source.

Exception 3 to Section 170.2(c)4B: Zones in which specific humidity levels are required to satisfy exempt process loads. Computer rooms or other spaces where the only process load is from IT equipment may not use this exception.

Exception 4 to Section 170.2(c)4B: Zones with a peak supply-air quantity of 300 cfm or less.

C. **Economizers**.

i. Each cooling air handler that has a design total mechanical cooling capacity over 33,000 Btu/hr, or chilled-water cooling systems without a fan or that use induced airflow that has a cooling capacity greater than the systems listed in Table 170.2-E-2, shall include either:

a. An air economizer capable of modulating outside-air and return-air dampers to supply 100 percent of the design supply air quantity as outside air; or

b. A water economizer capable of providing 100 percent of the expected system cooling load, at outside air temperatures of 50°F dry-bulb and 45°F wet-bulb and below.

Exception 1 to Section 170.2(c)4Ci: Where special outside air filtration and treatment, for the reduction and treatment of unusual outdoor contaminants, makes compliance infeasible.

Exception 2 to Section 170.2(c)4Ci: Where the use of outdoor air for cooling will affect other systems, such as humidification or dehumidification, so as to increase overall building TDV energy use.

Exception 3 to Section 170.2(c)4Ci: Systems serving dwelling units.

Exception 4 to Section 170.2(c)4Ci: Where comfort cooling systems have the cooling efficiency that meets or exceeds the cooling efficiency improvement requirements in Table 170.2-F.

Exception 5 to Section 170.2(c)4Ci: Fan systems primarily serving computer rooms. See Section 140.9(a) for computer room economizer requirements.

TABLE 170.2-E-2 CHILLED WATER SYSTEM COOLING CAPACITY

Climate Zones	Total Building Chilled Water System Capacity, Minus Capacity of the Cooling units with Air Economizers	
	Building Water-Cooled Chilled Water System	Air-Cooled Chilled Water Systems or District Chilled Water Systems
15	≥ 960,000 Btu/h (280 kW)	≥ 1,250,000 Btu/h (365 kW)
1-14	≥720,000 Btu/h (210 kW)	≥940,000 Btu/h (275 kW)
16	≥1,320,000 Btu/h (385 kW)	≥1,720,000 Bu/h (505 kW)

TABLE 170.2-F ECONOMIZER TRADE-OFF TABLE FOR COOLING SYSTEMS

Climate Zone	**Efficiency Improvement [a]**
1	70%
2	65%
3	65%
4	65%
5	70%
6	30%
7	30%
8	30%
9	30%
10	30%
11	30%
12	30%
13	30%
14	30%
15	30%
16	70%

Footnote to TABLE 170.2-F

[a] If a unit is rated with an annualized or part-load metric, then to eliminate the required economizer, only the annualized or part-load minimum cooling efficiency of the unit must be increased by the percentage shown. If the unit is only rated with a full load metric, like EER or COP cooling, then that metric must be increased by the percentage shown. To determine the efficiency required to eliminate economizer, when the unit *equipment efficiency* is rated with an energy-input divided by work-output metric, the metric shall first be converted to COP prior to multiplying by the *efficiency* improvement percentage and then converted back to the rated metric.

ii. If an economizer is required by Section 170.2(c)4Ci, and an air economizer is used to meet the requirement, then it shall be:

a. Designed and equipped with controls so that economizer operation does not increase the building heating energy use during normal operation; and

Exception to Section 170.2(c)4Ciia: Systems that provide 75 percent of the annual energy used for mechanical heating from site-recovered energy or a site-solar energy source.

b. Capable of providing partial cooling even when additional mechanical cooling is required to meet the remainder of the cooling load.

c. Designed and equipped with a device type and high limit shut off complying with Table 170.2-G.

TABLE 170.2-G AIR ECONOMIZER HIGH LIMIT SHUT OFF CONTROL REQUIREMENTS

Device Type[a]	Climate Zones	Required High Limit (Economizer Off When):	Required High Limit (Economizer Off When):
		Equation[b]	Description
Fixed Dry Bulb	1, 3, 5, 11-16	T_{OA} > 75°F	Outdoor air temperature exceeds 75°F
Fixed Dry Bulb	2, 4, 10	T_{OA} > 73°F	Outdoor air temperature exceeds 73°F
Fixed Dry Bulb	6, 8, 9	T_{OA} > 71°F	Outdoor air temperature exceeds 71°F
Fixed Dry Bulb	7	T_{OA} > 69°F	Outdoor air temperature exceeds 69°F
Differential Dry Bulb	1, 3, 5, 11-16	T_{OA} > T_{RA}°F	Outdoor air temperature exceeds return air temperature
Differential Dry Bulb	2, 4, 10	T_{OA} > T_{RA}-2°F	Outdoor air temperature exceeds return air temperature minus 2°F
Differential Dry Bulb	6, 8, 9	T_{OA} > T_{RA}-4°F	Outdoor air temperature exceeds return air temperature minus 4°F
Differential Dry Bulb	7	T_{OA} > T_{RA}-6°F	Outdoor air temperature exceeds return air temperature minus 6°F
Fixed Enthalpy[c] + Fixed Drybulb	All	h_{OA} > 28 Btu/lb[c] or T_{OA} > 75°F	Outdoor air enthalpy exceeds 28 Btu/lb of dry air[c] or Outdoor air temperature exceeds 75°F

Footnote to TABLE 170.2-G:

[a] Only the high limit control devices listed are allowed to be used and at the setpoints listed. Others such as Dew Point, Fixed Enthalpy, Electronic Enthalpy, and Differential Enthalpy Controls, may not be used in any Climate Zone for compliance with Section **170.2(c)4Ci** unless approval for use is provided by the Energy Commission Executive Director.

[b] Devices with selectable (rather than adjustable) setpoints shall be capable of being set to within 2°F and 2 Btu/lb of the setpoint listed.

[c] At altitudes substantially different than sea level, the Fixed Enthalpy limit value shall be set to the enthalpy value at 75°F and 50% relative humidity. As an example, at approximately 6,000 foot elevation, the fixed enthalpy limit is approximately 30.7 Btu/lb.

iii. The air economizer and all air dampers shall have the following features:

a. **Warranty.** 5-year manufacturer warranty of economizer assembly.

b. **Damper reliability testing.** Suppliers of economizers shall certify that the economizer assembly, including but not limited to outdoor air damper, return air damper, drive linkage and actuator, has been tested and is able to open and close against the rated airflow and pressure of the system for 60,000 damper opening and closing cycles.

c. **Damper leakage.** Economizer outdoor air and return air dampers shall have a maximum leakage rate of 10 cfm/sf at 250 Pascals (1.0 in. of water) when tested in accordance with AMCA Standard 500-D. The economizer outside air and return air damper leakage rates shall be certified to the Energy Commission in accordance with Section 110.0.

d. **Adjustable setpoint.** If the high-limit control is fixed dry-bulb or fixed enthalpy + fixed dry-bulb then the control shall have an adjustable setpoint.

e. **Sensor accuracy.** Outdoor air, return air, mixed air and supply air sensors shall be calibrated within the following accuracies.

I. Drybulb and wetbulb temperatures accurate to ±2°F over the range of 40°F to 80°F;

II. Enthalpy accurate to ±3 Btu/lb over the range of 20 Btu/lb to 36 Btu/lb;

III. Relative humidity (RH) accurate to ±5 percent over the range of 20 percent to 80 percent RH.

f. **Sensor calibration data.** Data used for control of the economizer shall be plotted on a sensor performance curve.

g. **Sensor high limit control.** Sensors used for the high limit control shall be located to prevent false readings, including but not limited to being properly shielded from direct sunlight.

h. **Relief air system.** Relief air systems shall be capable of providing 100 percent outside air without over-pressurizing the building.

iv. The space-conditioning system shall include the following:

a. Unit controls shall have mechanical capacity controls interlocked with economizer controls such that the economizer is at 100 percent open position when mechanical cooling is on and does not begin to close until the leaving air temperature is less than 45 degree F.

b. Direct Expansion (DX) units greater than 65,000 Btu/hr that control the capacity of the mechanical cooling directly based on occupied space temperature shall have a minimum of two stages of mechanical cooling capacity.

c. DX units not within the scope of Section 170.2(c)4Ciib shall (i) comply with the requirements in Table 170.2-H, and (ii) have controls that do not false load the mechanical cooling system by limiting or disabling the economizer or by any other means except at the lowest stage of mechanical cooling capacity.

TABLE 170.2-H DIRECT EXPANSION (DX) UNIT REQUIREMENTS FOR COOLING STAGES AND COMPRESSOR DISPLACEMENT

Cooling Capacity	Minimum Number of Mechanical Cooling Stages	Minimum Compressor Displacement
≥ 65,000 Btu/h and < 240,000 Btu/h	3 stages	≤ 35% full load
≥ 240,000 Btu/h	4 stages	≤ 25% full load

v. Systems that include a water economizer to meet Section 170.2(c)4Ci shall include the following:

a. Maximum pressure drop. Precooling coils and water-to-water heat exchangers used as part of a water economizer shall either have a waterside pressure drop of less than 15 feet of water, or a secondary loop shall be installed so that the coil or heat exchanger pressure drop is not contributing to pressure drop when the system is in the normal cooling (non-economizer) mode.

b. Economizer systems shall be integrated with the mechanical cooling system so that they are capable of providing partial cooling even when additional mechanical cooling is required to meet the remainder of the cooling load. Controls shall not false load the mechanical cooling system by limiting or disabling the economizer or by any other means, such as hot gas bypass, except at the lowest stage of mechanical cooling.

D. **Supply air temperature reset controls.** Space-conditioning systems supplying heated or cooled air to multiple zones shall include controls that automatically reset supply-air temperatures. Air distribution systems serving zones that are likely to have constant loads shall be designed for the air flows resulting from the fully reset supply air temperature. Supply air temperature reset controls shall be:

i. In response to representative building loads or to outdoor air temperature; and

ii. At least 25 percent of the difference between the design supply-air temperature and the design room air temperature.

Exception 1 to Section 170.2(c)4D: Systems that meet the requirements of Section 170.2(c)3Bi, without using Exception 1 to that section.

Exception 2 to Section 170.2(c)4D: Where supply-air temperature reset would increase overall building energy use.

Exception 3 to Section 170.2(c)4D: Systems supplying zones in which specific humidity levels are required to satisfy process loads. Computer rooms or other spaces with only IT equipment may not use this exception.

E. **Electric-resistance heating.** Electric-resistance heating systems shall not be used for space heating.

Exception 1 to Section 170.2(c)4E: Where an electric-resistance heating system supplements a heating system in which at least 60 percent of the annual energy requirement is supplied by site-solar or recovered energy.

Exception 2 to Section 170.2(c)4E: Where an electric-resistance heating system supplements a heat pump heating system, and the heating capacity of the heat pump is more than 75 percent of the design heating load calculated in accordance with Section 170.2(c)1 at the design outdoor temperature specified in Section 170.2(c)2.

Exception 3 to Section 170.2(c)4E: Where the total capacity of all electric-resistance heating systems serving the entire building is less than 10 percent of the total design output capacity of all heating equipment serving the entire building.

Exception 4 to Section 170.2(c)4E: Where the total capacity of all electric-resistance heating systems serving the entire building, excluding those allowed under Exception 2, is no more than 3 kW.

Exception 5 to Section 170.2(c)4E: Heating systems serving as emergency backup to gas heating equipment.

F. **Heat rejection systems.** Heat rejection equipment used in comfort cooling systems such as air-cooled condensers, open cooling towers, closed-circuit cooling towers and evaporative condensers shall include the following:

i. **Fan speed control.** Each fan powered by a motor of 7.5 hp (5.6 kW) or larger shall have the capability to operate that fan at 2/3 of full speed or less, and shall have controls that automatically change the fan speed to control the leaving fluid temperature or condensing temperature or pressure of the heat rejection device.

Exception 1 to Section 170.2(c)4Fi: Heat rejection devices included as an integral part of the equipment listed in Table 110.2-A through Table 110.2-N.

Exception 2 to Section 170.2(c)4Fi: Condenser fans serving multiple refrigerant circuits.

Exception 3 to Section 170.2(c)4Fi: Condenser fans serving flooded condensers.

Exception 4 to Section 170.2(c)4Fi: Up to one-third of the fans on a condenser or tower with multiple fans where the lead fans comply with the speed control requirement.

ii. **Tower flow turndown. O**pen cooling towers configured with multiple condenser water pumps shall be designed so that all cells can be run in parallel with the larger of:

a. The flow that is produced by the smallest pump; or

b. 50 percent of the design flow for the cell.

iii. **Limitation on centrifugal fan cooling towers.** Open cooling towers with a combined rated capacity of 900 gpm and greater at 95°F condenser water return, 85°F condenser water supply and 75°F outdoor wet-bulb temperature shall use propeller fans and shall not use centrifugal fans.

Exception 1 to Section 170.2(c)4Fiii: Cooling towers that are ducted (inlet or discharge) or have an external sound trap that requires external static pressure capability.

Exception 2 to Section 170.2(c)4Fiii: Cooling towers that meet the energy efficiency requirement for propeller fan towers in Section 110.2, Table 110.2-F.

iv. **Multiple cell heat rejection equipment.** Multiple cell heat rejection equipment with variable speed fan drives shall:

a. Operate the maximum number of fans allowed that comply with the manufacturer's requirements for all system components, and

b. Control all operating fans to the same speed. Minimum fan speed shall comply with the minimum allowable speed of the fan drive as specified by the manufacturer's recommendation. Staging of fans is allowed once the fans are at their minimum operating speed.

v. **Cooling tower efficiency.** Axial fan, open-circuit cooling towers serving condenser water loops for chilled water plants with a total of 900 gpm or greater shall have a rated efficiency of no less than 60 gpm/hp when rated in accordance with the conditions as listed in Table 110.2-F.

Exception 1 to Section 170.2(c)4Fv: Replacement of existing cooling towers that are inside an existing building or on an existing roof.

Exception 2 to Section 170.2(c)4Fv: Cooling towers serving buildings in Climate Zone 1 or 16.

G. **Minimum chiller efficiency.** Chillers shall meet or exceed Path B from Table 110.2-D.

Exception 1 to Section 170.2(c)4G**:** Chillers with electrical service > 600 V.

Exception 2 to Section 170.2(c)4G: Chillers attached to a heat recovery system with a design heat recovery capacity > 40 percent of the design chiller cooling capacity.

Exception 3 to Section 170.2(c)4G: Chillers used to charge thermal energy storage systems where the charging temperature is < 40°F.

Exception 4 to Section 170.2(c)4G: In buildings with more than three chillers, only three chillers are required to meet the Path B efficiencies.

H. **Limitation of air-cooled chillers.** Chilled water plants shall not have more than 300 tons provided by air-cooled chillers.

Exception 1 to Section 170.2(c)4H: Where the water quality at the building site fails to meet manufacturer's specifications for the use of water-cooled chillers.

Exception 2 to Section 170.2(c)4H: Chillers that are used to charge a thermal energy storage system with a design temperature of less than 40°F (4°C).

I. **Hydronic system measures**.

i. **Hydronic variable flow systems.** HVAC chilled and hot water pumping shall be designed for variable fluid flow and shall be capable of reducing pump flow rates to no more than the larger of: a) 50 percent or less of the design flow rate; or b) the minimum flow required by the equipment manufacturer for the proper operation of equipment served by the system.

Exception 1 to Section 170.2(c)4I: Systems that include no more than three control valves.

Exception 2 to Section 170.2(c)4I: Systems having a total pump system power less than or equal to 1.5 hp.

ii. **Chiller isolation.** When a chilled water system includes more than one chiller, provisions shall be made so that flow through any chiller is automatically shut off when that chiller is shut off while still maintaining flow through other operating chiller(s). Chillers that are piped in series for the purpose of increased temperature differential shall be considered as one chiller.

iii**. Boiler isolation.** When a hot water plant includes more than one boiler, provisions shall be made so that flow through any boiler is automatically shut off when that boiler is shut off while still maintaining flow through other operating boiler(s).

iv. **Chilled and hot water temperature reset controls.** Systems with a design capacity exceeding 500,000 Btu/hr supplying chilled or heated water shall include controls that automatically reset supply water temperatures as a function of representative building loads or outside air temperature.

Exception to Section 170.2(c)4Iiv: Hydronic systems that use variable flow to reduce pumping energy in accordance with Section 170.2(c)4Ii.

v. **Water-cooled air conditioner and hydronic heat pump systems.** Water circulation systems serving water-cooled air conditioners, hydronic heat pumps or both, that have total pump system power exceeding 5 hp, shall have flow controls that meet the requirements of Section 170.2(c)4Ivi. Each such air conditioner or heat pump shall have a two-position automatic valve interlocked to shut off water flow when the compressor is off.

vi. **Variable flow controls.**

a. Variable speed drives. Individual pumps serving variable flow systems and having a motor horsepower exceeding 5 hp shall have controls or devices (such as variable speed control) that will result in pump motor demand of no more than 30 percent of design wattage at 50 percent of design water flow. The pumps shall be controlled as a function of required differential pressure.

b. Pressure sensor location and setpoint.

c. For systems without direct digital control of individual coils reporting to the central control panel, differential pressure shall be measured at the most remote heat exchanger or the heat exchanger requiring the greatest differential pressure.

d. For systems with direct digital control of individual coils with a central control panel, the static pressure setpoint shall be reset based on the valve requiring the most pressure, and the setpoint shall be no less than 80 percent open. Pressure sensors may be mounted anywhere.

Exception 1 to Section 170.2(c)4Ivi: Heating hot water systems.

Exception 2 to Section 170.2(c)4Ivi: Condenser water systems serving only water-cooled chillers.

vii. **Hydronic heat pump (WLHP) controls.** Hydronic heat pumps connected to a common heat pump water loop with central devices for heat rejection and heat addition shall have controls that are capable of providing a heat pump water supply temperature deadband of at least 20°F between initiation of heat rejection and heat addition by the central devices.

Exception to Section 170.2(c)4Ivii: Where a system loop temperature optimization controller is used to determine the most efficient operating temperature based on real-time conditions of demand and capacity, deadbands of less than 20°F shall be allowed.

J. Reserved.

K. **Fan control.** Each cooling system listed in Table 170.2-H shall be designed to vary the indoor fan airflow as a function of load and shall comply with the following requirements:

i. DX and chilled water cooling systems that control the capacity of the mechanical cooling directly based on occupied space temperature shall (i) have a minimum of two stages of fan control with no more than 66 percent speed when operating on stage 1; and (ii) draw no more than 40 percent of the fan power at full fan speed, when operating at 66 percent speed.

ii. All other systems, including but not limited to DX cooling systems and chilled water systems that control the space temperature by modulating the airflow to the space, shall have proportional fan control such that at 50 percent air flow the power draw is no more than 30 percent of the fan power at full fan speed.

iii. Systems that include an air side economizer to meet Section 170.2(c)4Ci shall have a minimum of two speeds of fan control during economizer operation.

Exception to Section 170.2(c)4K: Modulating fan control is not required for chilled water systems with all fan motors <1 HP, or for evaporative systems with all fan motors < 1 HP, if the systems are not used to provide ventilation air and all indoor fans cycle with the load.

L. **Mechanical system shut-off.** Any directly conditioned common use area space with operable wall or roof openings to the outdoors shall be provided with interlock controls that disable or reset the temperature setpoint to 55°F for mechanical heating and disable or reset the temperature setpoint to 90°F for mechanical cooling to that space when any such opening is open for more than 5 minutes.

Exception 1 to Section 170.2(c)4L: Interlocks are not required on doors with automatic closing devices.

Exception 2 to Section 170.2(c)4L: Any space without a thermostatic control (thermostat or a space temperature sensor used to control heating or cooling to the space).

M**. Exhaust system transfer air.** Conditioned supply air delivered to any space with mechanical exhaust shall not exceed the greater of:

i. The supply flow required to meet the space heating or cooling load; or

ii. The ventilation rate required by the authority having jurisdiction, the facility Environmental Health and Safety Department or Section 160.2(c)3; or

iii. The mechanical exhaust flow minus the available transfer air. Available transfer air shall be from another conditioned space or return air plenums on the same floor and same smoke or fire compartment, and that at their closest point are within 15 feet of each other.

Exception 1 to Section 170.2(c)4M: Spaces that are required by applicable codes and standards to be maintained at a positive pressure differential relative to adjacent spaces.

Exception 2 to Section 170.2(c)4M: Spaces where the highest amount of transfer air that could be used for exhaust makeup may exceed the available transfer airflow rate and where the spaces have a required negative pressure relationship.

N. **Dedicated outdoor air systems (DOAS).** HVAC systems utilizing a dedicated outdoor air system (DOAS) to condition, temper or filter 100 percent outdoor air separate from local or central space-conditioning systems serving the same space shall meet the following criteria:

i. Provide each space with one of the following configurations:

a. A DOAS unit and a separate independent space-conditioning system in which the independent space-conditioning system complies with the economizer requirements specified by Section 170.2(c)4Ci and the DOAS unit complies with the exhaust air heat recovery requirements specified in Section 170.2(c)4N.

b. A DOAS unit that meets or exceeds the following criteria and a separate space cooling system:

I. Provides at least the minimum ventilation air flow rate as specified in Section 120.1(c)3 and provides no less than 0.3 cfm/ft^2 during economizer operation.

II. Ventilation sensible energy recovery ratio of at least 60 percent or enthalpy recovery ratio of at least 50 percent at full flow cooling design conditions and heating design condition.

III. Energy recovery bypass or control to directly economize with ventilation air based on outdoor air temperature limits specified in Table 170.2-G.

c. DOAS units with airflow rate > 1,000 cfm must meet demand ventilation control requirements in accordance with Sections 160.2(c)5C, D and E**.**

Exception to Section 170.2(c)4Ni: Systems installed for the sole purpose of providing makeup air for exhausting toxic fumes, flammable materials, paint, corrosive fumes, dust, dryer exhaust, or commercial kitchen hoods used for collecting and removing grease vapors and smoke.

ii. Ventilation fan systems shall be capable of modulating fan speed control.

iii. Heating and cooling equipment fans, heating and cooling circulation pumps, and terminal unit fans shall cycle off, and terminal unit primary cooling air shall be shut off when there is no call for heating or cooling in the zone.

Exception to Section 170.2(c)4Niii: Fans used for heating and cooling using less than 0.12 watts per cfm may operate when space temperatures are within the thermostat deadband to provide destratification and air mixing in the space.

iv. The DOAS supply air shall be delivered directly to the occupied space or downstream of the terminal heating or cooling coils.

Exception 1 to Section 170.2(c)4Niv: Active chilled beam systems.

Exception 2 to Section 170.2(c)4Niv: Sensible only cooling terminal units with pressure-independent variable-airflow regulating devices limiting the DOAS supply air to the greater of latent load or minimum ventilation requirements.

Exception 3 to Section 170.2(c)4Niv: Terminal heating or cooling units that comply with the low fan power allowance requirements in Exception to Section 170.2(c)4Niii.

v. DOAS with mechanical cooling providing ventilation to multiple zones and operating in conjunction with zone heating and cooling systems shall not use heating or heat recovery to warm supply air above 60°F when representative building loads or outdoor air temperature indicate that the majority of zones require cooling.

vi. DOAS with a total fan system power less than 1 kW shall not exceed a total combined fan power of 1.0 W/cfm. DOAS with fan power greater than or equal to 1 kW shall meet the requirements of Section 170.2(c)4A.

O. **Exhaust air heat recovery.** Fan systems designed to operate to the criteria listed in either Table 170.2-I or Table 170.2-J shall include an exhaust air heat recovery system that meets the following:

i. A sensible energy recovery ratio of at least 60 percent or an enthalpy recovery ratio of at least 50 percent for both heating and cooling design conditions.

ii. Energy recovery bypass or control to disable energy recovery and to directly economize with ventilation air based on outdoor air temperature limits specified in Table 170.2-G. For energy recovery systems where the transfer of energy cannot be stopped, bypass shall prevent the total airflow rate of either outdoor air or exhaust air through the energy recovery exchanger from exceeding 10 percent of the full design airflow rate.

iii. For a DOAS unit and a separate independent space-conditioning system meeting the requirements of Section 170.2(c)4Nia, the design supply fan airflow rate shall be the total airflow of only the DOAS unit.

EXCEPTION 1 to Section 170.2(c)4Oii: DOAS units with the capability to shut off when a separate independent space-conditioning system meets the economizer requirements specified by section 170.2(c)4Cia is economizing.

Exception 1 to Section 170.2(c)4O: Systems meeting Section 140.9(c) prescriptive requirements for laboratory and factory exhaust systems.

Exception 2 to Section 170.2(c)4O: Systems serving spaces that are not cooled and that are heated to less than 60°F.

Exception 3 to Section 170.2(c)4O: Where more than 60 percent of the outdoor air heating energy is provided from site-recovered energy in Climate Zone 16.

Exception 4 to Section 170.2(c)4O: Sensible recovery ratio requirements at heating design conditions are exempted for Climate Zone 15.

Exception 5 to Section 170.2(c)4O: Sensible recovery ratio requirements at cooling design conditions are exempted for Climate Zone 1.

Exception 6 to Section 170.2(c)4O: Where the sum of the airflow rates exhausted and relieved within 20 feet of each other is less than 75 percent of the design outdoor airflow rate, excluding exhaust air that is either:

i. used for another energy recovery system;

ii. not allowed by the California Mechanical Code (Title 24, Part 4) for use in energy recovery systems with leakage potential; or

iii. of Class 4 as specified in Section 160.2(c)8.

Exception 7 to Section 170.2(c)4O: Systems expected to operate less than 20 hours per week.

TABLE 170.2-I: ENERGY RECOVERY REQUIREMENTS BY CLIMATE ZONE AND PERCENT OUTDOOR AIR AT FULL DESIGN AIRFLOW (<8,000 HOURS / YEAR)

% Outdoor Air at Full Design Airflow	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
≥10% and <20%	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
≥20% and <30%	≥15,000	≥20,000	NR	NR	NR	NR	NR	NR	NR	NR	≥18,500	≥18,500	≥18,500	≥18,500	≥18,500	≥18,500
≥30% and <40%	≥13,000	≥15,000	NR	NR	NR	NR	NR	NR	NR	NR	≥15,000	≥15,000	≥15,000	≥15,000	≥15,000	≥15,000
≥40% and <50%	≥10,000	≥12,000	NR	NR	NR	NR	NR	NR	NR	≥22,000	≥10,000	≥10,000	≥10,000	≥10,000	≥10,000	≥10,000
≥50% and <60%	≥9,000	≥10,000	NR	≥18,500	NR	NR	NR	NR	NR	≥17,000	≥8,000	≥8,000	≥8,000	≥8,000	≥8,000	≥8,000
≥60% and <70%	≥7,000	≥7,500	NR	≥16,500	NR	NR	NR	NR	≥20,000	≥15,000	≥7,000	≥7,000	≥7,000	≥7,000	≥7,000	≥7,000
≥70% and <80%	≥6,500	≥7,000	NR	≥15,000	NR	NR	NR	NR	≥17,000	≥14,000	≥5,000	≥5,000	≥5,000	≥5,000	≥5,000	≥5,000
≥80%	≥4,500	≥6,500	NR	≥14,000	NR	NR	NR	NR	≥15,000	≥13,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000

FOOTNOTES TO TABLE 170.2-I:

1. Flow rates in Table 140.4-G represent the design supply fan airflow rate in CFM.
2. For a DOAS unit providing outdoor air to another space-conditioning system, the full design supply fan airflow rate shall be the total airflow of only the DOAS unit.

TABLE 170.2-J: ENERGY RECOVERY REQUIREMENTS BY CLIMATE ZONE AND PERCENT OUTDOOR AIR AT FULL DESIGN AIRFLOW (≥8,000 HOURS / YEAR)

% Outdoor Air at Full Design Airflow	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
≥10% and <20%	≥10,000	≥10,000	NR	NR	NR	NR	NR	NR	NR	≥40,000	≥40,000	≥20,000	≥10,000	≥10,000	≥10,000	≥10,000
≥20% and <30%	≥2,000	≥5,000	≥13,000	≥9,000	≥9,000	NR	NR	NR	NR	≥15,000	≥15,000	≥5,000	≥5,000	≥5,000	≥5,000	≥5,000
≥30% and <40%	≥2,000	≥3,000	≥10,000	≥6,500	≥6,500	NR	NR	NR	≥15,000	≥7,500	≥7,500	≥3,000	≥3,000	≥3,000	≥3,000	≥3,000
≥40% and <50%	≥2,000	≥2,000	≥8,000	≥6,000	≥6,000	NR	NR	NR	≥12,000	≥6,000	≥6,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000

≥50% and <60%	≥2,000	≥2,000	≥7,000	≥6,000	≥6,000	NR	NR	≥20,000	≥10,000	≥5,000	≥5,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000
≥60% and <70%	≥2,000	≥2,000	≥6,000	≥6,000	≥6,000	NR	NR	≥18,000	≥9,000	≥4,000	≥4,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000
≥70% and <80%	≥2,000	≥2,000	≥6,000	≥5,000	≥5,000	NR	NR	≥15,000	≥8,000	≥3,000	≥3,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000
≥80%	≥2,000	≥2,000	≥6,000	≥5,000	≥5,000	NR	NR	≥12,000	≥7,000	≥3,000	≥3,000	≥2,000	≥2,000	≥2,000	≥2,000	≥2,000

Footnotes to TABLE 170.2-J:

1. Flow rates in Table 140.4-G represent the design supply fan airflow rate in CFM.
2. For a DOAS unit providing outdoor air to another space-conditioning system, the full design supply fan airflow rate shall be the total airflow of only the DOAS unit.

(d) **Water-heating systems.** Water-heating systems shall meet the requirements of either 1, 2, 3 or 4.

For recirculation distribution systems serving individual dwelling units, only demand recirculation systems with manual on/off control as specified in the Reference Appendix RA4.4.9 shall be used. Recirculation system serving multiple dwelling units shall meet the requirements of Sections 110.3(c)2 and 110.3(c)5, and shall be capable of automatically controlling the recirculation pump operation based on measurement of hot water demand and hot water return temperature:

1. For systems serving individual dwelling units, the water-heating system shall meet the requirement of either A, B or C, or shall meet the performance compliance requirements of Section 170.1:
   A. A single 240 volt heat pump water heater. In addition, meet the following:
      i. A compact hot water distribution system as specified in Reference Appendix RA4.4.6 in climate zones 1 and 16; and
      ii. A drain water heat recovery system that is field verified as specified in the Reference Appendix RA3.6.9 in Climate Zone 16.
   B. A single heat pump water heater that meets the requirements of NEEA Advanced Water Heater Specification Tier 3 or higher. In addition, for climate zone 16, a drain water heat recovery system that is field verified as specified in Reference Appendix RA3.6.9.
   C. A gas or propane instantaneous water heater with an input of 200,000 Btu per hour or less and no storage tank.
2. For heat pump water-heating systems serving multiple dwelling units, the water-heating system shall be installed according to the manufacturer's design and installation guidelines and meet the following requirements:
   A. The hot water return from the recirculation loop shall connect to a recirculation loop tank and shall not directly connect to the primary heat pump water heater inlet or the primary thermal storage tanks.
   B. The fuel source for the recirculation loop tank shall be electricity if auxiliary heating is needed. The recirculation loop heater shall be capable of multi-pass water-heating operation.

C. For systems with single pass primary heat pump water heater, the primary thermal storage tanks shall be piped in series if multiple tanks are used. For systems with multi-pass primary heat pump water heater, the primary thermal storage tanks shall be piped in parallel if multiple tanks are used.

D. The primary storage tank temperature setpoint shall be at least 135°F.

E. The recirculation loop tank temperature setpoint shall be at least 10°F lower than the primary thermal storage tank temperature setpoint such that hot water from the recirculation loop tank is used for the temperature maintenance load before engaging the recirculation loop tank heater.

F. The minimum heat pump water heater compressor cut-off temperature shall be equal to or lower than 40°F ambient air temperature.

G. A recirculation system.

Exception to Section 170.2(d)2G: Buildings with eight or fewer dwelling units.

H. Design documentation shall be provided in accordance with JA14.4.

3. For gas or propane systems serving multiple dwelling units, a central water-heating system that includes the following components shall be installed:

A. For Climate Zones 1 through 9, gas service water-heating systems with a total installed gas water-heating input capacity of 1 MMBtu/h or greater shall have gas service water-heating equipment with a minimum thermal efficiency of 90 percent. Multiple units are allowed to meet this requirement with an input capacity-weighted average of at least 90 percent.

Exception 1 to Section 170.2(d)3A: Individual gas water heaters with input capacity at or below 100,000 Btu/h shall not be included in the calculations of the total system input or total system efficiency.
Exception 2 to Section 170.2(d)3A: If 25 percent of the annual water-heating requirement is provided by site-solar energy or site-recovered energy.

B. A recirculation system.

Exception to Section 170.2(d)3B: Buildings with eight or fewer dwelling units.

C. A solar water-heating system meeting the installation criteria specified in Reference Residential Appendix RA4 and with a minimum solar savings fraction of either i or ii below:

i. A minimum solar savings fraction of 0.20 in Climate Zones 1 through 9 or a minimum solar savings fraction of 0.35 in Climate Zones 10 through 16; or

ii. A minimum solar savings fraction of 0.15 in Climate Zones 1 through 9 or a minimum solar savings fraction of 0.30 in Climate Zones 10 through 16. In addition, a drain water heat recovery system that is field verified as specified in the Reference Appendix RA3.6.9.

4. A water-heating system serving multiple dwelling units determined by the Executive Director to use no more energy than the one specified in Subsection 1, 2 or 3 above.

TABLE 170.2-K MECHANICAL COMPONENT PACKAGE – Multifamily Standard Building Design

Multifamily			Climate Zone															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Unitary (serving one dwelling unit)	If Balanced Ventilation System[1]	HRV or ERV Sensible Recovery Efficiency	0.67	0.67	NR	NR	NR	NR	NR	NR	NR	NR	0.67	0.67	0.67	0.67	0.67	0.67
		HRV or ERV Fan Efficacy (W/cfm)	0.6	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.6	0.6	0.6	0.6	0.6
		Non-HRV or Non-ERV Fan Efficacy (W/cfm)	NR	NR	NR	0.4	0.4	0.4	0.4	0.4	0.4	0.4	NR	NR	NR	NR	NR	NR
	If Heat Pump, HSPF[2]/HSPF2		MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN
	If Dual-Fuel Heat Pump, AFUE		MIN	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MIN
	Refrigerant Charge Verification or Fault Indicator Display		NR	REQ	NR	NR	NR	NR	NR	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	NR
	SEER/SEER2		MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN	MIN
Central (serving multiple dwelling units)	If Balanced Ventilation Systems[1]	Sensible Recovery Efficiency or Effectiveness	0.67	0.67	NR	NR	NR	NR	NR	NR	NR	NR	0.67	0.67	0.67	0.67	0.67	0.67
		Bypass Function	REQ	REQ	NR	NR	NR	NR	NR	NR	NR	NR	REQ	REQ	REQ	REQ	REQ	REQ
Central System Air Handlers	Central Fan Integrated Ventilation System Fan Efficacy		REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ	REQ
Duct Insulation	Ducts in Unconditioned Space		R-8	R-8	R-6	R-8	R-6	R-6	R-6	R-8	R-8	R-8	R-8	R-8	R-8	R-8	R-8	R-8
Water Heating	All Buildings		System Shall meet Section 170.2(d)															

Footnotes to TABLE 170.2-K:

1. Requirements only apply when using Balanced Ventilation to meet 160.2(b)2Aivb.
2. HSPF means "heating seasonal performance factor."
3. A supplemental heating unit may be installed in a space served directly or indirectly by a primary heating system, provided that the unit thermal capacity does not exceed 2 kilowatts or 7,000 Btu/hr and is controlled by a time-limiting device not exceeding 30 minutes.

(e) **Lighting.** Dwelling unit lighting shall meet the applicable mandatory requirements of Section 160.5(a). Common use area lighting shall meet the following requirements:

Exception to Section 170.2(e): Common use areas providing shared provisions for living, eating, cooking or sanitation to dwelling units that would otherwise lack these provisions may instead comply with Section 160.5(a).

1. **Interior common use area lighting.** A building complies with Section 170.2(e)1 if:

   A. The calculation of adjusted indoor lighting power of all proposed building areas combined, calculated under Subsection 170.2(e)2, is no greater than the calculation of allowed indoor lighting power, specific methodologies calculated under Subsection 170.2(e)4; and

   B. The calculation of allowed indoor lighting power, general rules comply with Subsection 170.2(e)3.

   The prescriptive limits on indoor lighting power are the smaller of the actual and allowed indoor lighting power values determined in accordance with Item i.

2. Calculation of Adjusted Indoor Lighting Power. The Adjusted Indoor Lighting Power of all proposed building areas is the total watts of all planned permanent and portable lighting systems in all areas of the proposed building; subject to the applicable adjustments under Subdivisions A through D of this subsection.

A. Two interlocked lighting systems: No more than two lighting systems may be used for an area, and if there are two they must be interlocked. Where there are two interlocked lighting systems, the watts of the lower wattage system may be excluded from the Adjusted Indoor Lighting Power if:

i. An installation certificate detailing compliance with Section 170.2(e)1A is submitted in accordance with Section 10-103 and Section 160.5(e); and

ii. The area (or areas) served by the interlocking systems is an auditorium, a conference room, a multipurpose room or a theater; and

iii. The two lighting systems are interlocked with a nonprogrammable double-throw switch to prevent simultaneous operation of both systems.

For compliance with Part 6, a nonprogrammable double-throw switch is an electrical switch commonly called a “single pole double throw” or “three-way” switch that is wired as a selector switch allowing one of two loads to be enabled. It can be a line voltage switch or a low voltage switch selecting between two relays. It cannot be overridden or changed in any manner that would permit both loads to operate simultaneously.

B. Reduction of wattage through controls. In calculating Adjusted Indoor Lighting Power, the installed watts of a luminaire providing general lighting in an area listed in Table **170.2-L may be reduced by the product of (i) the number of watts controlled as described in** Table **170.2-L, times (ii) the applicable** power adjustment factor **(PAF), if all of the following conditions are met:**

i. An installation certificate is submitted in accordance with Section 160.5(e)2; and

ii. Luminaires and controls meet the applicable requirements of Section 110.9 and Sections 160.5(b) through 160.6; and

iii. The controlled lighting is permanently installed general lighting systems and the controls are permanently installed nonresidential-rated lighting controls.

When used for determining PAFs for general lighting in offices, furniture mounted luminaires that comply with all of the following conditions shall qualify as permanently installed general lighting systems:

a. The furniture mounted luminaires shall be permanently installed no later than the time of building permit inspection; and

b. The furniture mounted luminaires shall be permanently hardwired; and

c. The furniture mounted lighting system shall be designed to provide indirect general lighting; and

d. Before multiplying the installed watts of the furniture mounted luminaire by the applicable PAF, 0.3 watts per square foot of the area illuminated by the furniture mounted luminaires shall be subtracted from installed watts of the furniture mounted luminaires; and

e. The lighting control for the furniture mounted luminaire complies with all other applicable requirements in Section 170.2(e)1Aii.

iv. At least 50 percent of the light output of the controlled luminaire is within the applicable area listed in **Table 170.2-L**. Luminaires on lighting tracks shall be within the applicable area in order to qualify for a PAF.

v. Only one PAF from **Table 170.2-L** may be used for each qualifying luminaire. PAFs shall not be added together unless allowed in **Table 170.2-L**.

vi. Only lighting wattage directly controlled in accordance with Section 170.2(e)1Aii shall be used to reduce the installed watts as allowed by Section 170.2(e)1Aii for calculating the Adjusted Indoor Lighting Power. If only a portion of the wattage in a luminaire is controlled in accordance with Section 170.2(e)1Aii, then only that portion of controlled wattage may be reduced in calculating Adjusted Indoor Lighting Power.

vii. Lighting controls used to qualify for a PAF shall be designed and installed in addition to manual, multilevel and automatic lighting controls required in Section **160.5(b)4**, and in addition to any other lighting controls required by any provision of Part 6. PAFs shall not be available for lighting controls required by Part 6.

viii. To qualify for the PAF for daylight continuous dimming plus OFF control, the daylight control and controlled luminaires shall comply with Sections 160.5(b)4D, 160.5(e)1C and 160.5(e)1G, and the controls shall be continuous dimming and shall additionally turn lights completely OFF when the daylight available in the daylit zone is greater than 150 percent of the illuminance received from the general lighting system at full power. The PAF shall apply to the luminaires in the primary sidelit daylit zone, secondary sidelit daylit zone and skylit daylit zone.

ix. To qualify for the PAF for an occupant sensing control controlling the general lighting in open plan office areas above workstations, in accordance with **Table 170.2-L**, the following requirements shall be met:

a. The open plan office area shall be greater than 250 square feet; and

b. This PAF shall be available only in office areas that contain workstations; and

c. Controlled luminaires shall only be those that provide general lighting directly above the controlled area, or furniture mounted luminaires that comply with Section 170.2(e)1Aii and provide general lighting directly above the controlled area; and

d. Qualifying luminaires shall be controlled by occupant sensing controls that meet all of the following requirements, as applicable:

I. Infrared sensors shall be equipped by the manufacturer, or fitted in the field by the installer, with lenses or shrouds to prevent them from being triggered by movement outside of the controlled area.

II. Ultrasonic sensors shall be tuned to reduce their sensitivity to prevent them from being triggered by movements outside of the controlled area.

III. All other sensors shall be installed and adjusted as necessary to prevent them from being triggered by movements outside of the controlled area.

x. To qualify for the PAF for an Institutional Tuning in **Table 170.2-L**, the tuned lighting system shall comply with all of the following requirements:

a. The lighting controls shall limit the maximum output or maximum power draw of the controlled lighting to 85 percent or less of full light output or full power draw; and

b. The means of setting the limit is accessible only to authorized personnel; and

c. The setting of the limit is verified by the acceptance test required by Section 160.5(e)1G; and

d. The construction documents specify which lighting systems shall have their maximum light output or maximum power draw set to no greater than 85 percent of full light output or full power draw.

xi. To qualify for the PAF for a demand responsive control in **Table 170.2-L**, the general lighting wattage receiving the PAF shall not be within the scope of Section 110.12(c) and a demand responsive control shall meet all of the following requirements:

a. The controlled lighting shall be capable of being automatically reduced in response to a demand response signal; and

b. General lighting shall be reduced in a manner consistent with uniform level of illumination requirements in Table 160.5-B.

xii. To qualify for the PAFs for clerestory fenestration, horizontal slats or light shelves in **Table 170.2-L**, the daylighting design shall meet the requirements in Section 140.3(d). The PAFs shall only apply to lighting in a primary or secondary sidelit daylit zone where continuous dimming daylighting controls meeting the requirements of Section 160.5(b)4D are installed.

C. Lighting wattage excluded. The watts of the following indoor lighting applications may be excluded from Adjusted Indoor Lighting Power:

i. Lighting installed by the manufacturer in walk-in coolers or freezers, vending machines and food preparation equipment.

ii. Lighting that is required for exit signs subject to the CBC. Exit signs shall meet the requirements of the Appliance Efficiency Regulations.

iii. Exit way or egress illumination that is normally off and that is subject to the CBC.

iv. Temporary lighting systems.

v. Lighting systems in qualified historic buildings, as defined in the California Historical Building Code (Title 24, Part 8), are exempt from the lighting power density allowances if they consist solely of historic lighting components or replicas of historic lighting components. If lighting systems in qualified buildings contain some historic lighting components or replicas of historic components, combined with other lighting components, only those historic or historic replica components are exempt. All other lighting systems in qualified historic buildings shall comply with the lighting power density allowances.

vi. Lighting for signs shall comply with Section 170.2(e)7.

vii. Lighting in elevators where the lighting meets the requirements in Section 120.6(f).

viii. Lighting connected to a Life Safety Branch or Critical Branch, as specified in Section 517 of the California Electrical Code.

D. Luminaire classification and power adjustment.

i. Luminaire classification and power shall be determined in accordance with Section 160.5(b)1.

ii. Small Aperture Tunable-White and Dim-to-Warm Luminaires Lighting Power Adjustment. For qualifying small aperture tunable-white and dim-to-warm LED luminaires, the adjusted indoor lighting power of these luminaires shall be calculated by multiplying their maximum rated wattage by 0.75. Qualifying luminaires shall meet all of the following:

a. Small aperture. Qualifying luminaires with a luminaire aperture length longer than 18 inches shall have a luminaire aperture no wider than four inches. Qualifying luminaires with a luminaire aperture length of 18 inches or less shall have a luminaire aperture no wider than 8 inches.

b. Color changing. Qualifying tunable-white luminaires shall be capable of a color change greater than or equal to 2000 Kelvin correlated color temperature (CCT). Qualifying dim-to-warm luminaires shall be capable of color change greater than or equal to 500 Kelvin CCT.

c. Controls. Qualifying luminaires shall be connected to controls that allow color changing of the luminaires.

iii. Tailored Method Display Lighting Mounting Height Lighting Power Adjustment. For wall display luminaires or floor display luminaires meeting the Tailored Method described in Sections 170.2(e)1Ciig and h and where the bottom of luminaires are 10 feet 7 inches and greater above the finished floor, the adjusted indoor lighting power of these luminaires shall be calculated by multiplying their maximum rated wattage and the appropriate mounting height adjustment factor from Table 170.2-O. Luminaire mounting height is the distance from the finished floor to the bottom of the luminaire. General lighting shall not qualify for a mounting height multiplier.

3. Calculation of allowed indoor lighting power: general rules.

A. The allowed indoor lighting power allotment for conditioned areas shall be calculated separately from the allowed lighting power allotment for unconditioned areas. Each allotment is applicable solely to the area to which it applies, and there shall be no trade-offs between conditioned and unconditioned area allotments.

B. The allowed indoor lighting power allotment shall be calculated separately from the allowed outdoor lighting power allotment. Each allotment is applicable solely to the area to which it applies, and there shall be no trade-offs between the separate indoor and outdoor allotments.

C. The allowed indoor lighting power allotment for general lighting shall be calculated as follows:

i. The Area Category Method, as described in Section 170.2(e)1Ci, shall be used either by itself for all common use areas in the building, or when some areas in the building use the Tailored Method described in Section 170.2(e)1Cii. Under the Area Category Method (either by itself or in conjunction with the Tailored Method), as described more fully in Section 170.2(e)1Ci, and subject to the adjustments listed there, the allowed indoor lighting power allotment for general lighting shall be calculated for each area in the building as follows:

a. For conditioned areas, by multiplying the conditioned square feet of the area times the applicable allotment of watts per square foot for the area shown in Table 170.2-M (or Table 170.2-N if the Tailored Method is used for that area).

b. For unconditioned areas, by multiplying the unconditioned square feet of the area times the applicable allotment of watts per square foot for the area shown in Table 170.2-M (or Table 170.2-N if the Tailored Method is used for that area).

The allowed indoor lighting power allotment for general lighting for one area for which the Area Category Method was used may be increased up to the amount that the allowed indoor lighting power allotment for general lighting for another area using the Area Category Method or Tailored Method is decreased, except that such increases and decreases shall not be made between conditioned and unconditioned space.

D. The Tailored Method, as described in Section 170.2(e)1Cii, shall be used either by itself for all areas in the building, or when some areas in the building use the Area Category Method described in Section 170.2(e)1Ci. Under the Tailored Method (either by itself or in conjunction with the Area Category Method) as described more fully in Section 170.2(e)1Cii, and subject to the adjustments listed there, allowed indoor lighting power allotment for general lighting shall be calculated for each area in the building as follows:

i. For conditioned areas, by multiplying the conditioned square feet of the area times the applicable allotment of watts per square foot for the area shown in Table 170.2-N (or Table 170.2-M if the Area Category Method is used for that area);

ii. For unconditioned areas, by multiplying the unconditioned square feet of the area times the applicable allotment of watts per square foot for the area shown in Table 170.2-L (or Table 170.2-M if the Area Category Method is used for that area).

E. The allowed indoor lighting power allotment for general lighting for one area for which the Tailored Method was used may be increased up to the amount that the allowed indoor lighting power for general lighting for another area is decreased, but only if the Tailored Method or Area Category Method was used for the other area, except that such increases and decreases shall not be made between conditioned and unconditioned space.

F. If the Area Category Method is used for an area, the Tailored Method may not be used for that area. If the Tailored Method is used for an area, the Area Category Method may not be used for that area.

4. Calculation of allowed indoor lighting power: specific methodologies. The allowed indoor lighting power for each common use primary function area shall be calculated using only one of the methods in Subsection i, ii or iii below as applicable.

A. Area Category Method. Requirements for using the Area Category Method include all of the following:

i. The Area Category Method shall be used only for primary function areas, as defined in Section 100.1, that are listed in Table 170.2-M. For primary function areas not listed, selection of a reasonably equivalent type shall be permitted.

ii. For purposes of compliance with Section 170.2(e)1Ci, an "area" shall be defined as all contiguous areas that accommodate or are associated with a single primary function area listed in Table 170.2-M.

iii. Where areas are bounded or separated by interior partitions, the floor area occupied by those interior partitions may be included in a primary function area.

iv. The allowed indoor lighting power for each primary function area is the Lighting Power Density value in Table 170.2-M times the square feet of the primary function area. The total allowed indoor lighting power for the building is the sum of all allowed indoor lighting power for all areas in the building.

v. In addition to the allowed indoor lighting power calculated according to Sections 170.2(e)1Cia through f, the building may add additional lighting power allowances for qualifying lighting systems as specified in the Qualifying Lighting Systems column in Table 170.2-M under the following conditions:

a. Only primary function areas having a lighting system as specified in the Qualifying Lighting Systems column in Table 170.2-M and in accordance with the corresponding footnote of the table shall qualify for the additional lighting power allowances; and

b. The additional lighting power allowances shall be used only if the plans clearly identify all applicable task areas and the lighting equipment designed to illuminate these tasks; and

c. Tasks that are performed less than two hours per day or poor quality tasks that can be improved are not eligible for the additional lighting power allowances; and

d. The additional lighting power allowances shall not utilize any type of luminaires that are used for general lighting in the building; and

e. The additional lighting power allowances shall not be used when using the Complete Building Method, or when the Tailored Method is used for any area in the building; and

f. The additional lighting power allowed is the smaller of:

I. the lighting power density listed in the "Allowed Additional Lighting LPD" column in Table 170.2-M, times the square feet of the primary function, or

II. the adjusted indoor lighting power of the applicable lighting; and

B. Tailored Method. Requirements for using the Tailored Method include all of the following:

i. The Tailored Method shall be used only for primary function areas listed in Table 170.2-N as defined in Section 100.1.

ii. Allowed indoor lighting power allotments for general lighting shall be determined according to Section 170.2(e)1Ciif, as applicable.

iii. For compliance with Section 170.2(e)1Cii, an "area" shall be defined as all contiguous areas that accommodate or are associated with a single primary function area listed in Table 170.2-N.

iv. Where areas are bounded or separated by interior partitions, the floor area occupied by those interior partitions may be included in a primary function area.

v. In addition to the allowed indoor lighting power allotments for general lighting calculated according to Section 170.2(e)1Ciif, as applicable, the building may add additional lighting power allowances for wall display lighting, task lighting and decorative/special effects lighting, according to Sections 170.20(e)1Ciig through j.

vi. Determine allowed indoor lighting power allotments for general lighting for primary function areas listed in Table 170.2-N as follows:

a. Use the general illumination level (lux) listed in column 2 of Table 170.2-N to determine the allowed general lighting power density allotments for the area.

b. Determine the room cavity ratio (RCR) for the area. The RCR shall be calculated according to the applicable equation in Table 170.2-P.

c. Find the allowed general lighting power density allotment in Table 170.2-Q that is applicable to the general illuminance level (lux) from column 2 of Table 170.2-N (as described in Item i) and the RCR determined in accordance with Table 170.2-P (as described in Item ii).

d. Determine the square feet of the area in accordance with Sections 170.2(e)1Ciic and d.

e. Multiply the allowed lighting power density allotment, as determined in accordance with Item iii by the square feet of each primary function area, as determined in accordance with Item iv. The product is the allowed indoor lighting power allotment for general lighting for the area.

vii. Determine additional allowed power for wall display lighting according to column 3 of Table 170.2-N for each primary function area as follows:

a. Qualifying wall lighting shall:

I. Be mounted within 10 feet of the wall having the wall display. When track lighting is used for wall display, and where portions of that lighting track are more than 10 feet from the wall and other portions are within 10 feet of the wall, portions of track more than 10 feet from the wall shall not be used for the wall display allowance.

II. Be a lighting system type appropriate for wall lighting. Lighting systems appropriate for wall lighting are lighting track adjacent to the wall, wall-washer luminaires, luminaires behind a wall valance or wall cove, or accent light. (Accent luminaires are adjustable or fixed luminaires with PAR, R, MR or AR, or luminaires providing directional display light.)

b. Additional allowed power for wall display lighting is available only for lighting that illuminates walls having wall displays. The length of display walls shall include the length of the perimeter walls, including but not limited to closable openings and permanent full height interior partitions. Permanent full height interior partitions are those that (I) extend from the

floor to within two feet of the ceiling or are taller than ten feet and (II) are permanently anchored to the floor.

c. For wall display lighting where the bottom of the luminaire is greater than 10 feet 6 inches above the finished floor, the mounting height adjustment factor from Table 170.2-O can be used to adjust the installed luminaire wattage as specified in Section 170.2(e)1Aivc.

d. The allowed power for wall display lighting shall be the smaller of:

I. the "wall display lighting power density" determined in accordance with Table 170.2-N, multiplied by the wall display lengths determined in accordance with Item iii; and

II. The Adjusted Indoor Lighting Power used for the wall display lighting systems.

e. Lighting internal to display cases that are attached to a wall or directly adjacent to a wall are counted as wall display lighting as specified in Section 170.2(e)1Ciig. All other lighting internal to display cases is counted as floor display lighting.

viii. Determine additional allowed power allotment for task lighting according to column 4 of Table 170.2-N for each primary function area as follows:

a. Additional allowed power for task lighting may be used by qualifying task lighting systems. For floor areas qualifying for task lighting power allowances, the additional allowed power shall be used only once for the same floor area, so that the allowance shall not be additive.

b. Qualifying task lighting shall:

I. Be located immediately adjacent to and capable of illuminating the task for which it is installed.

II. Be of a type different from the general lighting system.

III. Be separately switched from the general lighting system.

c. The square footage of task areas shall be determined in accordance with Sections 170.2(e)1ciic and d, except that any floor area designed to not have tasks, such as floor areas designated as a path of egress, shall not be included for the task lighting allowance.

d. The allowed power for task lighting for each applicable area shall be the smaller of:

I. The allowed task lighting power determined in accordance with Section 170.2(e)1ciih multiplied by the floor square footage determined in accordance with Section 170.2(e)1ciihIII; and

II. The adjusted indoor lighting power used for the task lighting systems.

ix. Determine additional allowed power for decorative/special effects lighting for each primary function area as follows:

a. Qualifying decorative/special effects lighting includes luminaires such as chandeliers, sconces, lanterns, neon and cold cathode, light emitting diodes, theatrical projectors, moving lights and light color panels when any of those lights are used in a decorative manner that does not serve as display lighting or general lighting.

b. Additional lighting power for decorative/special effects lighting shall be used only if allowed by column 5 of Table 170.2-N.

c. Additional lighting power for decorative/special effects lighting shall be used only in areas having decorative/special effects lighting. The square footage of the floor area shall be determined in accordance with Sections 170.2(e)1Ciic and d, and it shall not include floor areas not having decorative/special effects lighting.

d. The additional allowed power for decorative/special effects lighting for each applicable area shall be the smaller of:

I. The product of the "allowed decorative/special effects lighting power" determined in accordance with Section 170.2(e)1CiikII, multiplied by the floor square footage determined in accordance with Section 170.2(e)1CiikIII; and

II. The adjusted indoor lighting power of allowed ornamental/special effects lighting.

LIGHTING POWER ADJUSTMENT FACTORS (PAF)

TYPE OF CONTROL	TYPE OF AREA	FACTOR
1. Daylight Continuous Dimming plus OFF Control	Luminaires in skylit daylit zone or primary sidelit daylit zone	0.10
2. Occupant Sensing Controls in Office Spaces larger than 250 square feet	In open plan offices > 250 square feet: One sensor controlling an area that is: No larger than 125 square feet	0.30
	In open plan offices > 250 square feet: One sensor controlling an area that is: From 126 to 250 square feet	0.20
3.Institutional Tuning	Luminaires in non-daylit areas. Luminaires that qualify for other PAFs in this table may also qualify for this tuning PAF.	0.10
	Luminaires in daylit areas. Luminaires that qualify for other PAFs in this table may also qualify for this tuning PAF.	0.05
4. Demand Responsive Control	General lighting luminaires not in the scope of Section 110.12(c). Luminaires that qualify for other PAFs in this table may also qualify for this demand responsive control PAF	0.05
5. Clerestory Fenestration	Luminaires in daylit areas adjacent to the clerestory. Luminaires that qualify for daylight dimming plus OFF control may also qualify for this PAF.	0.05
6. Horizontal Slats	Luminaires in daylit areas adjacent to vertical fenestration with interior or exterior horizontal slats. Luminaires that qualify for daylight dimming plus OFF control may also qualify for this PAF.	0.05
7.Light Shelves	Luminaires in daylit areas adjacent to clerestory fenestration with interior or exterior light shelves. This PAF may be combined with the PAF for clerestory fenestration. Luminaires that qualify for daylight dimming plus OFF control may also qualify for this PAF	0.10

Footnote to TABLE 170.2-L:

a. To qualify for any of the Power Adjustment Factors in this table, the installation shall comply with the applicable requirements in Section 170.2(e)1Aii

b. Only one PAF may be used for each qualifying luminaire unless combined below.

c. Lighting controls that are required for compliance with Part 6 shall not be eligible for a PAF

TABLE 170.2-M AREA CATEGORY METHOD - LIGHTING POWER DENSITY VALUES (WATTS/FT²)

Primary Function Area	Allowed Lighting Power Density for General Lighting (W/ft²)	Additional Lighting Power Qualified Lighting Systems	Additional Lighting Power Additional Allowance (W/ft², unless noted otherwise)
Storage	0.45	-	-
Conference, Multipurpose and Meeting Area	0.75	Display/Decorative	0.30
Copy Room	0.50	-	-
Corridor Area	0.40	Decorative/Display	0.25
Dining Area Bar/Lounge and Fine Dining	0.45	Display/Decorative	0.35
Dining Area Cafeteria/Fast Food	0.45	Display/Decorative	0.25
Dining Area Family and Leisure	0.40	Display/Decorative	0.25
Health Care / Assisted Living Nurse's Station	0.75	Tunable white or dim-to-warm[8]	0.10
Health Care / Assisted Living Physical Therapy Room	0.85	Tunable white or dim-to-warm[8]	0.10
Kitchen/Food Preparation Area	0.95	-	-
Electrical, Mechanical, Telephone Rooms	0.40	Detailed Task Work[1]	0.20
Exercise/Fitness Center and Gymnasium Area	0.50	-	-
Lobby, Main Entry	0.70	Display/Decorative	0.25
Locker Room	0.45	-	-
Lounge, Breakroom, or Waiting Area	0.55	Display/Decorative	0.25
Concourse and Atria Area	0.60	Display/Decorative	0.25

TABLE 170.2-M AREA CATEGORY METHOD - LIGHTING POWER DENSITY VALUES (WATTS/FT²) (Continue)

Primary Function Area		**Allowed Lighting Power Density for General Lighting (W/ft²)**	**Additional Lighting Power Qualified Lighting Systems**	**Additional Lighting Power Additional Allowance (W/ft², unless noted otherwise)**
Office Area	> 250 square feet	0.60	Decorative/Display and Portable lighting for office areas[5]	0.20
Office Area	≤ 250 square feet	0.65	Decorative/Display and Portable lighting for office areas[5]	0.20
Parking Garage Area	Parking Zone and Ramps	0.10	First ATM or Ticket Machine	100 W
Parking Garage Area	Parking Zone and Ramps	0.10	Additional ATM or Ticket machine	50 W each
Parking Garage Area	Daylight Adaptation Zones[3]	1.00	-	-
Laundry Area		0.45	-	-
Restrooms		0.65	Decorative/ Display	0.35
Stairwell		0.60	Decorative/ Display	0.35
All other		0.40	-	-
Aging Eye/Low-vision[6]	Lobby, Main Entry	0.85	Display/Decorative	0.30
Aging Eye/Low-vision[6]	Lobby, Main Entry	0.85	Transition Lighting OFF at night[7]	0.95
Aging Eye/Low-vision[6]	Stairwell	0.80	Display/Decorative	0.30
Aging Eye/Low-vision[6]	Corridor Area	0.70	Display/Decorative	0.30
Aging Eye/Low-vision[6]	Lounge/Waiting Area	0.80	Display/Decorative	0.30
Aging Eye/Low-vision[6]	Multipurpose Room	0.85	Display/Decorative	0.30
Aging Eye/Low-vision[6]	Dining	0.80	Display/Decorative	0.30
Aging Eye/Low-vision[6]	Restroom	1.00	Display/Decorative	0.20

Footnotes for this table are listed below.

1. Detailed task work – Lighting provides high level of visual acuity required for activities with close attention to small elements and/or extreme close up work.

2. RESERVED

3. Daylight Adaptation Zones shall be no longer than 66 feet from the entrance to the parking garage.

4. RESERVED

5. Portable lighting in office areas includes under shelf or furniture-mounted supplemental task lighting qualifies when controlled by a time clock or an occupancy sensor.

6. Aging Eye/Low-vision areas can be documented as being designed to comply with the light levels in ANSI/IES RP-28 and are or will be licensed by local or state authorities for either senior long-term care, adult day care, senior support, and/or people with special visual needs.

7. Transition lighting OFF at night. Lighting power controlled by astronomical time clock or other control to shut off lighting at night. Additional LPD only applies to area within 30 feet of an exit. Not applicable to lighting in daylit zones.

8. Tunable white luminaires capable of color change greater than or equal to 2000K CCT, or dim-to-warm luminaires capable of color change greater than or equal to 500K CCT, connected to controls that allows color changing of the luminaires.

TABLE 170.2-N TAILORED METHOD LIGHTING POWER ALLOWANCES

1	2	3		5
Primary Function Area	**General Illumination Level (Lux)**	**Wall Lighting Power Density (W/ft)**	**Task Lighting Power Density (W/ft)**	**Allowed Decorative/ Special Effect Lighting Power Density (W/ft²)**
Conference, Multipurpose, and Meeting Center Areas	300	2.00	0.25	0.35
Dining Areas	200	1.25	0.25	0.35
Lobby, Main Entry	200	3.50	0.25	0.35

TABLE 170.2-O TAILORED WALL AND FLOOR DISPLAY MOUNTING HEIGHT ADJUSTMENT FACTORSFACTORS

Height in feet above finished floor and bottom of luminaire(s)	Wall Display Mounting Height Adjustment Factor
< 10′-7″	1.00
10′-7″ to 14′-0″	0.85
>14′-0″ to 18′-0″	0.75
> 18′-0″	0.70

Table 170.2-P ROOM CAVITY RATIO (RCR) EQUATIONS

Determine the Room Cavity Ratio for Table 170.2-Q using one of the following equations.
Room cavity ratio for rectangular rooms $$RCR = \frac{5 \times H \times (L + W)}{L \times W}$$
Room cavity ratio for irregular-shaped rooms $$RCR = \frac{2.5 \times H \times P}{A}$$
Where: L =Length of room; W = Width of room; H =Vertical distance from the work plane to the centerline of the lighting fixture; P = Perimeter of room, and A = Area of room

TABLE 170.2-Q TAILORED METHOD GENERAL LIGHTING POWER ALLOWED – BY ILLUMINANCE *AND ROOM CAVITY RATIO*

General Lighting Power Density (W/ft²) for the following RCR values[b]

General Illuminance Level (lux)[a]	RCR ≤ 2.0	RCR > 2.0 and ≤ 3.5	RCR > 3.5 and ≤ 7.0	RCR > 7.0
150	0.35	0.40	0.50	0.65
200	0.40	0.50	0.65	0.85
300	0.55	0.70	0.85	1.20
400	0.65	0.80	1.05	1.25
500	0.80	0.90	1.25	1.55
600	0.90	1.05	1.40	2.00

Footnotes to TABLE 170.2-Q

[a] Illuminance values from Column 2 of TABLE 170.2-N.

[b] RCR values are calculated using applicable equations in TABLE 170.2-P.

5. **RESERVED.**

6. **Outdoor lighting.**

   A. A multifamily or mixed occupancy outdoor lighting installation complies with this section if it meets the requirements in Subsections 170.2(e)6B and C, and the actual outdoor lighting power installed is no greater than the allowed outdoor lighting power calculated under Subsection 170.2(e)6D. The allowed outdoor lighting shall be calculated according to outdoor lighting zone in Title 24, Part 1, Section 10-114.

   Exceptions to Section 170.2(e)6A: When more than 50 percent of the light from a luminaire falls within one or more of the following applications, the lighting power for that luminaire shall be exempt from Section 170.2(e)6:

   i. Temporary outdoor lighting.

   ii. Lighting required and regulated by the Federal Aviation Administration and the Coast Guard.

   iii. Lighting for public streets, roadways, highways and traffic signage lighting, including lighting for driveway entrances occurring in the public right-of-way owned or maintained by a local municipality or utility.

   iv. Lighting for sports and athletic fields, and children's playgrounds.

   v. Reserved.

   vi. Lighting of public monuments.

   vii. Lighting of signs complying with the requirements of Sections 160.5(d) and 170.2(e)7.

   viii. Lighting of stairs, wheelchair elevator lifts for American with Disabilities Act (ADA) compliance, and ramps that are other than parking garage ramps.

   ix. Landscape lighting.

   x. Reserved.

   xi. Lighting for outdoor theatrical and other outdoor live performances, provided that these lighting systems are additions to area lighting systems and are controlled by a multiscene or theatrical cross-fade control station accessible only to authorized operators.

   xii. Outdoor lighting systems for qualified historic buildings, as defined in the California Historic Building Code (Title 24, Part 8), if they consist solely of historic lighting components or replicas of historic lighting components. If lighting systems for qualified historic buildings contain some historic lighting components or replicas of historic components, combined with other lighting components, only those historic or historic replica components are exempt. All other outdoor lighting systems for qualified historic buildings shall comply with Section 170.2(e)6.

B. Outdoor lighting power trade-offs. Outdoor lighting power trade-offs shall be determined as follows:

   i. Allowed lighting power determined according to Section 170.2(e)6Di for general hardscape lighting allowance may be traded to specific applications in Section 170.2(e)6Dii, provided the hardscape area from which the lighting power is traded continues to be illuminated in accordance with Section 170.2(e)6Dia.

   ii. Allowed lighting power determined according to Section 170.2(e)2Dii for additional lighting power allowances for specific applications shall not be traded between specific applications, or to hardscape lighting in Section 170.2(e)6Di.

   iii. Trading off lighting power allowances between outdoor and indoor areas shall not be permitted.

C. Calculation of actual lighting power. The wattage of outdoor luminaires shall be determined in accordance with Section 160.5(b)1.

D. Calculation of allowed lighting power. The allowed lighting power shall be the combined total of the sum of the general hardscape lighting allowance determined in accordance with Section 170.2(e)2Di, and the sum of the additional lighting power allowance for specific applications determined in accordance with Section 170.2(e)6Dii.

i. General hardscape lighting allowance. Determine the general hardscape lighting power allowances as follows:

a. The general hardscape area of a site shall include parking lot(s), roadway(s), driveway(s), sidewalk(s), walkway(s), bikeway(s), plaza(s), bridge(s), tunnel(s) and other improved area(s) that are illuminated. Public roadway(s) that are illuminated by a lighting system owned or maintained by the local municipality or utility shall not be included in the area calculations. In plan view of the site, determine the illuminated hardscape area, which is defined as any hardscape area that is within a square pattern around each luminaire or pole that is ten times the luminaire mounting height with the luminaire in the middle of the pattern, less any areas that are within a building, beyond the hardscape area, beyond property lines or obstructed by a structure. The illuminated hardscape area shall include portions of planters and landscaped areas that are within the lighting application and are less than or equal to 10 feet wide in the short dimensions and are enclosed by hardscape or other improvement on at least three sides. Multiply the illuminated hardscape area by the Area Wattage Allowance (AWA) from Table 170.2-R for the appropriate lighting zone.

b. Determine the Initial Wattage Allowance (IWA) for general hardscape lighting from Table 170.2-R for the appropriate lighting zone. The hardscape area shall be permitted one IWA per site.

c. The general hardscape lighting allowance shall be the sum of the allowed watts determined from a and b above.

ii. Additional lighting power allowance for specific applications. Additional lighting power for specific applications shall be the smaller of the additional lighting allowances for specific applications determined in accordance with Table **170.2-S for the appropriate lighting zone, or the actual installed lighting power meeting the requirements for the allowance.**

TABLE 170.2-R GENERAL HARDSCAPE MULTIFAMILY LIGHTING POWER ALLOWANCE

Type of Power Allowance	Lighting Zone 0[2]	Lighting Zone 1[2]	Lighting Zone 2[2]	Lighting Zone 3[2]	Lighting Zone 4[2]
Area Wattage Allowance (AWA)	No allowance[1]	0.026 W/ft²	0.030 W/ft²	0.038 W/ft²	0.055 W/ft²
Initial Wattage Allowance (IWA)	No allowance[1]	300 W	350 W	400 W	450 W

Footnotes to TABLE 170.2-R

1 Continuous lighting is explicitly prohibited in Lighting Zone 0. A single luminaire of 15 Watts or less may be installed at an entrance to a parking area, trail head, fee payment kiosk, outhouse, or toilet facility, as required to provide safe navigation of the site infrastructure. Luminaires installed shall meet the maximum zonal lumen limits as specified in Section 160.5(c)1.

2 Narrow band spectrum light sources with a dominant peak wavelength greater than 580 nm – as mandated by local, state, or federal agencies to minimize the impact on local, active professional astronomy or nocturnal habitat of specific local fauna – shall be allowed a 2.0 lighting power allowance multiplier.

TABLE 170.2-S ADDITIONAL MULTIFAMILY LIGHTING POWER ALLOWANCE FOR SPECIFIC APPLICATIONS
All area and distance measurements in plan view unless otherwise noted.

Lighting Application	Lighting Zone 0	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	Lighting Zone 4
WATTAGE ALLOWANCE PER APPLICATION. Use all that apply as appropriate.					
Building Entrances or Exits. Allowance per door. Luminaires qualifying for this allowance shall be within 20 feet of the door.	Not applicable	9 watts	15 watts	19 watts	21 watts
Primary Entrances to Senior Care Facilities Allowance per primary entrance(s) only. Primary entrances shall provide access for the general public and shall not be used exclusively for staff or service personnel. This allowance shall be in addition to the building entrance or exit allowance above. Luminaires qualifying for this allowance shall be within 100 feet of the primary entrance.	Not applicable	20 watts	40 watts	57 watts	60 watts
ATM Machine Lighting. Allowance per ATM machine. Luminaires qualifying for this allowance shall be within 50 feet of the dispenser.	Not applicable	100 watts for first ATM machine, 35 watts for each additional ATM machine.			
WATTAGE ALLOWANCE PER HARDSCAPE AREA (W/ft²). May be used for any illuminated hardscape area on the site.					
Hardscape Ornamental Lighting. Allowance for the total site illuminated hardscape area. Luminaires qualifying for this allowance shall be rated for 50 watts or less as determined in accordance with Section 160.5(b)1 and shall be post-top luminaires, lanterns, pendant luminaires, or chandeliers.	Not applicable	No Allowance	0.007 W/ft²	0.013 W/ft²	0.019 W/ft²
WATTAGE ALLOWANCE PER SPECIFIC AREA (W/ft²). Use as appropriate provided that none of the following specific applications shall be used for the same area.					
Building Facades. Only areas of building façade that are illuminated shall qualify for this allowance. Luminaires qualifying for this allowance shall be aimed at the façade and shall be capable of illuminating it without obstruction or interference by permanent building features or other objects. This allowance calculation shall not include portions of the building facades within 20 feet of residence bedroom windows.	Not applicable	No Allowance	0.100 W/ft²	0.170 W/ft²	0.225 W/ft²
Canopies and Tunnels. Allowance for the total area within the drip line of the canopy or inside the tunnel. Luminaires qualifying for this allowance shall be located under the canopy or tunnel.	Not applicable	0.057 W/ft²	0.137 W/ft²	0.270 W/ft²	0.370 W/ft²
Student Pick-up/Drop-off zone. Allowance for the area of the student pick-up/drop-off zone, with or without canopy, for preschool through 12th grade school campuses. A student pick-up/drop off zone is a curbside, controlled traffic area on a school campus where students are picked-up and dropped off from vehicles. The allowed area shall be the smaller of the actual width or 25 feet, times the smaller of the actual length or 250 feet. Qualifying luminaires shall be within 2 mounting heights of the student pick-up/drop-off zone.	Not applicable	No Allowance	0.056 W/ft²	0.200 W/ft²	No Allowance

	Outdoor Dining. Allowance for the total illuminated hardscape of outdoor dining. Outdoor dining areas are hardscape areas used to serve and consume food and beverages. Qualifying luminaires shall be within 2 mounting heights of the hardscape area of outdoor dining.	Not applicable	0.004 W/ft²	0.030 W/ft²	0.050 W/ft²	0.075 W/ft²
	Special Security Lighting for Retail Parking and Pedestrian Hardscape. This additional allowance is for illuminated retail parking and pedestrian hardscape identified as having special security needs. This allowance shall be in addition to the building entrance or exit allowance.	Not applicable	0.004 W/ft²	0.005 W/ft²	0.010 W/ft²	No Allowance
	Security Camera. This additional allowance is for the illuminated general hardscape area. This allowance shall apply when a security camera is installed within 2 mounting heights of the general hardscape area and mounted more than 10 feet away from a building.	Not applicable	No Allowance	0.018 W/ft²	0.018 W/ft²	0.018 W/ft²

7. **Requirements for signs**. Section 170.2(e)7 applies to all internally illuminated and externally illuminated signs, unfiltered light emitting diodes (LEDs), and unfiltered neon, both indoor and outdoor. Each sign shall comply with either Subsection A or B, as applicable.

   A. **Maximum allowed lighting power.**

      i. For internally illuminated signs, the maximum allowed lighting power shall not exceed the product of the illuminated sign area and 12 watts per square foot. For double-faced signs, only the area of a single face shall be used to determine the allowed lighting power.

      ii. For externally illuminated signs, the maximum allowed lighting power shall not exceed the product of the illuminated sign area and 2.3 watts per square foot. Only areas of an externally lighted sign that are illuminated without obstruction or interference, by one or more luminaires, shall be used.

      iii. Lighting for unfiltered light emitting diodes (LEDs) and unfiltered neon shall comply with Section 170.2(e)7B.

   B. **Alternate lighting sources.** The sign shall be equipped with one or more of the following light sources:

      i. High pressure sodium lamps; or

      ii. Metal halide lamps that are:

         a. Pulse start or ceramic served by a ballast that has a minimum efficiency of 88 percent or greater; or

         b. Pulse start that are 320 watts or smaller, are not 250 watt or 175 watt lamps, and are served by a ballast that has a minimum efficiency of 80 percent.

         Ballast efficiency is the reference lamp power divided by the ballast input power when tested according to ANSI C82.6-2015.

      iii. Neon or cold cathode lamps with transformer or power supply efficiency greater than or equal to the following:

         a. A minimum efficiency of 75 percent when the transformer or power supply rated output current is less than 50 mA; or

         b. A minimum efficiency of 68 percent when the transformer or power supply rated output current is 50 mA or greater.

      The ratio of the output wattage to the input wattage is at 100 percent tubing load.

      iv. Fluorescent lighting systems meeting one of the following requirements:

         a. Use only lamps with a minimum color rendering index (CRI) of 80; or

b. Use only electronic ballasts with a fundamental output frequency not less than 20 kHz.

v. Light emitting diodes (LEDs) with a power supply having an efficiency of 80 percent or greater; or

Exception to Section 170.2(e)7Bv: Single voltage external power supplies that are designed to convert 120 volt AC input into lower voltage DC or AC output, and have a nameplate output power less than or equal to 250 watts, shall comply with the applicable requirements of the Appliance Efficiency Regulations (Title 20).

vi. Compact fluorescent lamps that do not contain a medium screw base socket (E24/E26).

Exception 1 to Section 170.2(e)7: Unfiltered incandescent lamps that are not part of an electronic message center (EMC), an internally illuminated sign or an externally illuminated sign.

Exception 2 to Section 170.2(e)7: Exit signs. Exit signs shall meet the requirements of the Appliance Efficiency Regulations.

(f) **Photovoltaic requirements—three habitable stories or fewer**. All multifamily buildings up to three habitable stories shall have a newly installed photovoltaic (PV) system or newly installed PV modules meeting the minimum qualification requirements specified in Joint Appendix JA11. The annual electrical output of the PV system shall be no less than the smaller of a PV system size determined using Equation 170.2-C, or the maximum PV system size that can be installed on the building's **solar access roof area** (SARA).

A. SARA includes the area of the building's roof space capable of structurally supporting a PV system, and the area of all roof space on covered parking areas, carports, and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2, Section 1511.2.

B. SARA does NOT include:

i. Any roof area that has less than 70 percent annual solar access. Annual solar access is determined by dividing the total annual solar insolation, accounting for shading obstructions, by the total annual solar insolation if the same areas were unshaded by obstructions. For steep-sloped roofs, only shading from existing permanent natural or manmade obstructions that are external to the dwelling, including but not limited to trees, hills and adjacent structures, shall be considered for annual solar access calculations. For low slope roofs, all obstructions including those that are external to the dwelling unit, and obstructions that are part of the building design and elevation features, shall be considered for the annual solar access calculations.

ii. Occupied roof areas as specified by CBC Section 503.1.4.

iii. Roof area that is otherwise not available due to compliance with other building code requirements if confirmed by the Executive Director.

EQUATION 170.2-C ANNUAL PHOTOVOLTAIC ELECTRICAL OUTPUT

$$kW_{PV} = (CFA \times A)/1000 + (N_{DU} \times B)$$

where:

kW_{PV} = kW_{dc} size of the PV system.

CFA = Conditioned floor area.

N_{DU} = Number of dwelling units.

A = CFA adjustment factor from Table 170.2-T.

B = Dwelling unit adjustment factor from Table 170.2-T.

Exception 1 to Section 170.2(f): For steep slope roofs, SARA shall not consider roof areas with a northerly azimuth that lies between 300 degrees and 90 degrees from true north. No PV system is required if the SARA is less than 80 contiguous square feet.

Exception 2 to Section 170.2(f): No PV system is required when the minimum PV system size specified by Section 170.2(f) is less than 1.8 kW_{dc}.

Exception 3 to Section 170.2(f): Buildings with enforcement-authority-approved roof designs, where the enforcement authority determines it is not possible for the PV system, including panels, modules and components and supports and attachments to the roof structure, to meet the requirements of American Society of Civil Engineers (ASCE) Standard 7-16, Chapter 7, Snow Loads.

Exception 4 to Section 170.2(f): For buildings that are approved by the local planning department prior to January 1, 2020 with mandatory conditions of approval:

a. Shading from roof designs and configurations for steep slope roofs shall be considered for the annual solar access calculations; and

b. Roof areas that are not allowed to have PVs by the mandatory conditions of approval shall not be considered in determining the SARA.

Exception 5 to Section 170.2(f): PV system sizes determined using Equation 170.2-C may be reduced by 25 percent if installed in conjunction with a battery storage system. The battery storage system shall meet the qualification requirements specified in Joint Appendix JA12 and have a minimum usable capacity of 7.5 kWh.

TABLE *170.2-TCFA* AND DWELLING UNIT ADJUSTMENT FACTORS

CLIMATE ZONE	A—CFA	B—DWELLING UNITS
1	0.793	1.27
2	0.621	1.22
3	0.628	1.12
4	0.586	1.21
5	0.585	1.06
6	0.594	1.23
7	0.572	1.15
8	0.586	1.37
9	0.613	1.36
10	0.627	1.41
11	0.836	1.44
12	0.613	1.40
13	0.894	1.51
14	0.741	1.26
15	1.56	1.47
16	0.59	1.22

(g) **Photovoltaic requirements—more than three habitable stories.** All newly constructed building types specified in Table 170.2-U, or mixed occupancy buildings where one or more of these building types constitute at least 80 percent of the floor area of the building, shall have a newly installed photovoltaic (PV) system meeting the minimum qualification requirements of Reference Joint Appendix JA11. The PV size in kW_{dc} shall be not less than the smaller of the PV system size determined by Equation 170.2-D, or the total of all available Solar Access Roof Areas (SARA) multiplied by 14 W/ft^2.

1. SARA include the area of the building's roof space capable of structurally supporting a PV system, and the area of all roof space on covered parking areas, carports and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2, Section 1511.2.

2. SARA does not include:

   A. Any area that has less than 70 percent annual solar access. Annual solar access is determined by dividing the total annual solar insolation (accounting for shading obstructions) by the total annual solar insolation if the same areas were unshaded by those obstructions. For all roofs, all obstructions

including those that are external to the building, and obstructions that are part of the building design and elevation features, may be considered for the annual solar access calculations.

B. Occupied roofs as specified by CBC Section 503.1.4.

C. Roof space that is otherwise not available due to compliance with other building code requirements if confirmed by the Executive Director.

EQUATION 170.2-D PHOTOVOLTAIC DIRECT CURRENT SIZE

$kW_{PVdc} = (CFA \times A)/1000$

where:

kW_{PVdc} = Size of the PV system in kW.

CFA = Conditioned floor area in square feet.

A = PV capacity factor specified in Table 170.2-U for the building type.

Where the building includes more than one of the space types listed in Table 170.2-U, the total PV system capacity for the building shall be determined by applying Equation 170.2-D to each of the listed space types and summing the capacities determined for each.

Exception 1 to Section 170.2(g): No PV system is required where the total of all available SARA is less than 3 percent of the conditioned floor area.

Exception 2 to Section 170.2(g): No PV system is required where the required PV system size is less than 4 kW_{dc}.

Exception 3 to Section 170.2(g): No PV system is required if the SARA contains less than 80 contiguous square feet.

Exception 4 to Section 170.2(g): Buildings with enforcement-authority-approved roof designs, where the enforcement authority determines it is not possible for the PV system, including panels, modules, components, supports and attachments to the roof structure, to meet ASCE 7-16, Chapter 7, Snow Loads.

Exception 5 to Section 170.2(g): Multi-tenant buildings in areas where a load serving entity does not provide either a Virtual Net Metering (VNEM) or community solar program.

Table 170.2-U – PV Capacity Factors

Building Type	**Factor A – Minimum PV Capacity (W/ft² of conditioned floor area)** **Climate Zones** **1, 3, 5, 16**	***Factor A – Minimum PV Capacity (W/ft² of conditioned floor area)*** **Climate Zones** **2, 4, 6-14**	**Factor A – Minimum PV Capacity (W/ft² of conditioned floor area)** **Climate Zone** **15**
Grocery	2.62	2.91	3.53
High-Rise Multifamily	1.82	2.21	2.77
Office, Financial Institutions, Unleased Tenant Space	2.59	3.13	3.80
Retail	2.62	2.91	3.53
School	1.27	1.63	2.46
Warehouse	0.39	0.44	0.58
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0.39	0.44	0.58

(h) **Battery storage system requirements—more than three habitable stories.** All buildings that are required by Section 170.2(g) to have a PV system shall also have a battery storage system meeting the minimum qualification requirements of Reference Joint Appendix JA12. The rated energy capacity and the rated power capacity shall be not less than the values determined by Equation 170.2-E and Equation 170.2-F. Where the building includes more than one of the space types listed in Table 170.2-V, the total battery system capacity for the building shall be determined by applying Equations 170.2-E and 170.2-F to each of the listed space types and summing the capacities determined for each space type and equation.

EQUATION 170.2-E BATTERY STORAGE RATED ENERGY CAPACITY

$kWh_{batt} = kW_{PVdc} \times B / D^{0.5}$

WHERE:

kWh_{batt} = Rated usable energy capacity of the battery storage system in kWh.

kW_{PVdc} = PV system capacity required by Section 170.2(g) in kWdc.

B = Battery energy capacity factor specified in Table 170.2-V for the building type.

D = Rated single charge-discharge cycle AC to AC (round-trip) efficiency of the battery storage system.

EQUATION 170.2-F BATTERY STORAGE RATED POWER CAPACITY

$kW_{batt} = kW_{PVdc} \times C$

WHERE:

kW_{batt} = Power capacity of the battery storage system in kWdc

kW_{PVdc} = PV system capacity required by Section 170.2(g) in kWdc.

C = Battery power capacity factor specified in Table 170.2-V for the building type.

Exception 1 to Section 170.2(h): No battery storage system is required if the installed PV system size is less than 15 percent of the size determined by Equation 170.2-D.

Exception 2 to Section 170.2(h): No battery storage system is required in buildings with battery storage system requirements with less than 10 kWh rated capacity.

TABLE *170.2-V – Battery Storage Capacity Factors*

	Factor B – Energy Capacity	**Factor C – Power Capacity**
Storage-to-PV Ratio	**Wh/W**	**W/W**
Grocery	1.03	0.26
High-Rise Multifamily	1.03	0.26
Office, Financial Institutions, Unleased Tenant Space	1.68	0.42
Retail	1.03	0.26
School	1.87	0.46
Warehouse	0.93	0.23
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0.93	0.23

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code.

SUBCHAPTER 12
MULTIFAMILY BUILDINGS - ADDITIONS, ALTERATIONS, AND REPAIRS TO EXISTING MULTIFAMILY BUILDINGS

SECTION 180.0 – GENERAL

Additions, alterations and repairs to existing attached dwelling units and common use areas in multifamily buildings, existing outdoor lighting for these occupancies, and internally and externally illuminated signs shall meet the requirements specified in Sections 100.0 through 110.10, 160.1, and 160.3 through 170.2 that are applicable to the building project, and either the performance compliance approach (energy budgets) in Section 180.1(b) (for additions) or 180.2(c) (for alterations), or the prescriptive compliance approach in Section 180.1(a) (for additions) or 180.2(b) (for alterations), for the climate zone in which the building is located. Climate zones are shown in Figure 100.1-A.

Covered process requirements for additions, alterations and repairs to existing multifamily buildings are specified in Section 141.1.

Nonresidential occupancies in mixed occupancy buildings shall comply with nonresidential requirements in Sections 120.0 through 141.1.

NOTE: For alterations that change the occupancy classification of the building, the requirements specified in Section 180.2 apply to the occupancy after the alterations.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

SECTION 180.1 – ADDITIONS

Additions to existing multifamily buildings shall meet the applicable requirements of Sections 110.0 through 110.9; Sections 160.0, 160.1, and 160.2(c) and (d); Sections 160.3 through 160.7; and either Section 180.1(a) or 180.1(b).

Exception 2 to Section 180.1: Additions of 300 square feet or less are exempt from the roofing product requirements of Section 170.2(a)1A.

Exception 3 to Section 180.1: Existing inaccessible piping shall not require insulation as defined under Section **160.4(f)2**Aiii.

Exception 4 to Section 180.1: Space-conditioning system. When heating or cooling will be extended to an addition from the existing system(s), the existing heating and cooling equipment need not comply with Part 6. The heating system capacity must be adequate to meet the minimum requirements of CBC Section 1204.1.

Exception 5 to Section 180.1: Space-conditioning system ducts. When any length of duct is extended from an existing duct system to serve the addition, the existing duct system and the extended duct shall meet the applicable requirements specified in Sections 180.2(b)2Ai and 180.2(b)2Aii.

Exception 6 to Section 180.1: Photovoltaic and battery storage systems, as specified in Sections 170.2(f) through 170.2(h), are not required for additions.

Exception 7 to Section 180.1: Dwelling unit space heating system. New or replacement space heating systems serving an addition may be a heat pump or gas heating system.

(a) **Prescriptive approach.** The envelope and lighting of the addition; any newly installed space-conditioning or ventilation system, electrical power distribution system, or water-heating system; any addition to an outdoor lighting system; and any new sign installed in conjunction with an indoor or outdoor addition shall meet the applicable requirements of Sections 110.0 through 110.12**;** 160.0, 160.1, and 160.2(c) and (d); and 160.3 through 170.2.

1. **Envelope.**

   A. Additions that are greater than 700 square feet shall meet the requirements of Section 170.2(a), with the following modifications:

      i. Framed walls extension. Extensions of existing wood-framed walls may retain the dimensions of the existing walls and shall install cavity insulation of R-15 in a 2x4 framing and R-21 in a 2x6 framing.

      ii. The maximum allowed fenestration area shall be the greater of 175 square feet or 20 percent of the addition floor area.

      iii. When existing siding of a wood-framed wall is not being removed or replaced, cavity insulation of R-15 in a 2x4 framing and R-21 in a 2x6 framing shall be installed and continuous insulation is not required.

      iv. Additions that consist of the conversion of existing spaces from unconditioned to conditioned space shall not be required to perform the air sealing part of QII when the existing air barrier is not being removed or replaced.

   B. Additions that are 700 square feet or less shall meet the requirements of Section 170.2(a), with the following modifications.

      i. Roof and ceiling insulation in a ventilated attic shall meet one of the following requirements:
         a. In Climate Zones 1, 2, 4, and 8 through 16, achieve an overall assembly U-factor not exceeding 0.025. In wood framed assemblies, compliance with U-factors may be demonstrated by installing insulation with an R-value of R-38 or greater.

b. In Climate Zones 3 and 5 through 7, achieve an overall assembly U-factor not exceeding 0.031. In wood framed assemblies, compliance with U-factors may be demonstrated by installing insulation with an R-value of R-30 or greater.

ii. Radiant barrier. For buildings three habitable stories or less, radiant barriers shall be installed in attics with exposed attic deck undersides in Climate Zones 2–15.

iii. Extensions of existing wood-framed walls may retain the dimensions of the existing walls and shall install cavity insulation of R-15 in a 2x4 framing and R-21 in a 2x6 framing; and

iv. Fenestration products must meet the U-factor, RSGHC and VT requirements of Table 180.2-B.

v. Quality Insulation Installation (QII) requirements of Section 170.2(a)6 do not apply.

Exception to Section 180.1(a)1B: Insulation in an enclosed rafter ceiling shall meet the requirements of Section 160.1(a).

Exception to Section 180.1(a)1: Additions that increase the area of the roof by 2,000 square feet or less are exempt from the solar ready requirements of Section 160.8.

2. **Mechanical ventilation for indoor air quality.** Additions to existing buildings shall comply with Section 160.2 subject to the requirements specified in Subsections A and B below. When HERS field verification and diagnostic testing are required by Section 180.1(a)2, buildings with three habitable stories or less shall use the applicable procedures in the Residential Appendices, and buildings with four or more habitable stories shall use the applicable procedures in Nonresidential Appendices NA1 and NA2.

A. **Whole-dwelling unit mechanical ventilation**.

i. Dwelling units that meet the conditions in Subsection a or b below shall not be required to comply with the whole-dwelling unit ventilation airflow specified in Section 160.2(b)2Aiv or 160.2(b)2Av.

a. Additions to an existing dwelling unit that increase the conditioned floor area of the existing dwelling unit by less than or equal to 1000 square feet.

b. Junior Accessory Dwelling Units (JADU) that are additions to an existing building.

ii. Additions to an existing dwelling unit that increase conditioned floor area by more than 1,000 square feet shall have mechanical ventilation airflow in accordance with Section 160.2(b)2Aiv or 160.2(b)2Av, as applicable. The mechanical ventilation airflow rate shall be based on the conditioned floor area of the entire dwelling unit comprising the existing dwelling unit conditioned floor area plus the addition conditioned floor area.

iii. New dwelling units that are additions to an existing building shall have mechanical ventilation airflow provided in accordance with Section 160.2(b)2Aiv or 160.2(b)2Av as applicable. The mechanical ventilation airflow rate shall be based on the conditioned floor area of the new dwelling unit.

B. **Local mechanical exhaust**. Additions to existing buildings shall comply with all applicable requirements specified in Sections 160.2(b)2Avi and 160.2(b)2B.

3. **Water heater.** When additional water-heating equipment is installed to serve a dwelling unit as part of the addition, one of the following types of water heaters shall be installed:

A. A water-heating system that meets the requirements of Section 170.2(d); or

B. A water-heating system determined by the Executive Director to use no more energy than the one specified in Item A above.

(b) **Performance approach.** Performance calculations shall meet the requirements of **Sections** 170.0 through 170.2(a), pursuant to the applicable requirements in Items 1, 2 and 3 below.

1. **For additions alone.** The addition complies if the addition alone meets the energy budgets as specified in Section 170.1.

2. **Existing plus alteration plus addition.** The standard design for existing plus alteration plus addition energy use is the combination of the existing building's unaltered components to remain; existing building altered components that are the more efficient, in TDV energy, of either the existing conditions or the requirements of Section 180.2(c); plus the proposed addition's energy use meeting the requirements of Section 180.1(a). The proposed design energy use is the combination of the existing building's unaltered components to remain and the altered components' energy features, plus the proposed energy features of the addition.

   Exception to Section 180.1(b)2: Existing structures with a minimum R-11 insulation in framed walls showing compliance with Section 180.1(b) are exempt from showing compliance with Section 160.1(b).

3. **Mechanical ventilation for indoor air quality**. Additions to existing buildings shall comply with Section 160.2 subject to the requirements specified in Subsections A and B below. When HERS field verification and diagnostic testing are required by Section 180.1(b)3, buildings with three habitable stories or less shall use the applicable procedures in the Residential Appendices, and buildings with four or more habitable stories shall use the applicable procedures in Nonresidential Appendices NA1 and NA2.

   A. **Whole-dwelling unit mechanical ventilation**.

      i. Dwelling units that meet the conditions in Subsection a or b below shall not be required to comply with the whole-dwelling unit ventilation airflow specified in Section 160.2(b)2Aiv or 160.2(b)2Av.

         a. Additions to an existing dwelling unit that increase the conditioned floor area of the existing dwelling unit by less than or equal to 1000 square feet.

         b. Junior Accessory Dwelling Units (JADU) that are additions to an existing building.

      ii. Additions to an existing dwelling unit that increase the conditioned floor area of the existing dwelling unit by more than 1,000 square feet shall have mechanical ventilation airflow in accordance with Section 160.2(b)2Aiv or 160.2(b)2Av as applicable. The mechanical ventilation airflow rate shall be based on the conditioned floor area of the entire dwelling unit comprised of the existing dwelling unit conditioned floor area plus the addition conditioned floor area.

      iii. New dwelling units that are additions to an existing building shall have mechanical ventilation airflow provided in accordance with Section 160.2(b)2Aiv or 160.2(b)2Av as applicable. The mechanical ventilation airflow rate shall be based on the conditioned floor area of the new dwelling unit.

   B. **Local Mechanical Exhaust**. Additions to existing buildings shall comply with all applicable requirements specified in 160.2(b)2Avi and 160.2(b)2B.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 180.2 – ALTERATIONS

Alterations to components of existing multifamily buildings, including alterations made in conjunction with a change in building occupancy to a multifamily occupancy, shall meet Item (a), and either Item (b) or (c) below:

Exception 1 to Section 180.2: When heating, cooling or service water heating for an alteration is provided by expanding existing systems, the existing systems and equipment need not comply with Sections 110.0 through 110.10; Sections 160.0 through 160.7; and Section 170.2(c) or 170.2(d).

Exception 2 to Section 180.2: When existing heating, cooling or service water-heating systems or components are moved within a building, the existing systems or components need not comply with Sections 110.0 through 110.10; Sections 160.0 through 160.7; and Section 170.2(c) or 170.2(d).

Exception 3 to Section 180.2: Where an existing system with electric reheat is expanded when adding variable air volume (VAV) boxes to serve an alteration, total electric reheat capacity may be expanded not to exceed 20 percent of the existing installed electric capacity in any one permit and the system need not comply with Section 170.2(b)4E. Additional electric reheat capacity in excess of 20 percent may be added subject to the requirements of Section 170.2(b)4E.

Exception 4 to Section 180.2: The requirements of Section 160.3(a)2H shall not apply to alterations of space-conditioning systems or components.

(a) **Mandatory requirements.** Altered components in a multifamily building shall meet the minimum requirements in this section.

1. **Roof/ceiling insulation.** The opaque portions of the roof/ceiling that separate conditioned spaces from unconditioned spaces or ambient air shall meet the requirements of Section 180.2(b)1B.
2. **Wall insulation. For the altered** opaque portion of walls separating conditioned spaces from unconditioned spaces or ambient air shall meet the applicable requirements of Items A through D below:
   A. **Metal building.** A minimum of R-13 insulation between framing members, or the area-weighted average U-factor of the wall assembly shall not exceed U-0.113.
   B. **Metal framed.** A minimum of R-13 insulation between framing members, or the area-weighted average U-factor of the wall assembly shall not exceed U-0.217.
   C. **Wood framed and others.** A minimum of R-11 insulation between framing members, or the area-weighted average U-factor of the wall assembly shall not exceed U-0.110.
   D. **Spandrel panels and curtain walls.** A minimum of R-4, or the area-weighted average U-factor of the wall assembly shall not exceed U-0.280.

   Exception to Section 180.2(a)2: Light and heavy mass walls.
3. **Floor insulation.** For the altered portion of raised floors that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable requirements of Items A through B below:
   A. **Raised framed floors.** A minimum of R-11 insulation between framing members, or the area-weighted average U-factor of the floor assembly shall not exceed U-0.071.
   B. **Raised mass floors.** A minimum of R-6 insulation, or the area-weighted average U-factor of the floor assembly shall not exceed U-0.111.

(b) **Prescriptive approach.** The altered component and any newly installed equipment serving the alteration shall meet the applicable requirements of Sections 110.0 through 110.9 and all applicable requirements of Sections 160.0, 160.1, 160.2(c) and (d), 160.3(a) through 160.3(b)5J, 160.3(b)6, 160.3(c**)** and 160.5; and

1. **Envelope.**

A. **Roof alterations**. Existing roofs being replaced, recovered or recoated of a multifamily building shall meet the requirements of Section 110.8(i). For roofs with more than 50 percent of the roof area or more than 2,000 square feet of roof, whichever is less, being altered, the requirements of i and iii below apply:

i. Low-sloped roofs in Climate Zones 2, 4, and 6 through 15 shall have a minimum aged solar reflectance of 0.63 and a minimum thermal emittance of 0.75, or a minimum SRI of 75.

Exception to Section 180.2(b)1Ai: The aged solar reflectance requirement can be met by using insulation at the roof deck specified in Table 180.2-A.

Table 180.2-A Roof/Ceiling Insulation Tradeoff for Low-Sloped Aged Solar Reflectance

Minimum Aged Solar Reflectance	Roof Deck Continuous Insulation R-value (Climate Zones 6-7)	Roof Deck Continuous Insulation R-value (Climate Zones 2, 4, 8-15)
0.60	2	16
0.55	4	18
0.50	6	20
0.45	8	22
No requirement	10	24

ii. Steep-sloped roofs in Climate Zones 4 and 8 through 15 shall have a minimum aged solar reflectance of 0.20 and a minimum thermal emittance of 0.75, or a minimum SRI of 16.

Exception to Section 180.2(b)1Aii: The following shall be considered equivalent to Subsection ii:

a. Buildings with ceiling assemblies with a U-factor lower than or equal to 0.025 or that are insulated with at least R-38 ceiling insulation in an attic; or

b. Buildings with a radiant barrier in the attic, where the radiant barrier is not installed directly above spaced sheathing, meeting the requirements of Section 170.2(a)1C; or

c. Buildings that have no ducts in the attic in Climate Zones 2, 4, 9, 10, 12 and 14; or

d. Buildings with R-2 or greater continuous insulation above or below the roof deck.

Exception 1 to Sections 180.2(b)1Ai and ii: Roof area covered by building integrated photovoltaic panels and building integrated solar thermal panels is not required to meet the minimum requirements for solar reflectance, thermal emittance or SRI.

Exception 2 to Sections 180.2(b)1Ai and ii: Roof constructions with a weight of at least 25 lb/ft^2 are not required to meet the minimum requirements for solar reflectance, thermal emittance or SRI.

iii. For low-sloped roofs, the area of the roof recover or roof replacement shall be insulated to R-14 continuous insulation or a U-factor of 0.039 in Climate Zones 1, 2, 4, and 8 through 16.

Exception 1 to Section 180.2(b)1Aiii: Roof recovers with new R-10 insulation added above deck do not need to be insulated to meet R-14.

Exception 2 to Section 180.2(b)1Aiii: When existing mechanical equipment located on the roof will not be disconnected and lifted, insulation added may be limited to the greater of R-10 or the maximum installed thickness that will allow the distance between the height of the roof membrane surface to the top of the base flashing to remain in accordance with the manufacturer's instructions.

Exception 3 to Section 180.2(b)1Aiii: At the drains and other low points, tapered insulation with a thermal resistance less than R-14 may be used, provided that insulation thickness is increased at the high points of the roof so that the average thermal resistance equals or exceeds R-14.

Exception 4 to Section 180.2(b)1Aiii: The area of the roof recoat is not required to be insulated.

B. **Roof/ceiling insulation**.

i. **Attic roof**. Vented attics shall meet the following:

a. In Climate Zones 1 through 4 and 8 through 16, insulation shall be installed to achieve a weighted U-factor of 0.020 or insulation installed at the ceiling level shall result in an installed thermal resistance of R-49 or greater for the insulation alone; and

Exception to Section 180.2(b)1Bia: In Climate Zones 1, 3, 4 and 9, dwelling units with at least R-19 existing insulation installed at the ceiling level**.**

b. In Climate Zones 2 and 11 through 16, air seal all accessible areas of the ceiling plane between the attic and the conditioned space in accordance with Section 110.7; and

Exception 1 to Section 180.2(b)1Bib: Dwelling units with at least R-19 existing insulation installed at the ceiling level.

Exception 2 to Section 180.2(b)1Bib: Dwelling units with atmospherically vented space heating or water-heating combustion appliances located inside the pressure boundary of the dwelling unit.

c. In Climate Zones 1 through 4 and 8 through 16, recessed downlight luminaires in the ceiling shall be covered with insulation to the same depth as the rest of the ceiling. Luminaires not rated for insulation contact must be replaced or fitted with a fireproof cover that allows for insulation to be installed directly over the cover; and

Exception to Section 180.2(b)1Bic: In Climate Zones 1 through 4 and 8 through 10, dwelling units with at least R-19 existing insulation installed at the ceiling level.

d. Attic ventilation shall comply with the California Building Code requirements.

Exception 1 to Section 180.2(b)1Bi: Dwelling units with at least R-38 existing insulation installed at the ceiling level.

Exception 2 to Section 180.2(b)1Bi: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 3 to Section 180.2(b)1Bi: Dwelling units with knob and tube wiring located in the vented attic.

Exception 4 to Section 180.2(b)1Bi: Where the accessible space in the attic is not large enough to accommodate the required R-value, the entire accessible space shall be filled with insulation, provided such installation does not violate Section 806.3 of Title 24, Part 2.5.

Exception 5 to Section 180.2(b)1Bi: Where the attic space above the altered dwelling unit is shared with other dwelling units and the requirements of Section 180.2(b)1Bi are not triggered for the other dwelling units.

C. Fenestration alterations other than repair shall meet the requirements below:

Note: Glass replaced in an existing sash and frame or sashes replaced in an existing frame are considered repairs. In these cases, Section 180.2(b) requires that the replacement be at least equivalent to the original in performance.

i. Fenestration products installed to replace existing fenestration products of the same total area shall meet either a or b:

a. The maximum U-factor, RSHGC and VT requirements of Table 180.2-B, or

b. The area-weighted U-factor and RSHGC of Table 170.2-A.

Exception 1 to Section 180.2(b)1Ci: In an alteration, where 150 square feet or less of the entire building's vertical fenestration is replaced, RSHGC and VT requirements of Table 180.2-B shall not apply.

ii. Alterations that add fenestration and skylight area shall meet the total fenestration area requirements of Section 170.2(a) and the U-factor, RSHGC and VT requirements of Table 180.2-B.

Exception 1 to Section 180.2(b)1Cii: Alterations that add fenestration area of up to 50 square feet shall not be required to meet the total fenestration area requirements of Sections 170.2(a), nor the U-factor, RSHGC and VT requirements of Table 180.2-B.

Exception 2 to Section 180.2(b)1Cii: Alterations that add up to 16 square feet of new skylight area per dwelling unit with a maximum U-factor of 0.55 and a maximum RSHGC of 0.30 shall not be required to meet the total fenestration area requirements of Section 170.2(a)3.

D. Exterior doors. Alterations that add exterior door area shall meet the U-factor requirement of Section 170.2(a)4.

Table 180.2-B Altered Fenestration Maximum U-Factor and Maximum RSHGC

Climate Zone		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Curtainwall / Storefront / Window Wall and Glazed Doors[1]	**U-factor**	0.38	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.38
Curtainwall / Storefront / Window Wall and Glazed Doors[1]	**RSHGC**	0.35	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.25
Curtainwall / Storefront / Window Wall and Glazed Doors[1]	**VT[2]**	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
NAFS 2017 Performance Class AW Window – Fixed[1]	**U-factor**	0.38	0.38	0.38	0.38	0.38	0.47	0.47	0.41	0.41	0.38	0.38	0.38	0.38	0.38	0.38	0.38
NAFS 2017 Performance Class AW Window – Fixed[1]	**RSHGC**	0.35	0.25	0.25	0.25	0.25	0.31	0.31	0.26	0.26	0.25	0.25	0.25	0.25	0.25	0.25	0.25
NAFS 2017 Performance Class AW Window – Fixed[1]	**VT[2]**	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
NAFS 2017 Performance Class AW Window – Operable[1]	**U-factor**	0.43	0.43	0.43	0.43	0.43	0.47	0.47	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
NAFS 2017 Performance Class AW Window – Operable[1]	**RSHGC**	0.35	0.24	0.24	0.24	0.24	0.31	0.31	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
NAFS 2017 Performance Class AW Window – Operable[1]	**VT[2]**	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
All Other Windows and Glazed Doors[1]	**U-factor**	0.30	0.30	0.30	0.30	0.30	0.30	0.34	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
All Other Windows and Glazed Doors[1]	**RSHGC**	0.35	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Skylights, 3 habitable stories and fewer	**U-factor**	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Skylights, 3 habitable stories and fewer	**RSHGC**	NA	0.23	NA	0.23	NA	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	NA

Table 180.2-B Altered Fenestration Maximum U-Factor and Maximum RSHGC (Continue)

Skylights, 4 habitable stories and greater	**U-factor**	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Skylights, 4 habitable stories and greater	**RSHGC**	0.35	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Skylights, 4 habitable stories and greater	**VT[2]**	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49

Footnotes to TABLE 180.2-B

1. For fenestration installed in buildings with three or fewer habitable stories, there is no SHGC requirement in Climate Zones 1, 3, 5, and 16.
2. Minimum VT requirements to not apply to multifamily buildings 3 habitable stories or less.

2. **Space-conditioning systems**.

A. Space-conditioning systems serving dwelling units.

i. **Entirely new or complete replacement space-conditioning systems** installed as part of an alteration shall include all the system heating or cooling equipment, including but not limited to: condensing unit, cooling or heating coil, and air handler for split systems; or complete replacement of a packaged unit; plus entirely new or replacement duct system [Section 180.2(b)2Aiib]. Entirely new or complete replacement space-conditioning systems shall meet the requirements of Sections 160.2(a)1, 160.3(a)1, 160.3(b)1 through 3, 160.3(b)5, 160.3(b)6, 160.3(c)1, 170.2(c)3B, 180.2(b)2Av, and Table 180.2-C.

ii. **Altered duct systems—duct sealing**: In all climate zones, when more than 25 feet of new or replacement space-conditioning system ducts are installed, the ducts shall comply with the applicable requirements of Subsections a and b below. New ducts located in unconditioned space shall meet the applicable requirements of Sections 160.3(b)5A through J and the duct insulation requirements of Table 180.2-C, and

a. The altered duct system, regardless of location, shall be sealed as confirmed through field verification and diagnostic testing in accordance with all applicable procedures for duct sealing of altered existing duct systems as specified in Reference Residential Appendix RA3.1, utilizing the leakage compliance criteria specified in Subsection I or II below.

TABLE 180.2-C DUCT INSULATION R-VALUE

Climate Zone	3, 5 through 7	1, 2, 4, 8 through 16
Duct R-Value	R-6	R-8

I. **Entirely new or complete replacement duct system.** If the new ducts form an entirely new or complete replacement duct system directly connected to the air handler, the duct system shall meet one of the following requirements:

A. The total leakage of the duct system shall not exceed 12 percent of the air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1, or

B. The duct system leakage to outside shall not exceed 6 percent of the air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.4.

Entirely new or complete replacement duct systems installed as part of an alteration are constructed of at least 75 percent new duct material, and up to 25 percent may consist of reused parts from the dwelling unit's existing duct system, including but not limited to registers, grilles, boots, air handler, coil, plenums and duct material, if the reused parts are accessible and can be sealed to prevent leakage.

Entirely new or complete replacement duct systems shall also conform to the requirements of Sections 160.2(a)1 and 160.3(b)5L. If the air handler and ducts are located within a vented attic, the requirements of Section 180.2(b)1Bi shall also be met.

II. **Extension of an existing duct system.** If the new ducts are an extension of an existing duct system serving multifamily dwellings, the combined new and existing duct system shall meet one of the following requirements:

A. The measured duct leakage shall be equal to or less than 15 percent of air handler airflow as confirmed by field verification and diagnostic testing utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1; or

B. The measured duct leakage to outside shall be equal to or less than 10 percent of air handler airflow as confirmed by field verification and diagnostic testing utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.4; or

C. If it is not possible to meet the duct sealing requirements of either Section 180.2(b)2AiicI or II then all accessible leaks shall be sealed and verified through a visual inspection and a smoke test by a certified HERS Rater utilizing the methods specified in Reference Residential Appendix RA3.1.4.3.5.

Exception to Section 180.2(b)2AiiaII: duct sealing. Existing duct systems that are extended, which are constructed, insulated or sealed with asbestos.

Exception 1 to 180.2(b)2Aii: The HERS Rater field verification and HERS Provider data registry requirements of Reference Residential Appendix RA2 and RA3 are not required for multifamily dwelling units in buildings four stories and greater. The installer shall certify that diagnostic testing was performed in accordance with the applicable procedures.

iii. **Altered space-conditioning system—duct sealing.** In all climate zones, when a space-conditioning system serving a multifamily dwelling is altered by the installation or replacement of space-conditioning system equipment, including replacement of the air handler, outdoor condensing unit of a split system air conditioner or heat pump, or cooling or heating coil, the duct system that is connected to the altered space-conditioning system equipment shall be sealed, as confirmed through field verification and diagnostic testing in accordance with the applicable procedures for duct sealing of altered existing duct systems as specified in Reference Residential Appendix RA3.1 and the leakage compliance criteria specified in Subsection a, b or c below.

a. The measured duct leakage shall be equal to or less than 15 percent of air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1; or

b. The measured duct leakage to outside shall be equal to or less than 10 percent of air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.4; or

c. If it is not possible to meet the duct sealing requirements of either Section 180.2(b)2Aiiia or b, then all accessible leaks shall be sealed and verified through a visual inspection and a smoke test by a certified HERS Rater utilizing the methods specified in Reference Residential Appendix RA3.1.4.3.5.

Exception 1 to Section 180.2(b)2Aiii: duct sealing. Duct systems that are documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in Reference Residential Appendix RA3.1.

Exception 2 to Section 180.2(b)2Aiii: duct sealing. Duct systems with less than 40 linear feet as determined by visual inspection.

Exception 3 to Section 180.2(b)2Aiii: duct sealing. Existing duct systems constructed, insulated or sealed with asbestos.

Exception 4 to Section 180.2(b)2Aiii: The HERS Rater field verification and HERS Provider data registry requirements of Reference Residential Appendix RA2 and RA3 are not required for multifamily dwelling units in buildings four stories and greater. The installer shall certify that diagnostic testing was performed in accordance with the applicable procedures.

iv. Altered space-conditioning system mechanical cooling. When a space-conditioning system is an air conditioner or heat pump that is altered by the installation or replacement of refrigerant-containing system components such as the compressor, condensing coil, evaporator coil, refrigerant metering device or refrigerant piping, the altered system shall comply with the following requirements:

a. All thermostats associated with the system shall be replaced with setback thermostats meeting the requirements of Section 110.2(c).

b. In Climate Zones 2, 8, 9, 10, 11, 12, 13, 14 and 15, air-cooled air conditioners and air-source heat pumps, including but not limited to ducted split systems, ducted package systems, small duct high velocity air systems, and minisplit systems, shall comply with Subsections I and II, unless the system is of a type that cannot be verified using the specified procedures. Systems that cannot comply with the requirements of Section 180.2(b)2Aivb shall comply with Section 180.2(b)2Aivc.

Exception to Section 180.2(b)2Aivb: Entirely new or complete replacement packaged systems for which the manufacturer has verified correct system refrigerant charge prior to shipment from the factory are not required to have refrigerant charge confirmed through field verification and diagnostic testing. The installer of these packaged systems shall certify that the packaged system was pre-charged at the factory and has not been altered in a way that would affect the charge. Ducted systems shall comply with the minimum system airflow rate requirement in Section 180.2(b)2AivbI, provided that the system is of a type that can be verified using the procedure specified in RA3.3 or an approved alternative in RA1.

I. The minimum system airflow rate shall comply with the applicable Subsection A or B below as confirmed through field verification and diagnostic testing in accordance with the procedures specified in Reference Residential Appendix Section RA3.3 or an approved alternative procedure as specified in Section RA1.

A. Small duct high velocity systems shall demonstrate a minimum system airflow rate greater than or equal to 250 cfm per ton of nominal cooling capacity; or

B. All other air-cooled air conditioner or air-source heat pump systems shall demonstrate a minimum system airflow rate greater than or equal to 300 cfm per ton of nominal cooling capacity.

Exception 1 to Section 180.2(b)2AivbI: Systems unable to comply with the minimum airflow rate requirement shall demonstrate compliance using the procedures in Section RA3.3.3.1.5, and the system's thermostat shall conform to the specifications in Section 110.12.

Exception 2 to Section 180.2(b)2AivbI: Entirely new or complete replacement space-conditioning systems, as specified by Section 180.2(b)2Ai, without zoning dampers may comply with the minimum airflow rate by meeting the applicable requirements in Table 160.3-A or 160.3-B as confirmed by field verification and diagnostic testing in accordance with the procedures in Reference Residential Appendix Sections RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure drop requirements of Section 160.2(a)1C for the system air filter device(s) shall conform to the requirements given in Tables 160.3-A and 160.3-B.

II. The installer shall charge the system according to manufacturer's specifications. Refrigerant charge shall be verified according to one of the following options, as applicable.

A. The installer and rater shall perform the standard charge verification procedure as specified in Reference Residential Appendix Section RA3.2.2, or an approved alternative procedure as specified in Section RA1; or

B. The system shall be equipped with a fault indicator display (FID) device that meets the specifications of Reference Joint Appendix JA6. The installer shall verify the refrigerant charge and FID device in accordance with the procedures in Reference Residential Appendix Section RA3.4.2. The HERS Rater shall verify FID device in accordance with the procedures in Section RA3.4.2; or

C. The installer shall perform the weigh-in charging procedure as specified by Reference Residential Appendix Section RA3.2.3.1, provided the system is of a type that can be verified using the RA3.2.2 standard charge verification procedure and RA3.3 airflow rate verification procedure or approved alternatives in RA1. The HERS Rater shall verify the charge using RA3.2.2 and RA3.3 or approved alternatives in RA1.

Exception 1 to Section 180.2(b)2AivbII: When the outdoor temperature is less than 55 degrees F and the installer utilizes the weigh-in charging procedure in Reference Residential

Appendix Section RA3.2.3.1 to demonstrate compliance, the installer may elect to utilize the HERS Rater verification procedure in Reference Residential Appendix Section RA3.2.3.2. If the HERS Rater verification procedure in Section RA3.2.3.2 is used for compliance, the system's thermostat shall conform to the specifications in Section 110.12. Ducted systems shall comply with the minimum system airflow rate requirements in Section 180.2(b)2AivbI.

EXCEPTION 2 to Section 180.2(b)2Aivb: The HERS Rater field verification and HERS Provider data registry requirements of Reference Residential Appendix RA2 and RA3 are not required for multifamily dwelling units in buildings four stories and greater. The installer shall certify that diagnostic testing was performed in accordance with the applicable procedures.

v. **Altered Space-Heating System.** Altered or replacement space-heating systems shall not use electric resistance as the primary heat source.

EXCEPTION 1 to Section 180.2(b)2Av: Non-ducted electric resistance space heating systems if the existing space heating system is electric resistance.

EXCEPTION 2 to Section 180.2(b)2Av: Ducted electric resistance space heating systems if the existing space heating system is electric resistance and a ducted space cooling system is not being replaced or installed.

EXCEPTION 3 to Section 180.2(b)2Av: Electric resistance space heating systems, if the existing space heating system is electric resistance in Climate Zones 6, 7, 8, or 15.

B. **Common Use Area Space Conditioning Systems**

i. New or Replacement Space-Conditioning Systems or Components other than new or replacement space-conditioning system ducts shall meet the requirements of Sections 170.2(c)1, 2, and 4, applicable to the systems or components being altered. For compliance with Section 170.2(c)4A, additional fan power adjustment credits are available as specified in TABLE 180.2-D.

TABLE 180.2-D Fan Power Limitation Pressure Drop Adjustment

Airflow	Multi-Zone VAV Systems[1] ≤5,000 cfm	Multi-Zone VAV Systems[1] >5,000 and ≤10,000 cfm	Multi-Zone VAV Systems[1] >10,000 cfm	All Other Fan Systems ≤5,000 cfm	All Other Fan Systems >5,000 and ≤10,000 cfm	All Other Fan Systems >10,000 cfm
Supply Fan System Additional Allowance	0.135	0.114	0.105	0.139	0.12	0.107
Supply Fan System Additional Allowance In Unit with Adapter Curb	0.033	0.033	0.043	0.000	0.000	0.000
Exhaust/ Relief/ Return/ Transfer Fan System Additional Allowance	0.07	0.061	0.054	0.07	0.062	0.055
Exhaust/ Relief/ Return/ Transfer Fan System Additional Allowance In Unit with Adapter Curb	0.016	0.017	0.022	0.000	0.000	0.000

Footnotes to Table 180.2-D:

1. See FAN SYSTEM, MULTI-ZONE VARIABLE AIR VOLUME (VAV) for the definition of a Multi-Zone VAV System.

Exception 1 to Section 180.2(b)2Bi. Section 180.2(b)2Av does not apply to replacement of electric reheat of equivalent or lower capacity electric resistance space heaters when natural gas is not available.

Exception 2 to Section 180.2(b)2Bi: Section 170.2(c)4L is not applicable to new or replacement space-conditioning systems.

Exception 3 to Section 180.2(b)2Bi: Section 170.2(c)4Ci is applicable to systems, other than single package air-cooled commercial unitary air conditioners and heat pumps, with cooling capacity less than 54,000 Btu/h.

ii. **Altered duct systems.** When new or replacement space-conditioning system ducts are installed to serve an existing building, the new ducts shall meet the requirements of Section 160.3(c)2 and meet a or b below:

a. Reserved.

b. Entirely new or replacement duct systems installed as part of an alteration shall be leakage-tested in accordance with Section 160.2(c)2H. Entirely new or replacement duct systems installed as part of an alteration shall be constructed of at least 75 percent new duct material, and up to 25 percent may consist of reused parts from the building's existing duct system, including registers, grilles, boots, air handlers, coils, plenums, and ducts, if the reused parts are accessible and can be sealed to prevent leakage.

EXCEPTION 1 to Section 180.2(b)2Biib: When it is not possible to achieve the duct leakage criteria in Section 180.2(b)2Biib, all accessible leaks shall be sealed and verified through a visual inspection and a smoke test performed by a certified HERS Rater utilizing the methods specified in Reference Nonresidential Appendix NA2.1.4.2.2a.

EXCEPTION 2 to Section 180.2(b)2Biib: Duct Sealing. Existing duct systems that are extended, which are constructed, insulated or sealed with asbestos are exempt from the requirements of subsection 180.2(b)2Biib.

c. If the new ducts are an extension of an existing duct system, the combined new and existing duct system meets the criteria in Subsections I, II, and III below. The duct system shall be sealed to a leakage rate not to exceed 15 percent of the nominal air handler airflow rate as confirmed through field verification and diagnostic testing, in accordance with the applicable procedures in Reference Nonresidential Appendices NA1 and NA2:

I. The duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system; and

II. The space conditioning system serves less than 5,000 square feet of conditioned floor area; and

III. The combined surface area of the ducts located in the following spaces is more than 25 percent of the total surface area of the entire duct system:

A. Outdoors;

B. In a space directly under a roof that

C. Has a U-factor greater than the U-factor of the ceiling, or if the roof does not meet the requirements of Section 170.2(a)1B, or

D. Has fixed vents or openings to the outside or unconditioned spaces; or

E. In an unconditioned crawl space; or

F. In other unconditioned spaces.

iii. **Altered space-conditioning systems.** When a space-conditioning system is altered by the installation or replacement of space-conditioning system equipment (including replacement of the air handler, outdoor condensing unit of a split system air conditioner or heat pump, or cooling or heating coil:

a. For all altered units where the existing thermostat does not comply with the requirements for demand responsive controls specified in Section 110.12, the existing thermostat shall be replaced with a demand responsive thermostat that complies with Section 110.12. All newly installed space-conditioning systems requiring a thermostat shall be equipped with a demand responsive thermostat that complies with Section 110.12; and

b. The duct system that is connected to the new or replaced space-conditioning system equipment shall be sealed, if the duct system meets the criteria of Section 170.2(c)4Ji, as confirmed through field verification and diagnostic testing, in accordance with the applicable procedures for duct sealing of altered existing duct systems as specified in Reference Nonresidential Appendix NA2, and conforming to the applicable leakage compliance criteria in Section 180.2(b)2Bii.

Exception 1 to Section 180.2(b)2Biiib: duct sealing. Buildings altered so that the duct system no longer meets the criteria of Section 170.2(c)4Ji are exempt from the requirements of Subsection 180.2(b)2Biiib.

Exception 2 to Section 180.2(b)2Biiib: duct sealing. Duct systems that are documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2 are exempt from the requirements of Subsection 180.2(b)2Biiib.

Exception 3 to Section 180.2(b)2Biiib: duct sealing. Existing duct systems constructed, insulated or sealed with asbestos are exempt from the requirements of Subsection 180.2(b)2Biiib.

3. **Hot water systems**. Altered or replacement water-heating systems or components serving individual dwelling units shall meet the applicable requirements below:

   A. **Pipe insulation.** For newly installed piping and existing accessible piping, the insulation requirements of Section 160.4(f) shall be met.

   B. **Distribution system.** For recirculation distribution system serving individual dwelling units, only demand recirculation systems with manual on/off control as specified in Reference Appendix RA4.4.9 shall be installed.

   C. **Water-heating system.** The water-heating system shall meet one of the following:

      i. A natural gas or propane water-heating system; or

      ii. A single heat pump water heater. The storage tank shall not be located outdoors and shall be placed on an incompressible, rigid insulated surface with a minimum thermal resistance of R-10. The water heater shall be installed with a communication interface that either meets the requirements of Section 110.12(a) or has an ANSI/CTA-2045-B communication port; or

      iii. A single heat pump water heater that meets the requirements of NEEA Advanced Water Heater Specification Tier 3 or higher; or

      iv. If the existing water heater is an electric resistance water heater, a consumer electric water heater.

      v. A water-heating system determined by the Executive Director to use no more energy than the one specified in Sections 180.2(b)3Ci through iii above; or if no natural gas is connected to the existing water heater location, a water-heating system determined by the Executive Director to use no more energy than the one specified in Section 180.2(b)3Civ above.

4. **Lighting**.

   A. **Dwelling unit lighting.** The altered lighting system shall meet the lighting requirements of Section 160.5(a). The altered luminaires shall meet the luminaire efficacy requirements of Section 160.5(a) and Table 160.5-A. Where existing screw base sockets are present in ceiling-recessed luminaires, removal of these sockets is not required, provided that new JA8 compliant trim kits or lamps designed for use with recessed downlights or luminaires are installed.

   B. **Common use area—lighting, sign lighting, and electrical power distribution systems**.

      i. Spaces with lighting systems installed for the first time shall meet the applicable requirements of Sections 110.9, 160.5(b)1, 160.5(b)2, 160.5(b)3, 160.5(b)4, 160.5(c), 160.5(e), 170.2(b), and 170.2(e)1 through 170.2(e)6.

      ii. When the requirements of Section 160.5(b)4D are triggered by the addition of skylights to an existing building and the lighting system is not recircuited, the daylighting control need not meet the multi-level requirements in Section 160.5(b)4D.

      iii. New internally and externally illuminated signs shall meet the requirements of Sections 110.9, 160.5(d) and 170.2(e)7.

      iv. Altered indoor lighting systems. Alterations to indoor lighting systems that include 10% or more of the luminaires serving an enclosed space shall meet the requirements of a, b or c below:

         a. The alteration shall comply with the indoor lighting power requirements specified in Sections 170.2(e)1 through 4 and the lighting control requirements specified in Table 180.2-E; or

         b. The alteration shall not exceed 80% of the indoor lighting power requirements specified in Section 170.2(e)1 through 4, and shall comply with the lighting control requirements specified in Table 180.2-E; or

         c. The alteration shall be a one-for-one luminaire alteration within a building or tenant space of 5,000 square feet or less, the total wattage of the altered luminaires shall be at least 40%

lower compared to their total pre-alteration wattage and the alteration shall comply with the lighting control requirements specified in Table 180.2-E.

Alterations to indoor lighting systems shall not prevent the operation of existing, unaltered controls, and shall not alter controls to remove functions specified in Section 160.5(b)4.

Alterations to lighting wiring are considered alterations to the lighting system. Alterations to indoor lighting systems are not required to separate existing general, floor, wall, display or decorative lighting on shared circuits or controls. New or completely replaced lighting circuits shall comply with the control separation requirements of Sections 160.5(b)4Aiv and 160.5(b)4Cid.

Exception 1 to Section 180.2(b)4Biv: Alteration of portable luminaires, luminaires affixed to moveable partitions, or lighting excluded as specified in Section 170.2(e)2C.

Exception 2 to Section 180.2(b)4Biv: Any enclosed space with only one luminaire.

Exception 3 to Section 180.2(b)4Biv: Any alteration that would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 4 to Section 180.2(b)4Biv: Acceptance testing requirements of Section 160.5(e) are not required for alterations where lighting controls are added to control 20 or fewer luminaires.

Exception 5 to Section 180.2(b)4Biv: Any alteration limited to adding lighting controls or replacing lamps, ballasts or drivers.

Exception 6 to Section 180.2(b)4Biv: One-for-one luminaire alteration of up to 50 luminaires either per complete floor of the building or per complete tenant space, per annum.

v. Alterations to existing outdoor lighting systems in a lighting application listed in Table 170.2-R or 170.2-S shall meet the applicable requirements of Sections 160.5(b)1, 160.5(b)2, 160.5(b)3, 160.5(c)1 and 160.5(e), and:

a. In alterations that increase the connected lighting load, the added or altered luminaires shall meet the applicable requirements of Section 160.5(c)2 and the requirements of Section 170.2(e)6 for general hardscape lighting or for the specific lighting applications containing the alterations; and

b. In alterations that do not increase the connected lighting load, where 10 percent or more of the existing luminaires are replaced in a general hardscape or a specific lighting application, the alterations shall meet the following requirements:

I. In parking lots and outdoor sales lots where the bottom of the luminaire is mounted 24 feet or less above the ground, the replacement luminaires shall comply with Section 160.5(c)2A and Section 160.5(c)2C;

II. For parking lots and outdoor sales lots where the bottom of the luminaire is mounted greater than 24 feet above the ground and for all other lighting applications, the replacement luminaires shall comply with Section 160.5(c)2A and either comply with Section 160.5(c)2B or be controlled by lighting control systems, including motion sensors, that automatically reduce lighting power by at least 40 percent in response to the area being vacated of occupants; and

Exception to Section 180.2(b)4Bvb: Alterations where less than 5 existing luminaires are replaced.

c. In alterations that do not increase the connected lighting load, where 50 percent or more of the existing luminaires are replaced in general hardscape or a specific application, the replacement luminaires shall meet the requirements of Subsection b above and the requirements of Section 170.2(e)6 for general hardscape lighting or specific lighting applications containing the alterations.

Exception 1 to Section 180.2(b)4Bvc: Alterations where the replacement luminaires have at least 40 percent lower power consumption compared to the original luminaires are not required to comply with the lighting power allowances of Section 170.2(e)6.

Exception 2 to Section 180.2(b)4Bvc: Alterations where less than 5 existing luminaires are replaced.

Exception 3 to Section 180.2(b)4Bv: Acceptance testing requirements of Section 160.5(e) are not required for alterations where controls are added to 20 or fewer luminaires.

vi. Alterations to existing internally and externally illuminated signs that increase the connected lighting load, replace and rewire more than 50 percent of the ballasts, or relocate the sign to a different location on the same site or on a different site shall meet the requirements of Section 170.2(e)7.

Exception to Section 180.2(b)4Bvi: Replacement of parts of an existing sign, including replacing lamps, the sign face or ballasts, that do not require rewiring or that are done at a time other than when the sign is relocated, is not an alteration subject to the requirements of Section 180.2(b)4Bvi.

vii. Alterations to existing electrical power distribution systems shall meet the applicable requirements of the following sections:

a. Service electrical metering. New or replacement electrical service equipment shall meet the requirements of Section 160.6(a) applicable to the electrical power distribution system altered; and

b. Separation of electrical circuits for electrical energy monitoring. For entirely new or complete replacement of electrical power distribution systems, the entire system shall meet the applicable requirements of Section 160.6(b); and

c. Voltage drop. For alterations of feeders and branch circuits where the alteration includes addition, modification or replacement of both feeders and branch circuits, the altered circuits shall meet the requirements of Section 160.6(c); and

Exception to Section 180.2(b)4Bviic: Voltage drop permitted by California Electrical Code Sections 647.4, 695.6 and 695.7.

d. Circuit controls for 120-volt receptacles and controlled receptacles. For entirely new or complete replacement of electrical power distribution systems, the entire system shall meet the applicable requirements of Section 160.6(d).

TABLE 180.2-E Control Requirements for Indoor Lighting System Alterations for Common Use Areas

Control Specifications	**Projects complying with Section 180.2(b)4Biva**	**Projects complying with Sections 180.2(b)4Bivb or 180.2(b)4Bivc**
Manual Area Controls 160.5(b)4Ai	Required	Required
Manual Area Controls 160.5(b)4Aii	Required	Required
Manual Area Controls 160.5(b)4Aii	Only required for new or completely replaced circuits	Only required for new or completely replaced circuits
Multi-Level Controls 160.5(b)4B	Required	Not Required
Automatic Shut Off Controls 160.5(c)4Ci	Required; 160.5(b)4Cid only required for new or completely replaced circuits	Required; 160.5(b)4Cid only required for new or completely replaced circuits
Automatic Shut Off Controls 160.5(c)4Cii	Required	Required
Automatic Shut Off Controls 160.5(c)4Cii	Required	Required
Automatic Shut Off Controls 160.5(c)4Civ	Required	Required
Automatic Shut Off Controls 160.5(b)4Cv	Required	Required
Automatic Shut Off Controls 160.5(b)4Cvi	Required	Required
Automatic Shut Off Controls 160.5(b)4Cvii	Required	Required
Daylighting Controls 160.5(b)4D	Required	Not Required
Demand Responsive Controls 160.5(b)4E	Required	Not Required

5. **Mechanical ventilation and indoor air quality for dwelling units.** Alterations to existing buildings shall comply with Subsections A and B below as applicable. When HERS field verification and diagnostic testing are required by Section 180.2(b)5, buildings with three habitable stories or less shall use the applicable procedures in the Residential Appendices, and buildings with four or more habitable stories shall use the applicable procedures in Nonresidential Appendices NA1 and NA2.

   A. **Entirely new or complete replacement ventilation systems.** Entirely new or complete replacement ventilation systems shall comply with all applicable requirements in Section 160.2(b)2. An entirely new or complete replacement ventilation system includes a new ventilation fan component and an entirely new duct system. An entirely new or complete replacement duct system is constructed of at least 75 percent new duct material, and up to 25 percent may consist of reused parts from the

dwelling unit's existing duct system, including but not limited to registers, grilles, boots, air filtration devices and duct material, if the reused parts are accessible and can be sealed to prevent leakage.

B. **Altered ventilation systems**. Altered ventilation system components or newly installed ventilation equipment serving the alteration shall comply with Section 160.2(b)2 as applicable subject to the requirements specified in Subsections i and ii below.

i. **Whole-dwelling unit mechanical ventilation**.

a. **Whole-dwelling unit airflow**. If the whole-dwelling ventilation fan is altered or replaced, then one of the following Subsections 1 or 2 shall be used for compliance as applicable.

1. Dwellings that were required by a previous building permit to comply with the whole-dwelling unit airflow requirements in Section 160.2(b)2, 120.1(b) or 150.0(o) shall meet or exceed the whole-dwelling unit mechanical ventilation airflow specified in Section 160.2(b)2Aiv or 160.2(b)2Av as confirmed through HERS field verification and diagnostic testing in accordance with the applicable procedures specified in Reference Appendix RA3.7 or NA2.2.

2. Dwellings that were not required by a previous building permit to have a whole-dwelling unit ventilation system to comply with Section 160.2(b)2, 120.1(b) or 150.0(o) shall not be required to comply with the whole-dwelling unit ventilation airflow specified in Section 160.2(b)2Aiv or 160.2(b)2Av.

b. **Replacement ventilation fans.** Whole-dwelling unit replacement ventilation fans shall be rated for airflow and sound in accordance with the requirements of ASHRAE 62.2 Sections 7.1 and 7.2. Additionally, when conformance to a specified whole-dwelling unit airflow rate is required for compliance, the replacement fans shall be rated at no less than the airflow rate required for compliance.

c. **Air filters**. If the air filtration device for a whole-dwelling unit ventilation system is altered or replaced, then one of the following Subsections 1 or 2 shall be used for compliance.

1. Dwellings that were required by a previous building permit to comply with the ventilation system air filtration requirements in Section 160.2(b)1, 120.1(b)1 or 150.0(m)12 shall comply with the air filtration requirements in Section 160.2(b)1.

2. Dwellings that were not required by a previous building permit to comply with the ventilation system air filtration requirements in Section 160.2(b)1, 120.1(b)1 or 150.0(m)12 shall not be required to comply with the air filtration requirements specified in Section 160.2(b)1.

ii. **Local mechanical exhaust**.

a. **Bathroom local mechanical exhaust**. Altered bathroom local mechanical exhaust systems shall comply with the applicable requirements specified in Section 160.0(b)2Avi.

b. **Kitchen local mechanical exhaust**. If the kitchen local ventilation fan is altered or replaced, then one of the following Subsections 1, 2 or 3 shall be used for compliance.

1. Dwellings that were required by a previous building permit to comply with the kitchen local exhaust requirements in Section 160.0(b)2Avi, 120.1(b)2vi or 150.0(o)1G shall meet or exceed the applicable airflow or capture efficiency requirements in Section 160.0(b)2Avi.

2. Dwellings that were required by a previous building permit to install a vented kitchen range hood or other kitchen exhaust fan shall install a replacement fan that meets or exceeds the airflow required by the previous building permit, or 100 cfm, whichever is greater.

3. Dwellings that were not required to have a kitchen local ventilation exhaust system according to the conditions in either Subsection 1 or 2 above shall not be required to comply with the requirements of Section 160.0(b)2Avi.

c. **Replacement ventilation fans.** New or replacement local mechanical exhaust fans shall be rated for airflow and sound in accordance with the requirements of ASHRAE 62.2 Section 7.1 and Title 24, Part 6, Section 160.0(b)2Avif. Additionally, when compliance with a specified exhaust airflow rate is required, the replacement fan shall be rated at no less than the airflow rate required for compliance.

(c) Performance approach. The altered component(s) and any newly installed equipment serving the alteration shall meet the applicable requirements of Subsections 1, 2 and 3 below.

1. The altered components shall meet the applicable requirements of Sections 110.0 through 110.9, 160.0, 160.1, 160.2(c) and (d), 160.3(a) through 160.3(b)5J, 160.3(b)6, 160.3(c), and 160.5. Entirely new or complete replacement mechanical ventilation systems as these terms are used in Section 180.2(b)5A shall comply with the requirements in Section 180.2(b)5A. Altered mechanical ventilation systems shall comply with the requirements of Sections 180.2(b)5B. Entirely new or complete replacement space-conditioning systems, and entirely new or complete replacement duct systems, as these terms are used in Sections 180.2(b)2Ai and 180.2(b)2Aiia, shall comply with the requirements of Sections 160.2(a)1 and 160.3(b)5L.
2. The standard design for an altered component shall be the higher efficiency of existing conditions or the requirements of Section 180.2(b). For components not being altered, the standard design shall be based on the unaltered existing conditions such that the standard and proposed designs for these components are identical. When the third-party verification option is specified, all components proposed for alteration for which the additional credit is taken shall be verified by a qualified third party.
3. The proposed design shall be based on the actual values of the altered components.

NOTES TO SECTION 180.2(c):

1. If an existing component must be replaced with a new component, that component is considered an altered component for the purpose of determining the standard design altered component energy budget and must meet the requirements of Section 180.2(c)2.
2. The standard design shall assume the same geometry and orientation as the proposed design.
3. The “existing efficiency level” modeling rules, including situations where nameplate data is not available, are described in the applicable Residential or Nonresidential ACM Approval Manual.

EXCEPTION 1 to Section 180.2(c): Any dual-glazed greenhouse or garden window installed as part of an alteration complies with the U-factor requirements in Section 170.2.

EXCEPTION 2 to Section 180.2(c): Where the space in the attic or rafter area is not large enough to accommodate the required R-value, the entire space shall be filled with insulation provided such installation does not violate Section 1203.2 of Title 24, Part 2.

Note: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

SECTION 180.3 – REPAIRS

Repairs shall not increase the preexisting energy consumption of the repaired component, system or equipment.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8 and 25943, Public Resources Code.

SECTION 180.4 – WHOLE BUILDING

Any addition or alteration may comply with the requirements of Title 24, Part 6 by meeting the requirements for the entire building.

NOTE: Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.

CALIFORNIA MECHANICAL CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4 CHAPTER 6, DUCT SYSTEMS

TABLE P4-A ADOPTION TABLE

CODE SECTION		Agency
Adopt Entire Chapter as amended (amended Sections listed below)[1]		CEC
601.0		X
602.0		X
603.0		X
604.0		X
605.0		X

[1] Adopted by reference for Occupancies A, B, E, F, H, M, R S, and U; see Sections 110.8(d)3, 120.4 and 150.0(m).

APPENDIX 1-A
STANDARDS AND DOCUMENTS REFERENCED IN THE ENERGY CODE

The following documents are incorporated by reference to the extent they are referenced in the Energy Code.

AIR-CONDITIONING, HEATING AND REFRIGERATION INSTITUTE

AHRI 210/240-2017	Performance Rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment (~~2008~~ 2017 W/Addendum 1)
AHRI 310/380-2017	Packaged Terminal Air-Conditioners and Heat Pumps (2017)
AHRI 340/360~~-~~(I-P)-2019	Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment (2019)
ANSI/AHRI 365 (I-P)-2009	Performance Rating of Commercial and Industrial Unitary Air-Conditioning Condensing Units (2009)
ANSI/AHRI 390-2003	Performance Rating of Single Package Vertical Air Conditioners and Heat Pumps (2003)
ANSI/AHRI 400 (I-P)-2015	Performance Rating of Liquid to Liquid Heat Exchangers (2015)
AHRI 430 (I-P)-2020	Performance Rating of Central Station Air-handling Unit Supply Fans (2020)
AHRI 440 (I-P)-2019	Performance Rating of Fan-coil Units (2019)
ANSI/AHRI 460-2005	Performance Rating of Remote Mechanical-Draft Air-Cooled Refrigerant Condensers (2005)
AHRI 550/590(I-P)-2020	Performance Rating of Water-chilling and Heat Pump Water-heating Packages Using the Vapor Compression Cycle (2020)
AHRI 560-2000	Absorption Water Chilling and Water Heating Packages (2000)
AHRI 680 (I-P)-2017	Performance Rating of Residential Air Filter Equipment (2017)
AHRI 920 (I-P)-2020	Performance Rating of Direct Expansion-Dedicated Outdoor Air System Units (2020)
AHRI 1060 (I-P)-2018	Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment (2018)
AHRI 1230-2014	Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment (w/Addendum 1)
AHRI 1360 (I-P)-2017	Performance Rating of Computer and Data Processing Room Air Conditioners (2017)

Available from: Air-Conditioning, Heating and Refrigeration Institute
2311 Wilson Blvd, Suite 400
Arlington, VA 22203
(703) 524-8800

ASSOCIATION OF HOME APPLIANCE MANUFACTURERS

AHAM HRH-2-2020 Residential Kitchen Range Hood Performance Test Procedures (2020)

AHAM RKRH-CPPG-2020 Residential Kitchen Range Hood Certification Program Procedural Guide (2020) Version 3.0

Available from: Association of Home Appliance Manufacturers
1111 19th Street, NW, Suite 402
Washington, DC 20036
(202) 872-5955
www.aham.org

AIR-CONDITIONING CONTRACTORS OF AMERICA

ANSI/ACCA 2 Manual J-2016 Manual J - Residential Load Calculation, Eighth Edition (2016)

Available from: Air-Conditioning Contractors of America, Inc.
2800 Shirlington Road, Suite 300
Arlington, VA 22206
(703) 575-4477
www.acca.org

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION
CANADIAN STANDARDS ASSOCIATION
WINDOW AND DOOR MANUFACTURERS ASSOCIATION

AAMA/WDMA/CSA 101/I.S.2/A440-17
North American Fenestration Standard/Specification for Windows, Doors, and Skylights (2017)

Available from:

AAMA
1827 Walden Office Square, Suite 550
Schaumburg, IL 60173-4268
(847) 303-5664
www.aamanet.org

CSA
5060 Spectrum Way, Suite 100
Mississauga, ON, Canada L4W 5N6
(800) 463-6727
www.csagroup.org

WDMA
2025 M Street, NW, Suite 800
Washington, DC 20036-3309
(202) 367-1157
www.wdma.com

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGENISTS

2021 TLVs and BEIs — Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices

Available from:

ACGIH
1330 Kemper Meadow Drive
Cincinnati, Ohio 45240
(513) 742-2020
www.acgih.org

AMERICAN NATIONAL STANDARDS INSTITUTE

ANSI/AMCA 208-18 — Calculation of the Fan Energy Index (2018)

ANSI/AMCA 210-16 — Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating (2016)

ANSI/AMCA 500-D-18 — Laboratory Methods Of Testing Dampers For Rating (2018)

ANSI/ASABE S640 JUL2017 — Quantities and Units of Electromagnetic Radiation for Plants (Photosynthetic Organisms)

ANSI/ASSP Z9.5-2012 — Laboratory Ventilation (2012)

ANSI/CTA-2045-B-2021 — Modular Communications Interface for Energy Management (2018)

ANSI C82.6-2015 (R2020) — American National Standard for Lamp Ballasts - Ballasts for High-Intensity Discharge Lamps - Methods of Measurement (2020)

ANSI/NEMA WD 6-2016 — American National Standard for Wiring Devices - Dimensional Specifications (2016)

ANSI Z21.40.4a-1998 (R2017)/CGA 2.94a-M98 (R2017)

Performance Testing and Rating of Gas-Fired, Air-Conditioning and Heat Pump Appliances (2017)

ANSI Z21.47-2021/CSA 2.3:21

Gas-Fired Central Furnaces (2021)

ANSI Z83.8-2016/CSA 2.6-2016 (R2021)

Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters and Gas-Fired Duct Furnaces (2016)

Available from:

American National Standards Institute
25 West 43rd Street, 4th floor
New York, NY 10036
(212) 642-4900

ANSI/APSP/ICC 5-2011 — American National Standard For Residential Inground Swimming Pools (2011 w/Addendum A)

Available from: Association of Pool & Spa Professionals
2111 Eisenhower Ave.
Alexandria, VA 22314
(703) 838-0083

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (NATIONAL PUBLICATIONS)

ANSI/ASHRAE STANDARD 52.2-2017	Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size (2017)
ANSI/ASHRAE STANDARD 55-2020	Thermal Environment Conditions for Human Occupancy (2020)
ANSI/ASHRAE STANDARD 62.1-2019	Ventilation for Acceptable Indoor Air Quality (2019)
ANSI/ASHRAE STANDARD 62.2-2019	Ventilation and Acceptable Indoor Air Quality in Residential Buildings (2019)
ANSI/ASHRAE STANDARD 84-2020	Method of Testing Air-to-Air Heat/Energy Exchangers (2020)
ANSI/ASHRAE/IES STANDARDS 90.1-2019	Energy Standards for Buildings Except Low-Rise Residential Buildings (2019)
ANSI/ASHRAE STANDARD 154-2016	Ventilation For Commercial Cooking Operations (2016)
ANSI/ASHRAE 193-2010 (RA2014)	Method of Test for Determining the Airtightness of HVAC Equipment (RA2014)

ASHRAE Handbooks

HVAC Applications (I-P) (2019)

HVAC Systems and Equipment (I-P) (2020)

Fundamentals (I-P) (2017)

Available from: American Society of Heating,
Refrigerating and Air-Conditioning Engineers
(ASHRAE)
1791 Tullie Circle N.E.
Atlanta, GA 30329
www.ashrae.org

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (REGIONAL PUBLICATION)

ASHRAE Climatic Data for Region × Arizona, California, Hawaii, Nevada, Publication SPCDX, 1982, ISBN #20002196 and Supplement, 1994, ISBN #20002596

Available from: Order Desk
Building News
10801 National Boulevard
Los Angeles, CA 90064
(800) 873-6397 or (310) 474-7771
www.bnibooks.com/

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

ASME A17.1-2019/CSA B44:19 Safety Code for Elevators and Escalators (2019)

ASME A112.18.1-2018/CSA B125.1-18 Plumbing Supply Fittings

Available from: ASME
Two Park Avenue
New York, NY 10016-5990
(800) 843-2763
http://www.asme.org/

AMERICAN SOCIETY FOR TESTING AND MATERIALS / ASTM INTERNATIONAL

ASTM C55-17 Standard Specification for Concrete Building Brick (2017)

ASTM C177-19	Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded Hot Plate Apparatus (2019)
ASTM C272/C272M-18	Standard Test Method for Water Absorption of Core Materials for ~~Structural~~ Sandwich Constructions (2018)
ASTM C335/C335M-17	Standard Test Method for Steady-State Heat Transfer Properties of Horizontal Pipe Insulation (2017)
ASTM C518-17	Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus (2017)
ASTM C731-15	Standard Test Method for Extrudability, After Package Aging, of Latex Sealants (2015)
ASTM C732-17	Standard Test Method for Aging Effects of Artificial Weathering on Latex Sealants (2017)
ASTM C836/C836M-18	Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course (2018)
ASTM C1167-11(2017)	Standard Specification for Clay Roof Tiles (2017)
ASTM C1371-15	Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers (2015)
ASTM C1492-03(2016)	Standard Specification for Concrete Roof Tile (2016)
ASTM C1549-16	Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer (2016)
ASTM C1583/C1583M-20	Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method) (2020)
ASTM D448-12(2017)	Standard Classification for Sizes of Aggregate for Road and Bridge Construction (2017)
ASTM D522/D522M-17	Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings (2017)
ASTM D822/D822M-13(2018)	Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings (2018)
ASTM D1003-21	Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics (2021)
ASTM D1653-21	Standard Test Methods for Water Vapor Transmission of Organic Coating Films (2021)
ASTM D1863/D1863M-05(2018)	Standard Specification for Mineral Aggregate Used on Built-Up Roofs (2018)
ASTM D2202-00(2019)	Standard Test Method for Slump of Sealants (2019)
ASTM D2370-16	Standard Test Method for Tensile Properties of Organic Coatings (~~2016~~2016)
ASTM D2824/D2824M-18	Standard Specification for Aluminum-Pigmented Asphalt Roof Coatings, Nonfibered, and Fibered without Asbestos (2018)
ASTM D3468/D3468M-99(2020)	Standard Specification for Liquid-Applied Neoprene and Chlorosulfonated Polyethylene Used in Roofing and Waterproofing (2020)
ASTM D3805/D3805M-16	Standard Guide for Application of Aluminum-Pigmented Asphalt Roof Coatings (2016)
ASTM D4798/D4798M-11(2021)	Standard Practice for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method) (2021)
ASTM D5870-16	Standard Practice for Calculating Property Retention Index of Plastics (2016)
ASTM D6083/D6083M-21	Standard Specification for Liquid- Applied Acrylic Coating Used in Roofing (2021)
ASTM D6694/D6694M-15	Standard Specification for Liquid- Applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems (2015)
ASTM E96/E96M-16	Standard Test Methods for Water Vapor Transmission of Materials (2016)

ASTM E283/E283M-19	Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen (2019)
ASTM E408-13(2019)	Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques (2019)
ASTM E779-19	Standard Test Method for Determining Air Leakage Rate by Fan Pressurization (2019)
ASTM E903-20	Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres(2020)
ASTM E972-96(2021)	Standard Test Method for Solar Photometric Transmittance of Sheet Materials Using Sunlight (2021)
ASTM E1175-87(2015)	Standard Test Method for Determining Solar or Photopic Reflectance, Transmittance, and Absorptance of Materials Using a Large Diameter Integrating Sphere (2015)
ASTM E1677-19	Standard Specification for Air Barrier (AB) Material or Assemblies for Low-Rise Framed Building Walls (2019)
ASTM E1680-16	Standard Test Method for Rate of Air Leakage through Exterior Metal Roof Panel Systems (2016)
ASTM E1918-16	Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field (2016)
ASTM E1980-11(2019)	Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces (2019)
ASTM E2178-21	Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials (2021)
ASTM E2357-18	Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies (2018)
ASTM E3087-18	Standard Test Method for Measuring Capture Efficiency of Domestic Range Hoods (2018)

Available from:

ASTM International
100 Barr Harbor Drive West
Conshohocken, PA 19428-2959
(800) 262-1373 or (610) 832-9500

CALIFORNIA HISTORICAL BUILDING CODE

2022 California Building Code

2022 California Electrical Code

2022 California Fire Code

2022 California Mechanical Code

2022 California Plumbing Code

Available from: California Building Standards Commission
2525 Natomas Park Drive, Suite 130
Sacramento, CA 95833-2936
(916) 263-0916
www.bsc.ca.gov

CALIFORNIA ENERGY COMMISSION

Appliance Efficiency Regulations

Alternative Calculation Method (ACM) Manual

Available from: California Energy Commission
1516 Ninth Street
Sacramento, CA 95814
(916) 654-5106 or
(800) 772-3300 (in California)
www.energy.ca.gov/title24

CALIFORNIA DEPARTMENT OF CONSUMER AFFAIRS

Standards for Insulating Material

Available from: California Department of Consumer Affairs
Bureau of Household Goods and Services
4244 South Market Court, Suite D
Sacramento, California 95834-1243
(916) 999-2041

CERTIFYING ORGANIZATION

CIE 13.3-1995	Method of Measuring and Specifying Colour Rendering Properties of Light Sources (1995)
CIE 015-2018	Technical Report: Colorimetry (2018)

COOLING TECHNOLOGY INSTITUTE

CTI ATC-105(19)	Acceptance Test Code for Cooling Towers (2019)
CTI ATC-105DS (18)	Acceptance Test Code for Dry Fluid Coolers (2018)
CTI ATC-105S (11)	Acceptance Test Code for Closed-Circuit Cooling Towers (2011)
CTI ATC-106 (11)	Acceptance Test Code for Mechanical Draft Evaporative Vapor Condensers (2011)
CTI STD-201-RS (17)	Standard for the Certification of Water Cooling Tower Thermal Performance (2017)

Available from:
Cooling Technology Institute
2611 FM 1960 West, Suite A101
Houston, Texas 77068-3730
PO Box 73383
Houston, TX 77273-3383
(281) 583-4087

COOL ROOF RATING COUNCIL

CRRC-1	Product Rating Program Manual (2021)

Available from:
Cool Roof Rating Council
2435 N. Lombard Street
Portland, OR 97217
(866) 465-2523
www.coolroofs.org

HOME VENTILATING INSTITUE

HVI Publication 915-2020	HVI Loudness Testing and Rating Procedure (2020)
HVI Publication 916-2020	HVI Airflow Test Procedure (2020)
HVI Publication 920-2020	HVI Product Performance Certification Procedure Including Verification And Challenge (2020)

Available from:
Home Ventilating Institute
1740 Dell Range Blvd., Suite H, PMB 450
Cheyenne, WY 82009
(855) 484-8368
www.hvi.org

ILLUMINATING ENGINEERING SOCIETY

The IES Lighting Library™

ANSI/IES LM-79-19	Approved Method: Optical and Electrical Measurements of Solid State Lighting Products (2019)
ANSI/IES LS-1-20	Lighting Science: Nomenclature and Definitions for Illuminating Engineering (2020)
ANSI/IES TM-15-20	Technical Memorandum: Luminaire Classification System for Outdoor Luminaires (2020)
Available from:	Illuminating Engineering Society 120 Wall Street, 17th Floor New York, NY 10005-4026 (212) 248-5000 www.ies.org

INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS

California Mechanical Code

Available from:	International Association of Plumbing and Mechanical Officials 4755 E. Philadelphia St. Ontario, CA 91761 (800) 85-IAPMO (854-2766) www.iapmo.org

INTERNATIONAL CODE COUNCIL

California Building Code

Available from:	International Code Council Western Regional Office 3060 Saturn St. Brea, CA 92821 (888) 422-7233 www.iccsafe.org

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO 5801:2017	Fans- Performance testing using standardized airways (2017)
ISO 13256-1:1998 (RA 2012)	Water-Source Heat Pumps-Testing and Rating for Performance-Part 1: Water-to-Air and Brine-to-Air Heat Pumps (2012)
ISO 13256-2:1998 (RA2012)	Water-Source Heat pumps-Testing and rating for Performance-Part 2: Water-to-Water and Brine-to-Water Heat Pumps (2012)
ISO/IEC 17025:2017	General Criteria for the Competence of Testing and Calibration Laboratories (2017)
Available from:	ISO Chemin de Blandonnet 8 CP 401 1214 Vernier Geneva, Switzerland

INTERNATIONAL WINDOW FILM ASSOCIATION

Architectural Visual Inspection Standard Window Film (reindorsed 2018)

Available from: International Window Film Association
P.O. Box 3871
Martinsville, VA 24115-3871
276-666-4932

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

NEMA LSD 57-2018	Polyurethane Foam Application: Lighting Equipment (2018)
NEMA SSL 7A-2015	Phase Cut Dimming for Solid State Lighting: Basic Compatibility-(2015)

Available from: 1300 North 17th Street, Suite 1752
Rosslyn, VA 22209
708-841-3200
www.nema.org

NATIONAL FENESTRATION RATING COUNCIL

ANSI/NFRC 100-2020	Procedure for Determining Fenestration Product U-factors (2020)
ANSI/NFRC 200-2020	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence (2020)
ANSI/NFRC 202-2020	Procedure for Determining Translucent Fenestration Product Visible Transmittance at Normal Incidence (2020)
ANSI/NFRC 203-2020	Procedure for Determining Visible Transmittance of Tubular Daylighting Devices (2020)
ANSI/NFRC 400-2020	Procedure for Determining Fenestration Product Air Leakage (2020)

Available from: National Fenestration Rating Council
6035 Ivy Lane, Suite 140
Greenbelt, MD 20770
(301) 589-1776
www.NFRC.org
Email: info@nfrc.org

NSF INTERNATIONAL (FORMERLY NATIONAL SANITATION FOUNDATION)

NSF/ANSI/CAN 50-2020	Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (22020)

Available from: NSF International
PO Box 130140
Ann Arbor, MI 48113
(735) 769-8010

RESIDENTIAL ENERGY SERVICES NETWORK

ANSI/RESNET/ICC 380-2019	Standard for Testing Airtightness of Building Enclosures, Dwelling Unit, and Sleeping Unit Enclosures, Airtightness of Heating and Cooling Air Distribution Systems; and Airflow of Mechanical Ventilation Systems (2019)

Available from: Residential Energy Services Network, Inc. (RESNET)
P.O. Box 4561
Oceanside, CA 92052-4561
https://www.resnet.us/

SAE INTERNATIONAL

SAE J1772_201710	SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler (2017)

SHEET METAL AND AIR-CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION

Residential Comfort System Installation Standards Manual, Eighth Edition (2016)

ANSI/SMACNA 006-2006	HVAC Duct Construction Standards - Metal and Flexible (2006)
Available from:	Sheet Metal and Air-Conditioning Contractors' National Association (SMACNA) 4201 Lafayette Center Drive Chantilly, VA 20151-1209 (703) 803-2980 www.smacna.org

UNDERWRITERS LABORATORIES / UL

UL 181	Standard for Safety for Factory-made Air Ducts and Connectors (2017)
UL 181A	Standard for Safety for Closure Systems for Use with Rigid Air Ducts (2017)
UL 181B	Standard for Safety for Closure Systems for Use with Flexible Air Ducts and Air Connectors (2017)
UL 723	Standard for Safety for Test for Surface Burning Characteristics of Building Materials (2018)
UL 727	Standard for Safety for Oil-Fired Central Furnaces (2018)
UL 731	Standard for Safety for Oil-Fired Unit Heaters (2018)
UL 1077	Standard for Safety for Supplementary Protectors for Use in Electrical Equipment (2016)
UL 1574	Standard for Safety for Track Lighting Systems (2020)
UL 1598	Standard for Safety for Luminaires (2021)
UL 1741	Standard for Safety for Inverters, Converters, Controllers and Interconnection System Equipment for Safety for Use With Distributed Energy Resources (2021)
UL 1973	Standard for Safety for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications (2018)
UL 2108	Standard for Safety for Low Voltage Lighting Systems (2019)
UL 8750	Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products (2021)
UL 9540	Standard for Safety for Energy Storage Systems and Equipment (2021)

Available from:	UL LLC 333 Pfingsten Road Northbrook, IL 60062-2096 (847) 272-8800

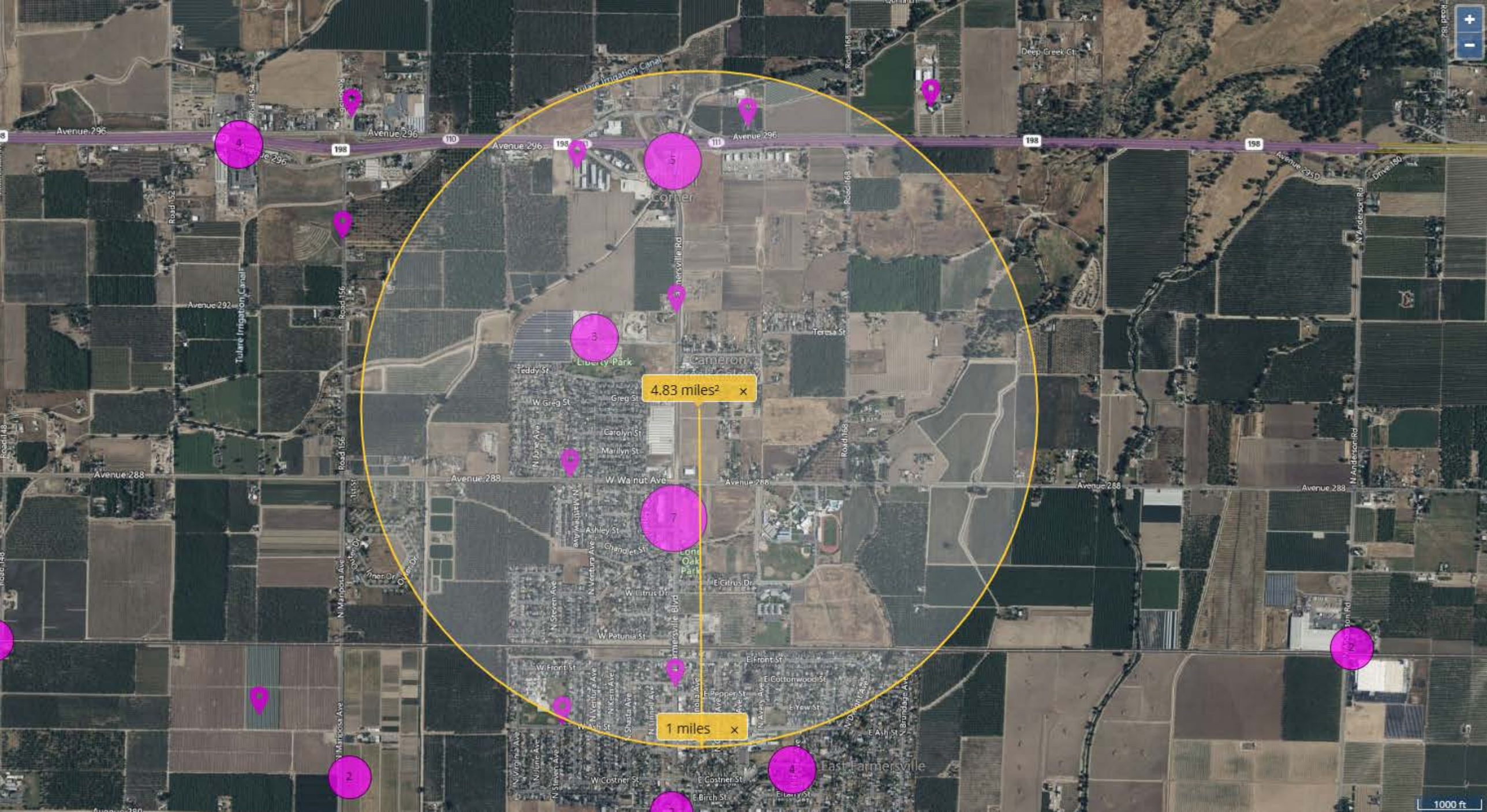
APPENDIX 1-B
ENERGY COMMISSION DOCUMENTS INCORPORATED BY REFERENCE IN THEIR ENTIRETY

The following documents published by the California Energy Commission are incorporated by reference in their entirety into the Energy Code:

Referenced appendices for the Building Energy Efficiency Standards for Residential and Nonresidential Buildings, including the Joint Appendices (JA), the Residential Appendices (RA), and Nonresidential Appendices (NA)

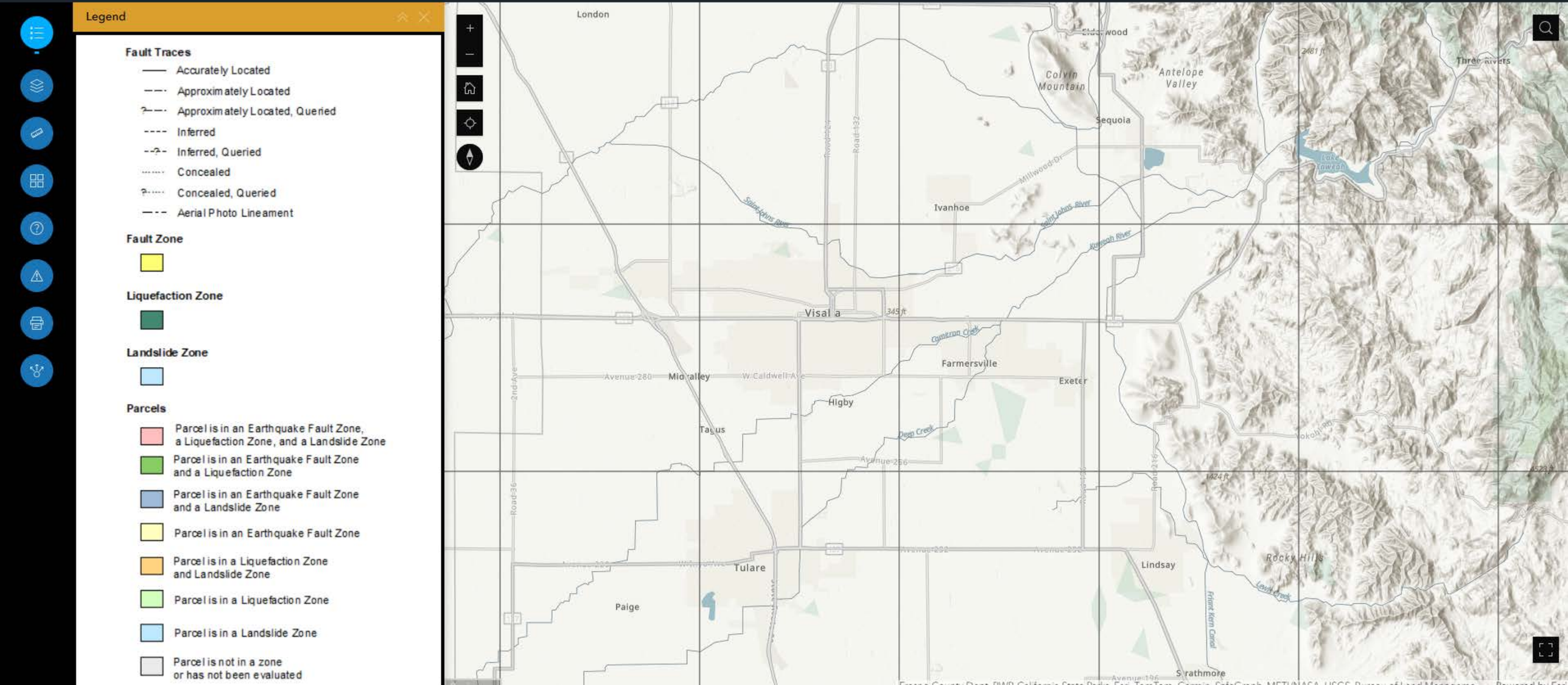
Alternative Calculation Method (ACM) Approval Manual

Available from: California Energy Commission/Publications
1516 Ninth Street
Sacramento, CA 95814
(916) 654-5200
www.energy.ca.gov/title24


4.83 miles²
1 miles
Avenue 296
Avenue 288
Avenue 292
Tulare Irrigation Canal
Liberty Park
Cameron
East Farmersville
W Walnut Ave
Teresa St
Greg St
W Greg St
Carolyn St
Marilyn St
Teddy St
Ashley St
Chanolet St
W Citrus Dr
E Citrus Dr
W Petunia St
E Front St
W Front St
E Cottonwood St
E Pepper St
E Yew St
E Ash St
W Costner St
E Costner St
E Birch St
E Liberty St
Road 152
Road 156
Road 168
N Ventura Ave
N Steven Ave
N June Ave
N Mariposa Ave
N Farmersville Blvd
N Anderson Rd
Deep Creek Ct
Drive 180
1000 ft

Department of Conservation
California Geological Survey

Earthquake Zones of Required Investigation



City of Farmersville 2023-2031 Housing Element

Tulare County Regional Housing Element

prepared by

City of Farmersville
Planning and Zoning Division
909 West Visalia Road
Farmersville, California 93223
Contact: Karl Schoettler, 4Creeks, Inc.

prepared with the assistance of

Rincon Consultants, Inc.
250 East 1st Street, Suite 1400
Los Angeles, California 90012

June 2024

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C1 Introduction and Community Engagement

This appendix of the Housing Element details housing conditions, needs, and constraints in the City of Farmersville. The information in this appendix is supported by the regional analysis contained in Chapters 1 through 5.

C1.1 Relationship to Other General Plan Elements

State law requires that the Housing Element be consistent with all other elements of the jurisdiction's general plan. The policies and implementation programs in this Housing Element are consistent with the policies and implementation programs in all other elements of Farmersville's General Plan. If during the implementation of this Housing Element, any inconsistencies are identified, the City would amend the General Plan to maintain internal consistency.

> *"The Housing Element will help Farmersville to create housing for all income groups (including our neediest residents) that we are expecting over the next eight years."*
>
> - Tina Hernandez, Mayor of Farmersville

C1.2 Organization of the Housing Element

This appendix for Farmersville consists of the following seven sections:

1. **Chapter C1: Introduction and Community Engagement:** This section introduces Farmersville's jurisdiction-specific components of the Housing Element and details the community input specific to the city.
2. **Chapter C2: Housing Needs Assessment:** This section reviews the existing and projected housing needs in Farmersville and presents a profile of socio-demographic information for the city, including population characteristics, household information, housing stock, tenure, and housing affordability. The assessment also considers local special housing needs for seniors, farmworkers, homeless individuals, large households, and female-headed households with children.
3. **Chapter C3: Housing Constraints Analysis:** This section identifies and addresses governmental and non-government impediments to housing production, maintenance, and improvements across all income levels.
4. **Chapter C4: Housing Resources:** This section provides resources and an inventory of adequate sites that are suitably zoned and available to be developed with housing to meet Farmersville's fair share of the Regional Housing Needs Allocation (RHNA) during the planning period.
5. **Chapter C5: Affirmatively Furthering Fair Housing Analysis:** This section identifies and seeks to eliminate factors that contribute to the continuation of residential segregation and exclusion in Farmersville, including public and private policies and practices that restrict housing choice and housing mobility.

6. **Chapter C6: Review of Past Accomplishments:** This section reviews the goals, policies, and programs of the 5th cycle Housing Element and compares projected outcomes with actual achieved results.
7. **Chapter C7: Housing Plan:** This section provides a statement of the community's goals, policies, and quantified objectives designed to maintain, preserve, improve, and develop housing within Farmersville. It includes quantified objectives for new construction, rehabilitation, and conserved units by income category (i.e., very low, low, moderate, and above-moderate) to make sure that Farmersville's existing and projected housing needs are met, consistent with the RHNA. This section also presents specific actions with measurable metrics and timelines that Farmersville will employ to address the identified fair housing issues.

C1.3 Community Engagement

Each jurisdiction deployed a diverse range of public outreach methods to solicit input from stakeholders and community members including interviews, surveys, a project-specific website, community events, and public meetings. The City of Farmersville collaborated with the other participating jurisdictions to compile a list of local stakeholders and organizations that provide affordable housing, market rate housing, homeless and other non-profit services, economic development services, and other community services in Farmersville. These entities were included in all notifications associated with the Housing Element update, including the project website, community events, housing survey, and release of the public draft Housing Element. Detailed information on the public engagement program and copies of community engagement materials are provided in Chapter 1, *Regional Introduction and Community Engagement.*

C1.3.1 Public Noticing

In addition to the outreach conducted for the project described in Chapter 1, *Regional Introduction and Community Engagement,* Farmersville utilized the following notification method during the Housing Element update process to engage a diverse array of community members:

- Posts to the City's website announcing the housing needs survey.

C1.3.2 City Council Presentation

On March 13, 2023, City staff presented at a City Council meeting that was open to the public. City staff presented an introduction to the Housing Element, the RHNA, state legislation, and the project timeline. There were no public comments submitted at the meeting.

C1.3.3 Community Workshops

Farmersville held a virtual workshop on May 31, 2023, to help inform the Housing Element and to introduce new Housing Element goals and requirements to the community. Information on the workshop content is available in Chapter 1, *Regional Introduction and Community Engagement.*

Flyers advertising the workshops were posted on the City's website. No participants attended due to a technical issue. The recording of the presentation was made available on the City's website and the City encouraged residents to view and provide comments.

C1.3.4 Stakeholder Interviews

A series of virtual stakeholder interviews were hosted on March 21 and 23, and April 4, 2023, via Zoom. During the stakeholder interviews, there was no discussion of housing issues specific to Farmersville. However, many of the issues identified in the region apply to Farmersville. Information on the interviews is available in Chapter 1, *Regional Introduction and Community Engagement.*

C1.3.5 Public Comment Survey

The City of Farmersville collaborated with TCAG and the other participating jurisdictions on the release of an online survey about housing needs to help inform the Housing Element. Information on the survey and input on a regional level is available in Chapter 1, *Regional Introduction and Community Engagement.*

This section summarizes information collected from survey respondents who noted that they reside in Farmersville:

- Respondents selected "quality and size of housing," "affordability," and "close to a public transit stop" as most important when looking for housing.
- Overall, most respondents selected "cost of quality housing" as the largest barrier to affording desirable housing. Respondents also identified the low supply of housing and lack of rent-restricted housing as barriers to affording housing.
- The most urgent housing issues are affordability of desired housing, availability of desired housing, homelessness, and housing quality.
- The housing assistance programs most beneficial to Farmersville residents are rental assistance or housing choice vouchers (HCVs), homebuyer loan counseling services, and housing assistance for residents with special needs. Respondents also cited landlord/tenant mediation services as a beneficial program to assist with housing needs.
- "Housing with three or more bedrooms" was ranked as most needed in the region followed by "housing with 1-2 bedrooms."
- Twenty-three percent of respondents were interested in developing Accessory Dwelling Units (ADUs) on their existing or future property. No respondents already had an ADU on their property.
- Respondents from all jurisdictions identified a need for supportive housing programs for individuals experiencing homelessness.
- Respondents across jurisdictions expressed the need for median-income housing, "higher end" housing, and non-low-income housing to keep families in the region.

C1.3.6 Response to Community Input

During community outreach, community members identified the following overarching themes regarding housing in the region. Each one is discussed with how it is addressed in the Housing Element.

Need more housing options for both renters and buyers at all income levels.

How addressed: The City will encourage housing development and diversification of the City's housing stock to create additional housing for households of all income levels.

- Housing Program 5 directs the City to encourage the production of ADUs as an affordable housing option through permit streamlining, spreading awareness of available ADU resources, generating an ADU permitting checklist, and adopting pre-approved ADU plans. In addition, the City will

collaborate with neighboring jurisdictions to incentivize the development of ADUs, including outreach and education materials on the use of HCVs on ADUs, promoting ADU development grants, and reducing plan check and permit fees.

- Housing Program 6 directs the City to amend the Zoning Code to facilitate the development of a variety of housing types. The City will review and revise development standards, including parking. The City will also revise the Zoning Code to allow single-room occupancy housing, streamline the permitting process, and ensure ministerial permitting processes for multifamily and affordable housing development. In addition, the Zoning Code will be amended to comply with State density bonus law and reasonable accommodation requirements and to comply with state law and remove barriers for the development of transitional and supportive housing, emergency shelters and low barrier navigation centers, employee housing for agricultural workers, and residential care facilities of seven or more residents.
- Housing Program 9 directs the City to utilize a variety of development tools to expand affordable housing options for households of all income levels, including reviewing and revising the General Plan, applicable Specific Plans, and the Zoning Code and Zoning Map to remove barriers to housing production and facilitate the development of a variety of housing types. The City will amend the Zoning Code to offer regulatory concessions and incentives for affordable housing projects, in compliance with State law, including provisions for density bonuses, flexibility for on- and off-site improvement requirements, and expedited project application review. The City will develop a web-based Housing Development Toolkit for housing developers to outline the residential development process and identify funding programs and resources for housing development. The City will also pursue funding opportunities, such as the CDBG, CalHome, PLHA, and Project Homekey funds, to finance affordable housing and housing for households with special needs.

Need for financial assistance for low-income renter and homeowner households.

How addressed: The City will coordinate with local service providers and agencies that operate assistance programs for low-income households to spread awareness of available financial resources.

- Housing Program 11 directs the city to collaborate with Self-Helt Enterprises to fund housing rehabilitation assistance. The City will spread awareness of homeowner rehabilitation programs by publishing resources on the City's website and connect qualified property owners to Self-Help Enterprises.
- Housing Program 12 directs the City to facilitate the development of housing for low-income households in coordination with the Housing Authority of Tulare County (HATC), service providers, and affordable housing developers. The City will spread awareness of the HATC's HCV program and other available assistance programs through the City's website, social media pages, and in-person community events, as well as conduct educational HCV workshops for landlords.
- Housing Program 14 directs the City to spread awareness for existing homebuyer assistance programs by distributing flyers, attending local events, facilitating social media campaigns, and hosting educational workshops.

C2 Housing Needs Assessment

This chapter provides an individual assessment of housing needs for the City of Farmersville. This section summarizes demographic, employment, and housing characteristics. The main source of the information is the pre-approved data package for jurisdictions approved by the California Department of Housing and Community Development (HCD). This data is primarily sourced from the United States (U.S.) Census, the California Department of Finance (DoF), and American Community Survey (ACS) 2016-2020 5-year estimates. The data contained throughout this chapter may differ from the data included in Chapter C5, *Affirmatively Furthering Fair Housing*, due to the availability of data at the time of drafting. Tables and figures also include comparable data for Tulare County and the state where it is found most useful.

C2.1 Population Characteristics

Population characteristics, such as growth rate, age, and income levels, affect the type and amount of housing needed in a community. Residents' age and income, employment trends, and other factors influence the type of housing needed and the community's ability to afford housing. The following section analyzes Farmersville's population characteristics and trends.

C2.2 Population Growth

Table C2-1 analyzes population change from 2000 to 2020. Farmersville experienced a population increase of 21.2 percent from 2000 to 2010, and decrease of 1.8 percent from 2010 to 2020. Farmersville's population fell by 191 people between 2010 and 2020, while the countywide and statewide population grew.

Table C2-1 Population Change (2000 - 2020)

Jurisdiction	2000	2010	2020	Percent Change 2000-2010	Percent Change 2010-2020
Farmersville	8,737	10,588	10,397	21.2%	-1.8%
Tulare County	368,021	442,179	463,955	20.2%	4.9%
California	33,971,648	37,253,956	39,346,023	9.7%	5.6%

Source: U.S. Census Bureau, Census 2000, 2010; Social Explorer tables for Census 2020.

C2.3 Age Characteristics

Table C2-2 shows a breakdown of population by age group and each group's percentage of the total population. The age groups include preschool (under five years), school-age students (five to 17 years), college-age students (18 to 24 years), young adults (25 to 44 years), middle-aged adults (45 to 64 years), and seniors (65 years and over). In Farmersville, the largest age group is the young adult category, representing 27.9 percent of the total population, which is similar to the county (26.9 percent) and state (28.6 percent). The second largest age group in Farmersville is school age students at 22.8 percent, which is similar in the county (22.8 percent) and state (16.6 percent).

Table C2-2 Population by Age Group (2020)

Jurisdiction	Under 5 years (Preschool)	5 to 17 years (School-age Students)	18 to 24 years (College-age Students)	25 to 44 (Young Adults)	45 to 64 (Middle-aged Adults)	65 years and over (Seniors)	Total Population
Farmersville	877	2,470	1,331	3,024	2,433	707	10,842
Percent	8.1%	22.8%	12.3%	27.9%	22.4%	6.5%	
Tulare County	36,942	105,835	46,977	124,822	96,553	52,826	463,955
Percent	8.0%	22.8%	10.1%	26.9%	20.8%	11.4%	
California	2,409,082	6,547,559	3,724,239	11,241,816	9,778,830	5,644,497	39,346,023
Percent	6.1%	16.6%	9.5%	28.6%	24.9%	14.4%	

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B01001.

C2.4 Race and Ethnicity

Table C2-3 shows race and ethnicity of residents in Farmersville, Tulare County, and California. In Farmersville, a majority of the population identifies as Hispanic/Latino (any race) at 88.7 percent, considerably higher than countywide (65.1 percent) or across the state (39.1 percent). The second largest racial/ethnic group is white (not Hispanic/Latino) representing 9.4 percent of the total population in Farmersville. This is much lower than Tulare County (27.8 percent) and the state (36.5 percent).

Table C2-3 Population by Race

Jurisdiction	Asian, not Hispanic	Black, not Hispanic	White, not Hispanic	Other race, not Hispanic*	Hispanic/Latino (any race)	Total Population:
Farmersville	14	86	1,014	115	9,613	10,842
Percent of Population	0.1%	0.8%	9.4%	1.1%	88.7%	
Tulare County	15,857	5,923	128,751	11,505	301,919	463,955
Percent of Population	3.4%	1.3%	27.8%	2.5%	65.1%	
California	5,743,983	2,142,371	14,365,145	1,713,595	15,380,929	39,346,023
Percent of Population	14.6%	5.4%	36.5%	4.4%	39.1%	

*Note: Other race includes American Indian and Alaskan Native, Native Hawaiian and Pacific Islander, Two or More Races, and Some Other Race.

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B01001.

C2.5 Economic Characteristics

Employment

Understanding employment and occupation patterns can provide insight into present housing needs. Table C2-4 shows employment by industry for Farmersville. 840 people, or 19 percent of the workforce in Farmersville, are employed in the educational services and health care and social assistance sector. This is similar to the county average of 21.6 percent and the state average of 21.2 percent. The second largest industry in Farmersville is agriculture, forestry, fishing, hunting, and mining with 16.5 percent, higher than the county average of 15.6 percent and the statewide total of 2.1 percent.

Table C2-4 Employment by Industry (2020)

	Farmersville	Percent	Tulare County	Percent	California	Percent
Educational Services, And Health Care And Social Assistance	840	19.0%	39,809	21.6%	3,960,265	21.2%
Agriculture, Forestry, Fishing And Hunting, And Mining	730	16.5%	28,627	15.6%	394,290	2.1%
Arts, Entertainment, And Recreation, And Accommodation And Food Services	678	15.3%	15,326	8.3%	1,894,858	10.2%
Retail Trade	528	11.9%	20,382	11.1%	1,942,421	10.4%
Manufacturing	345	7.8%	15,074	8.2%	1,676,497	9.0%
Wholesale Trade	274	6.2%	6,000	3.3%	514,234	2.8%
Construction	144	3.3%	10,863	5.9%	1,190,537	6.4%
Transportation And Warehousing, And Utilities	259	5.9%	9,021	4.9%	1,028,818	5.5%
Professional, Scientific, And Management, And Administrative, And Waste Management Services	210	4.8%	12,541	6.8%	2,581,266	13.8%
Public Administration	188	4.3%	10,691	5.8%	850,479	4.6%
Other Services, Except Public Administration	186	4.2%	8,228	4.5%	952,302	5.1%
Finance And Insurance, And Real Estate, And Rental And Leasing	39	0.9%	5,252	2.9%	1,118,253	6.0%
Information	-	0.0%	2,062	1.1%	542,674	2.9%

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table C24050.

Income Definitions and Income Limits

The State and Federal governments classify household income into several categories based upon the relationship to the county area median income (AMI), adjusted for household size. The U.S. Department of Housing and Urban Development (HUD) estimate of AMI is used to set income limits for eligibility in federal housing programs. The income categories include:

- Acutely low-income households, which earn up to 15 percent AMI;
- Extremely low-income households, which earn up to 30 percent AMI;
- Very low-income households, which earn between 31 and 50 percent AMI;
- Low-income households, which earn between 51 and 80 percent AMI; and
- Moderate income households, which earn between 80 and 120 percent AMI.

For all income categories, income limits are defined for various household sizes based on a four-person household as a reference point. Income limits for larger or smaller households are calculated by HUD (see Table C2-5). According to HUD, the AMI for a four-person household in Tulare County was $80,300 in 2022.

Table C2-5 HUD Income Limits by Person per Household (dollars)

Household Size:	1	2	3	4	5	6	7	8
Acutely Low Income	$8,450	$9,650	$10,850	$12,050	$13,000	$14,000	$14,950	$15,900
Extremely Low Income	$16,350	$18,700	$23,030	$27,750	$32,470	$37,190	$41,910	$46,630
Very Low Income	$27,300	$31,200	$35,100	$38,950	$42,100	$45,200	$48,300	$51,450
Low Income	$43,650	$49,850	$56,100	$62,300	$6,730	$72,300	$77,300	$82,250
Median Income	$56,200	$64,250	$72,250	$80,300	$84,730	$93,150	$99,550	$106,000
Moderate Income	$67,450	$77,100	$89,700	$96,350	$104,050	$111,750	$119,450	$127,200

Source: U.S. Department of Housing and Urban Development (HUD), 2022.

HCD uses the income categories shown in Table C2-6 to determine eligibility for state housing programs. HCD's methodology for calculating AMI is slightly different from HUD's methodology, and therefore the AMI and income limits vary.

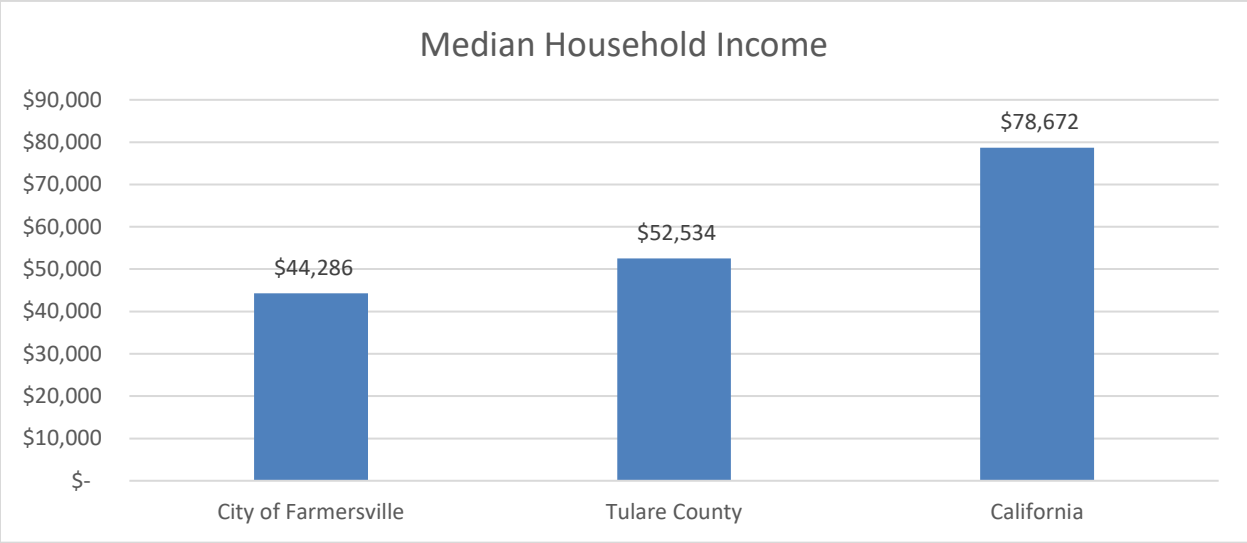
Table C2-6 State of California Income Categories

Income Category	Percent of County Area Median Income (AMI)
Extremely Low	0-30% AMI
Very Low	31%-50% AMI
Low	51%-80% AMI
Moderate	81%-120% AMI
Above Moderate	120% AMI or greater

Source: Section 50093 of the California Health and Safety Code.

Figure C2-1 shows actual median household income in Farmersville as reported by the 2016- 2020 ACS. This median income is for all households, regardless of household size. The median household income in Farmersville was $44,286 in 2020, which was lower than in Tulare County ($52,534) and significantly lower than the statewide median household income ($78,672).

Figure C2-1 Median Household Income



Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B19013.

Table C2-7 shows the median household income by race in 2020. In Farmersville, of the categories listed, "some other race" had the highest median income of $55,299. Hispanic/Latino households had the second highest median income of $46.346; however, limited data was available for the City of Farmersville due to the low numbers of Black/African American, American Indian/Alaskan Native, Native Hawaiian/Other Pacific Islander and two or more races households.

Table C2-7 Median Household Income by Race/Ethnicity (dollars)

Jurisdiction	White, alone	Black/African American, alone	American Indian and Alaskan Native, alone	Asian, alone	Native Hawaiian and Other Pacific Islander, alone	Some Other Race, alone	Two or More Races, alone	Hispanic/ Latino, Any Race
Farmersville	$35,417	N/A	N/A		N/A	$55,299	N/A	$46,346
Tulare County	$64,453	$44,708	$37,632	$67,396	N/A	$47,520	$62,159	$46,063
California	$90,496	$54,976	$60,182	$101,380	$81,682	$59,287	$76,733	$62,330

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B19013.

Overpayment and Housing Cost Burdens

Table C2-8 lists the number of owner-occupied, renter-occupied, and total households overpaying (spending more than 30 percent of income on housing) in Farmersville. Generally, renters are more affected by overpayment than owners. As shown, 52.4 percent of renter-occupied households are overpaying in Farmersville, which is higher than the county average and lower than the state average.

Table C2-8 Overpayment by Tenure

Jurisdiction	Owner-Occupied Overpaying	Renter-Occupied Overpaying	Total Overpaying
Farmersville	557		1,067
Percent	29.5%	52.4%	
Tulare County	23,773	28,894	52,667
Percent	30.0%	48.4%	
California	2,237,292	3,019,235	5,256,527
Percent	31.0%	51.5%	

Source: U.S. Census Bureau, ACS 06-10, 11-15, 16-20 (5-year Estimates), Table B25070.

Comprehensive Housing Affordability Strategy (CHAS) data provided by HUD provides information on cost burden based on the HUD Area Median Family Income (HAMFI). This data is included in Table C2-9 below. While the totals do not align exactly with 2020 ACS data presented above, the CHAS data identifies the level at which cost burdened households are overpaying for housing. In Farmersville, 34.5 percent of households spend at least 30 percent of their income on housing (cost burden), which is less than in the county and state. Further, 15.3 percent of households are spending more than 50 percent of their income on housing, which is also less than in the county and state.

Table C2-9 Cost Burdened Households

Jurisdiction	Cost Burden <= 30%	Cost Burden >30% to <=50%	Cost Burden >50%	Cost Burden Not Calculated	Total Occupied Units
Farmersville	1,868	549	438	-	2,855
Percent	65.4%	19.2%	15.3%	0.0%	100.0%
Tulare County	84,225	27,570	24,864	1,581	138,240
Percent	60.9%	19.9%	18.0%	1.1%	100.0%
California	7,807,275	2,632,205	2,427,660	177,125	13,044,265
Percent	59.9%	20.2%	18.6%	1.4%	100.0%

Source: U.S. Department of Housing and Urban Development, CHAS 2015-19 (5-Year Estimates), Table 7.

C2.6 Household Characteristics

Table C2-10 provides information on household types. Of the 2,862 households in Farmersville, 1,408 are married-couple households with or without children and 230 are cohabitating couple households with or without children.

Table C2-10 Households by Type

	Married-Couple Household			Cohabitating Couple Household			
Jurisdiction	Total	Children	No Children	Total	Children	No Children	Total Households
Farmersville	1,408	590	818	230	151	79	2,862
Percent	49.2%	20.6%	28.6%	8.0%	5.3%	2.8%	
Tulare County	73,140	35,234	37,906	10,809	6,596	4,213	139,044
Percent	52.6%	25.3%	27.3%	7.8%	4.7%	3.0%	
California	6,510,580	2,784,123	3,726,457	896,192	327,712	568,480	13,103,114
Percent	49.7%	21.2%	28.4%	6.8%	2.5%	4.3%	

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B11012

C2.7 Large Households

Table C2-11 provides information on large households (households with five or more people) by tenure. As shown, 29.9 percent of households in Farmersville consist of five or more people, which is greater than both the county (21.3 percent) and state (13.7 percent). In Farmersville, owner-occupied 5-person households (10.9 percent), owner-occupied 6-person households (8.8 percent), and renter-occupied 5-person households (5.2 percent) make up the largest percentage of large households, while there were no reported renter-occupied 6-person households. Additionally, both Farmersville and Tulare County have higher percentages of owner-occupied 6- and 7-person households than in California (13.7 percent).

Table C2-11 Large Households by Tenure

Jurisdiction	Total	Owner-Occupied Large Households			Renter-Occupied Large Households		
		5-Person	6-Person	7-or-More Person	5-Person	6-Person	7-or-More Person
Farmersville	857	312	253	82	149	-	61
Percent	29.9%	10.9%	8.8%	2.9%	5.2%	0.0%	2.1%
Tulare County	29,599	8,116	4,101	3,237	7,507	3,896	2,742
Percent	21.3%	5.8%	3.0%	2.3%	5.4%	2.8%	2.0%
California	1,809,518	567,528	238,866	195,326	458,328	201,263	148,207
Percent	13.7%	4.3%	1.8%	1.5%	3.5%	1.5%	1.1%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25009

C2.8 Overcrowding

Table C2-12 provides information on overcrowding (more than 1.0 people per room) by tenure in Farmersville. There are 441 overcrowded households in the city, of which 160 are owner-occupied households, and 281 are renter-occupied.

Table C2-12 Overcrowding Severity by Tenure

Jurisdiction	Owner-Occupied			Renter-Occupied		
	Total	1.0 to 1.5 Occupants per Room	More than 1.5 Occupants per Room	Total	1.0 to 1.5 Occupants per Room	More than 1.5 Occupants per Room
Farmersville	1,888	119	41	974	145	136
Percent		6.3%	2.2%		14.9%	14.0%

Source: U.S. Census Bureau, ACS 06-10, 11-15, 16-20 (5-year Estimates), Table B25014.

C2.9 Special Needs Groups

Special needs populations include individuals with a disability, elderly, large households, single-parent households, farmworkers, and individuals experiencing homelessness. These needs can make it difficult for members of these groups to locate suitable housing. The following subsections identify and discuss these special housing needs groups.

Seniors

Table C2-13 identifies senior households by tenure in Farmersville, Tulare County, and California. The percentage row identifies the percent of the specified age range within the owner-occupied or renter-occupied tenure. There are far more owner-occupied senior households in Farmersville (335 total) than renter-occupied senior households (93 total), which is similar to the county and state. As shown, 54.6 percent of senior owner-occupied households and 48.4 percent of senior renter-occupied households are made up of seniors between the ages of 65 and 74.

Table C2-13 Senior Households by Tenure

Jurisdiction	Owner-Occupied			Renter-Occupied		
	65 to 74	75 to 84	85 and over	65 to 74	75 to 84	85 and over
Farmersville	183	144	8	45	41	7
Percent	54.6%	43.0%	2.4%	48.4%	44.1%	7.5%
Tulare County	12,787	6,686	3,009	4,613	1,643	1,238
Percent	56.9%	29.7%	13.4%	61.6%	21.9%	16.5%
California	1,350,393	688,443	301,853	484,266	234,067	139,828
Percent	57.7%	29.4%	12.9%	56.4%	27.3%	16.3%

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B25007

Table C2-14 shows the rate of housing cost burden by elderly family type and tenure in Farmersville based on data extracted through HUD's CHAS (note that the CHAS data defines senior or elderly as age 62 and over, as opposed to the ACS that reports seniors as age 65 and older). Of all elderly persons in lower-income categories (less than or equal to 80 percent HAMFI), 30.6 percent of all senior-owner households and 76.5 percent of all senior-renter households in Farmersville had a housing cost burden of 30 percent or greater.

Table C2-14 Housing Cost Burden by Elderly Family Type and Tenure

	Owners		Renters		
	Elderly Family	Elderly Non- family	Elderly Family	Elderly Non- family	Total
Household Income <= 30% HAMFI Extremely Low-Income					
TOTAL HOUSEHOLDS <= 30% HAMFI	-	75	-	90	165
Number w/ Cost Burden <= 30%	-	35	-	10	45
Number w/ Cost Burden > 30% to <= 50%	-	-	-	55	55
Number w/ Cost Burden > 50%	-	40	-	25	65
Percent with Cost Burden >30% HAMFI	-	53%	-	89%	73%
Household Income > 30% to <= 50% HAMFI Very Low-Income					
TOTAL HOUSEHOLDS > 30% to <= 50% HAMFI	4	20	-	30	54
Number w/ Cost Burden <= 30%	-	20	-	-	20
Number w/ Cost Burden > 30% to <= 50%	-	-	-	-	-
Number w/ Cost Burden > 50%	4	-	-	30	34
Percent with Cost Burden >30% HAMFI	100%	0%	-	100%	63%
Household Income > 50% to <= 80% HAMFI Low-Income					
TOTAL HOUSEHOLDS > 50% to <= 80% HAMFI	75	15	30	-	120
Number w/ Cost Burden <= 30%	45	15	10	-	70
Number w/ Cost Burden > 30% to <= 50%	30	-	20	-	50
Number w/ Cost Burden > 50%	-	-	-	-	-
Percent with Cost Burden >30% HAMFI	40%	0%	67%	-	42%
Household Income > 80% to <= 100% HAMFI					
TOTAL HOUSEHOLDS > 80% to <= 100% HAMFI	4	10	-	20	34
Household Income > 100% HAMFI					
TOTAL HOUSEHOLDS > 100% HAMFI	35	4	-	-	39

	Owners		Renters		
	Elderly Family	Elderly Non- family	Elderly Family	Elderly Non- family	Total
Total Income <80% HAMFI and Cost Burden > 30%		74		130	204
Percent Income <80% HAMFI and Cost Burden > 30%		30.6%		76.5%	49.5%
GRAND TOTAL HOUSEHOLDS	**118**	**124**	**30**	**140**	**412**

Elderly family constitutes 2 persons with either or both age 62 and over.

HAMFI = HUD Area Median Family Income

Source: HUD Consolidated Planning / Comprehensive Housing Affordability Strategy (CHAS) database, 2015-2019 estimates, Table 7, accessed 2023. https://www.huduser.gov/portal/datasets/cp.html

Resources for Senior-Headed Households

Table C2-15 contains an inventory of the 88 senior rental units in Farmersville. As shown in Table C2-14, there are 170 total senior rental-occupied households, of which 150 are lower-income and 130 are experiencing cost burdens. Based on this data, there is resource need of 42 units for lower-income seniors who rent.

Table C2-15 Inventory of Senior Housing

Housing Development	Address	Number of Units	Description
Village Grove Apartments	675 S Farmersville Blvd, Farmersville, CA 93223	48	Rental units for seniors or individuals 55 and older with a disability.
Palomar Court Apartments	833 S Farmersville Blvd, Farmersville, CA 93223	40	Rental units for seniors or individuals 55 and older with a disability.
Total units:		**88**	

Source: Housing Authority of Tulare County, https://www.hatc.net/subsidized-housing-referral-listing.php, Accessed June 2023.

Table C2-16 provides information for the Farmersville Senior Center, which offers activities, meals, and programs for all seniors (age 55 and over). The Exeter Senior Center is a senior center in the nearby community of Exeter that offers classes, entertainment, and a gathering space for seniors.

Table C2-16 Tulare County CSET Senior Centers

Jurisdiction	Phone	Address
Exeter Senior Center	559-592-5960	301 South E. Street Exeter, CA
Farmersville Senior Center	559-667-2702	623 N. Avery Ave. Farmersville, CA

Source: CSET.org, https://www.cset.org/senior-services?rq=senior%20centers accessed June 2023.

Persons with Disabilities (including Developmental Disabilities)

Table C2-17 identifies the number of residents with one or more disabilities. In Farmersville, 5.9 percent of the total population has one type of disability, while 7.1 percent report two or more disabilities. The total share of population with a disability is greater in Farmersville than the county and state averages. Among those with a disability, 45.4 percent have one disability, while 44.6 percent have two or more types of disability.

Table C2-17 Population by Number of Disabilities

Jurisdiction	Total	With One Type of Disability	With two or More types of Disability	No Disability
Farmersville	10,842	638	767	9,437
Percent		5.9%	7.1%	87.0%
Tulare County	459,748	28,405	25,355	405,988
Percent		6.2%	5.5%	88.3%
California	38,838,726	2,089,065	2,057,886	34,691,775
Percent		5.4%	5.3%	89.3%

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table C18108.

Table C2-18 summarizes the population with a disability by age. In Farmersville, those 65 years and older make up the largest share of disabled individuals at 56.9 percent of the total population This is greater than the countywide average of 41.0 percent and the statewide average of 34.2 percent. The under 18 years age group accounts for the smallest percentage of those with a disability at 7.7 percent.

Table C2-18 Disability by Age for the Total Population

Jurisdiction	Total	Under 18 Years	18 to 64 Years	65 Years and Older
Farmersville	10,842	257	746	402
Percent		7.7%	11.0%	56.9%
Tulare County	459,748	6,680	25,918	21,162
Percent		4.7%	9.8%	41.0%
California	38,838,726	306,806	1,944,580	1,895,565
Percent		3.4%	8.0%	34.2%

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table C18108.

Table C2-19 identifies residents with a developmental disability by age. In Farmersville, most residents with a developmental disability are 18 years and older, while the majority of residents with developmental disabilities are under 18 years old throughout county and state.

Table C2-19 Developmental Disability by Age

Jurisdiction	Under 18 Years	18 Years and Older	Total Population
Farmersville	60	64	124
Tulare County	3,201	3,071	6,272
California	192,384	185,353	377,737

Source: DDS Quarterly Consumer Report, December 2021.

Resources for Persons with Disabilities

Table C2-20 identifies 88 rental units for residents with a disability in Farmersville. With 1,148 residents with a disability over 18 years old in the city (Table C2-18), there is an identified need for rental units for people with a disability.

Table C2-20 Inventory of Housing for People with Disabilities

Housing Development	Address	Number of Units	Description
Village Grove Apartments	675 S Farmersville Blvd, Farmersville, CA 93223	48	Rental units for individuals 55 and older with a disability.
Palomar Court Apartments	833 S Farmersville Blvd, Farmersville, CA 93223	40	Rental units for individuals 55 and older with a disability.
Total Units		**88**	

Source: Housing Authority of Tulare County, https://www.hatc.net/subsidized-housing-referral-listing.php, accessed June 2023.

Housing Plan Program 9 directs the City to support the development of affordable housing for residents with special needs, including those with a disability, by implementing permit streamlining and pursuing funding to facilitate affordable housing development.

Large Households

Table C2-11 above provides information on large households by tenure across all county jurisdictions See Section 2-6, *Large Households* for more information. As shown, there are 857 large households in Farmersville, and 75.5 percent are owner-occupied while the remaining 24.5 percent are renter-occupied.

Resources for Large Households

Table C2-21 compares the number of large households to the number of large units. Units with five or more rooms provide housing options for large households and work to lessen overcrowding. As shown, there are five units in Farmersville with five or more bedrooms but 857 large households, leaving a resource gap of 852 units. Extending the analysis to include units with four or more bedrooms (650 units), there is a resource gap of more than 200 units.

Table C2-21 Large Families by Tenure and Unit Size

Total Occupied Housing Units	Total Large Households	Renter Occupied Large Households	Units with 4 Bedrooms	Units with 5 or more Bedrooms	Total Units with 4 or More Bedrooms
Farmersville	857	210	650	5	655

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Tables B25042, B25009.

Female-Headed Households

Table C2-22 identifies single female-headed households with their own children under age 18. The table values do not include female-headed households with unrelated dependents. Farmersville has a total of 759 single female-headed households with their own children under 18, representing 26.5 percent of total households. This percentage is greater than in the County (24.3 percent) and smaller than the State (26.2 percent).

Table C2-22 Single Female-Headed Households

Jurisdiction	Total Households	Single Female-Headed Households*	Percent
Farmersville	2,862	759	26.5%
Tulare County	139,044	33,727	24.3%
California	13,103,114	3,430,426	26.2%

* Single Female-Headed Households with own children under age 18, does not include unrelated dependents.

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B11012.

Table C2-23 compares female-headed households with children by poverty status. In Farmersville, 30.1 percent of female-headed households have an income below the poverty line. This percentage is lower than the average in Tulare County (36.3 percent) but higher than the statewide average (21.5 percent).

Table C2-23 Female-Headed Family Households with No Spouse Present, by Poverty Status

	City of Farmersville	Percent	Tulare County	Percent	California	Percent
Below Poverty Line	184	30.1%	8,689	36.3%	364,236	21.5%
Above Poverty Line	427	69.9%	15,222	63.7%	1,329,038	78.5%
Total	**611**		**23,911**		**1,693,274**	

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B17010.

Table C2-24 summarizes female-headed family households with no spouse present by poverty status and tenure for Farmersville. Of the 184 female-headed family households below the poverty level, most (156 households, 85.8 percent) are renters, while 28 own their home.

Table C2-24 Female-Headed Family Households with No Spouse Present, by Poverty Status and Tenure, City of Farmersville

	Total	Renter Occupied	Owner Occupied
Below Poverty Line	184	156	28
Above Poverty Line	427	160	267
Total	**611**	**316**	**295**

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table B17019.

Resources for Single-Parent and Female-Headed Households

Tulare County CSET operates family resource centers located in the city of Tulare and Earlimart that provide families with access to services ranging from nutrition and health education to housing and utility assistance to employment training. Each Resource Center has established partnerships and referral processes with local agencies, food pantries, and the faith-based community to be able to provide assistance to families.

Core services of the Tulare County Family Resource Network include family advocacy, parenting education, ongoing intensive family support services, resource, and referrals to partner agencies, family health and wellness, home visitation and child development services.

Table C2-25 provides information on resources for single parents located throughout Tulare County and are available to all Farmersville residents.

Table C2-25 Single-Parent Resources

Organization	Phone	Address
Tulare County Resource Center	559.684.1987	304 E. Tulare Ave., Tulare, CA 93274
Earlimart Family Resource Center	661.849.2960	176 N. Front St., Earlimart, CA 93219
CalWORKS Child Care Program	559.624.8100	1845 North Dinuba Boulevard, Visalia, CA

Source: Tulare County CSET, https://www.cset.org/ accessed June 2023.
Tulare County Family Resource Center Network, http://www.tcfrcn.org/ accessed June 2023.
California Department of Social Services, *CalWORKS Child Care Program*, https://www.cdss.ca.gov/calworks-child-care accessed June 2023.

Extremely Low-Income Residents

Table C2-26 identifies extremely low-income households by tenure in Farmersville. Renter-occupied households make up a larger percentage of total extremely low-income households with 55.3 percent. There are 548 extremely low-income households in Farmersville, comprising 19.1 percent of the total households in the city.

Table C2-26 Extremely Low-Income Households by Tenure

	Income <=30% HAMFI		
Jurisdiction	Owner-Occupied	Renter-Occupied	Total
Farmersville	245	303	548
Percent	44.7%	55.3%	19.1% of total households

Source: US Housing and Urban Development, CHAS 2015-19 (5-Year Estimates)

Table C2-27 summarizes cost burdens among extremely low-income households in Farmersville. As shown, 195 of 245 extremely low income owner-occupied extremely low-income households and 293 of 303 renter-occupied extremely low-income households experience a housing cost burden.

Table C2-27 Extremely Low-Income Households Overpaying by Tenure

	Owner-Occupied			Renter-Occupied			
Jurisdiction	Cost Burden <30%	Cost Burden 30% - 50%	Cost Burden>50%	Cost Burden <30%	Cost Burden 30% - 50%	Cost Burden>50%	Total ELI Households
Farmersville	50	25	170	10	119	174	548
Percent	9.1%	4.6%	31.0%	1.8%	21.7%	31.8%	100.0%

Source: US Housing and Urban Development, CHAS 2015-19 (5-Year Estimates), Table 7.

Analyzing the overlap between special needs groups and extremely low-income households can provide a deeper understanding of each population. The CHAS dataset used to analyze extremely low-income households above, also provides data on senior households, households with a disability and large households. Table C2-28 compares the number of extremely low-income households among the total population, seniors, and residents with a disability. As shown, among the 548 extremely low-income households, 165 are senior households, 525 are households where the householder has at least one disability, and 104 are large households.

Table C2-28 Extremely Low-Income Households

	Total	Senior Households	Householders with a Disability	Large Households
Farmersville	548	165	525	104
Percent	100.0%	30.1%	95.8%	19.0%

Source: US Housing and Urban Development, CHAS 2015-19 (5-Year Estimates), Tables 6 and 7.

The CHAS dataset does not include data for female-headed households with children, however, as shown in Table C2-24 there are 184 female-headed family households with incomes below the poverty line.

Resources for Extremely Low-Income Households

Table C2-29 includes an inventory of affordable housing in Farmersville. As shown, there are 176 affordable units in the city. These units serve households earning less than 80 percent of the AMI. Based on the identified need (548 extremely low-income renter households experiencing housing cost burden) there is a need for additional units affordable to extremely low-income households in the city.

Table C2-29 Inventory of Public Assisted Complexes, Farmersville

Name	Address	City	Zip	Affordable Units
Shasta Villa Apartments	232 North Shasta Street	Farmersville	93223	19
Park Creek Village	398 West Walnut Avenue	Farmersville	93223	47
Gateway Village	200 N. Stevens Avenue	Farmersville	93223	47
Gateway Village II	200 N. Steven Avenue	Farmersville	93223	16
Village Grove Apartments	675 South Farmersville Blvd.	Farmersville	93223	47
Total				**176**

Source: California Housing Partnership, 2023.

The Housing Authority of Tulare County (HATC) provides assistance to lower and moderate-income families in need of housing through the Housing Choice Voucher (HCV) program throughout the county. HATC currently administers approximately 700 public housing units, 3,100 HCV units, and 860 units of local, non-traditional housing.[1] According to HATC, 70 households use HCVs in Farmersville. Through Housing Plan Program 9, the City will facilitate development of housing for extremely low-income households.

Farmworkers

The U.S. Department of Agriculture (USDA) provides countywide farmworker population data generated through the Census of Agriculture. The most recent Census of Agriculture data (2017) identified 23,233 farmworkers in the county.

Table C2-30 provides ACS data for the total farmworker population in Farmersville and Tulare County in 2020. Farmersville had 730 farm workers in 2020, representing 2.6 percent of the total farmworker population across the county.

[1] U.S. Department of Housing and Urban Development, Housing Authority of Tulare County, https://www.hud.gov/program_offices/public_indian_housing/programs/ph/mtw/tulare accessed June 2023.

Table C2-30 Farmworker Population

Jurisdiction	Farmworkers
Farmersville	730
Percent	2.6%
Total Tulare County	**28,627**

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table C24050.

Resources for Farmworkers

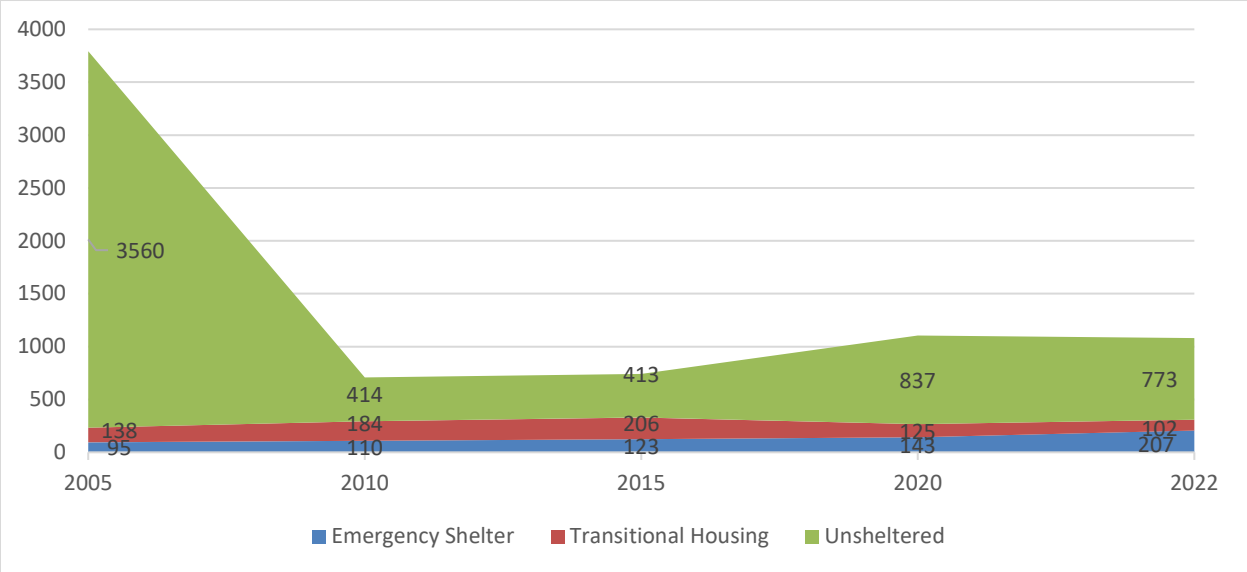
To meet the need of farm workers, the Tulare County Housing Authority operates 191 housing units at the Linnel Farm Labor Center, situated on Walnut Avenue and Road 156, immediately west of Farmersville city limits. The Housing Authority also operates 175 units for farmworkers at the Woodville Farm Labor Center, approximately 15 miles south of Farmersville near the unincorporated community of Woodville. The Housing Authority requires low-income farm worker families to pay 30 percent of their adjusted gross income towards rent. Any additional rent is paid for by the USDA Rural Development program. As reported in Table C2-30, there were 730 farmworkers living in Farmersville in 2020. Despite the housing opportunities in the unincorporated county listed above, there is a significant gap in housing resources for farmworkers in the city.

To address the needs of farmworkers, the City will implement Housing Plan Programs 6 and 9 to support affordable housing development and remove constraints to development of housing types that may fit the needs of farmworkers, such as employee housing.

Persons Experiencing Homelessness

Figure C2-2 shows total households experiencing homelessness by living situation between 2005 to 2022. As shown, 2005 had the highest reported number of households (3,793) within the Continuum of Care (CoC), the majority of which were unsheltered. Data for 2022 indicates that 1,082 households were experiencing homelessness, including 773 that were reported as unsheltered.

Figure C2-2 Homelessness by Type Over Time, Households, Kings/Tulare CoC



Source: U.S. HUD, CoC Homeless Populations and Subpopulations Reports (2005, 2010, 2015, 2020, 2022).

CoC data identifies persons experiencing homelessness by type and race across the regions CoC for the year 2020. Among those counted, 92 percent identified as white, nine percent as Black/African American, and seven percent as American Indian or Alaska Native. In regard to ethnicity, 45 percent identify as Hispanic or Latino (of any race).

The Kings Tulare Homeless Alliance conducted a point-in-time count in 2023. Data from the point-in-time count is reported for Porterville, Visalia, Tulare, and the balance of the county. Among those counted, there were a total of 1,053 people experiencing homelessness in Tulare County and 97 percent of this population lives in either Porterville, Tulare, or Visalia, while the remaining three percent (36 residents) live throughout all other jurisdictions including Farmersville. Table C2-31 identifies those counted in 2023.

Table C2-31 Homelessness by Type (2023)

Jurisdiction	Emergency Shelter	Transitional Housing	Unsheltered	Total
Balance of County, including Farmersville	5	0	31	36
Porterville	56	16	227	299
Tulare	21	36	227	284
Visalia	83	57	294	434

Kings/Tulare Homeless Alliance, *2023 Point in Time Report,* July 7, 2023.

Resources for Persons Experiencing Homelessness

There are no emergency shelters in Farmersville; however, there are two shelters in nearby Visalia approximately seven miles from Farmersville. Visalia Rescue Mission has locations on NE First Avenue and N Burke Avenue and provides 50 beds to men aged 18 years and older and an additional 40 beds to women and children. Additionally, the Tulare Cares Temporary Shelter, located 13 miles from Farmersville on E Walnut Avenue in Tulare, is an active temporary emergency shelter with capacity for up to 178 guests. Emergency housing is permitted by-right in Farmersville in the RM zone.

To address the needs of homeless individuals, the City will implement Housing Plan Programs 1 and 6 to support the development of shelter housing and supportive services for people experiencing homelessness.

C2.10 Housing Stock Characteristics

A community's housing stock is defined as the collection of all housing units located within the jurisdiction. The characteristics of the housing stock, including growth, type, age, condition, tenure, vacancy rates, housing costs, and affordability are important in determining the housing needs for the community. The following sections detail the housing stock characteristics of Farmersville to identify how well the current housing stock meets the needs of current and future residents.

C2.11 Housing Growth

Table C2-32 summarizes the growth of the housing stock in Farmersville by providing the total number of units between 1980 and 2020. The largest growth rate occurred between 1990 and 2000 with a 31 percent change during this 10-year period. Between 1980 and 2010 the housing stock grew on average by 18.9 percent each decade. Between 2010 and 2020, however, production slowed significantly. During this time the number of housing units in the city grew by just 7.2 percent.

Table C2-32 Total Housing Units Over Time (1980 to 2020)

Jurisdiction	1980	1990	2000	2010	2020
Farmersville	1,640	1,732	2,269	2,726	2,921
Percent Change		+5.6%	+31.0%	+20.1%	+7.2%

Source: U.S. Census Bureau, Census 1980(STF1:T65), 1990(STF1:H1), 2000(SF1:H1); ACS 16-20 (5-year Estimates), Table B25001.

C2.12 Housing Type and Tenure

Table C2-33 identifies the total housing units by type in Farmersville, Tulare County, and California. Single-family detached homes comprise the majority of the housing stock, with 78.2 percent of total units. This is greater than the county with 75.0 percent and the state with 57.7 percent. The second most common housing type are three- or four-unit complexes, providing 5.2 percent of the total units in Farmersville.

Table C2-33 Total Housing Units by Type

Jurisdiction	Total	1 unit, Detached	1 unit, Attached	2	3 or 4	5 to 9	10 to 19	20 to 49	50 or more	Mobile Home	Boat, RV, Van, etc.
Farmersville	2,921	2,283	74	52	151	92	129	10	22	108	-
Percent		78.2%	2.5%	1.8%	5.2%	3.2%	4.4%	0.3%	0.8%	3.7%	0.0%
Tulare County	150,079	112,528	4,416	3,704	7,936	4,077	2,262	2,362	3,535	9,096	163
Percent		75.0%	2.9%	2.5%	5.3%	2.7%	1.5%	1.6%	2.4%	6.1%	0.1%
California	14,210,945	8,206,621	1,009,488	339,846	773,994	840,296	721,132	705,450	1,083,247	515,666	15,205
Percent		57.7%	7.1%	2.4%	5.4%	5.9%	5.1%	5.0%	7.6%	3.6%	0.1%

Source: U.S. Census Bureau, ACS16-20 (5-year Estimates), Table C24050.

Table C2-34 indicates housing units by tenure. In Farmersville, 66.0 percent of units are owner-occupied compared to 34.0 percent renter occupied. This is similar to the county (57.1 percent) and the state (55.3 percent).

Table C2-34 Housing Units by Tenure

Jurisdiction	Total	Owner-Occupied	Renter-Occupied
Farmersville	2,862	1,888	974
Percent		66.0%	34.0%
Tulare County	139,044	79,353	59,691
Percent		57.1%	42.9%
California	13,103,114	7,241,318	5,861,796
Percent		55.3%	44.7%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25042

C2.13 Vacancy Rate

Table C2-35 provides data on vacancy status by type for all vacant units. The City's vacancy rate is 2.0 percent, lower than the county average (7.4 percent). Of the total vacant units in Farmersville, other vacant units make up the largest percentage of total vacant units with 76.3 percent, greater than both the county (42.6 percent) and the state (28.2 percent). By comparison to the county and state, Farmersville had no vacant units for seasonal, recreational, or occasional use, far less than the county (27.2 percent) and state (34.1 percent).

Table C2-35 Vacancy Status by Type for Total Vacant Units

Jurisdiction	Total	For Rent	Rented, Not Occupied	For Sale Only	Sold, Not Occupied	For Seasonal, Recreational, or Occasional Use	For Migrant Workers	Other Vacant
Farmersville	59	-	-	14	-	-	-	45
Percent		0.0%	0.0%	23.7%	0.0%	0.0%	0.0%	76.3%
Tulare County	11,035	1,542	449	901	398	3,004	39	4,702
Percent		14.0%	4.1%	8.2%	3.6%	27.2%	0.4%	42.6%
California	1,107,831	227,993	54,898	77,702	53,437	378,023	3,326	312,452
Percent		20.6%	5.0%	7.0%	4.8%	34.1%	0.3%	28.2%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25004

C2.14 Housing Unit Size

Table C2-36 provides housing unit size data for Farmersville, Tulare County, and California. In Farmersville, three-bedroom units (49.3 percent) are the most common housing type, followed by four-bedroom (22.7 percent) and two-bedroom (16.9 percent) units. This is similar to the statewide and countywide housing unit size trend, however, there is a notably larger stock of three-bedroom units in Farmersville and Tulare County when compared to the state.

Table C2-36 Housing Unit Size

Jurisdiction	Total	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 of More Bedroom
Farmersville	2,862	138	176	483	1,410	650	5
Percent		4.8%	6.2%	16.9%	49.3%	22.7%	0.2%
Tulare County	139,044	2,322	7,462	33,867	67,094	25,533	2,766
Percent		1.7%	5.4%	24.4%	48.3%	18.4%	2.0%
California	13,103,114	547,466	1,686,731	3,527,970	4,418,085	2,336,619	586,243
Percent		4.2%	12.8%	26.9%	33.7%	17.8%	4.4%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25042

C2.15 Age and Condition of Housing Stock

Table C2-37 provides data on the total occupied housing units by year built. Farmersville saw the most growth between 1970 and 1979. During this period, 745 units were constructed, representing 20.3 percent of the housing stock. Similarly, growth trends for Tulare County and California indicate that the largest percentage of units were constructed during the 1970s. During this time, 20.3 percent of the housing stock in Tulare County and 17.5 percent of the housing stock in California was constructed. Notably more than half (53.6 percent) of the housing stock in Farmersville was built prior to 1980 and is more than 40 years old.

Table C2-37 Total Occupied Housing Units by Year Built

Jurisdiction	Total	2014 or later	2010 to 2013	2000 to 2009	1990 to 1999	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or earlier
Farmersville	2,862	89	97	501	377	265	745	248	354	127	59
Percent		3.1%	3.4%	17.5%	13.2%	9.3%	26.0%	8.7%	12.4%	4.4%	2.1%
Tulare County	139,044	5,070	4,655	22,770	20,677	20,078	25,486	13,063	12,537	7,205	7,503
Percent		5.0%	7.2%	13.9%	13.9%	8.5%	20.3%	7.4%	10.1%	7.4%	6.4%
California	13,103,114	294,667	234,646	1,432,955	1,448,367	1,967,306	2,290,081	1,740,922	1,767,353	763,029	1,163,788
Percent		2.2%	1.8%	11.0%	11.1%	15.1%	17.5%	13.3%	13.5%	5.8%	8.9%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25036

Table C2-38 provides information on substandard housing units. In Farmersville, there are 42 substandard units, and 30 units (1.1 percent of total units) are lacking plumbing facilities. There is a greater percentage of units lacking plumbing facilities compared to the county (0.4 percent) and the state (0.4 percent).

The City's Code Enforcement Division estimates that approximately two percent of units (57 units) require major rehabilitation and fewer than one percent of units (28 units) citywide are beyond the point of repair. Concentrated areas of substandard housing in the city are primarily in the southern part of the city. Enforcement staff regularly distribute information about the City's home rehabilitation program to property owners undergoing enforcement.

Table C2-38 Substandard Housing Units

Jurisdiction	Total	Lacking Plumbing Facilities	Lacking Kitchen Facilities
Farmersville	2,862	30	12
Percent		1.1%	0.4%
Tulare County	139,044	481	971
Percent		0.4%	0.7%
California	13,103,114	54,342	151,660
Percent		0.4%	1.2%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25049.

C2.16 Housing Costs

Median Home Sale Price

Table C2-39 provides information on the median housing value in Farmersville and comparable jurisdictions from 1980 to 2020. Prices rose steadily from 1980 to 2000, before experiencing a large increase in value from 2000 to 2010. Median home values increased by 95 percent during this period. Increases in value have slowed since 2010, with growth between 2010 and 2020 at 14.9 percent. Each jurisdiction listed in the table experienced a similar pattern of growth in home values, including an extreme spike in value between 2000 and 2010. Porterville is the only jurisdiction listed that saw a decrease in value during any decade (0.6 percent decrease between 2010 and 2020).

Table C2-39 Median Housing Value Over Time (1980 to 2020)

Jurisdiction	1980	1990	2000	2010	2020
Farmersville	36,000	49,100	77,600	151,300	173,800
Percent		36.4%	58.0%	95.0%	14.9%
Dinuba	46,400	67,200	95,700	196,400	210,100
Percent		44.8%	42.4%	105.2%	7.0%
Exeter	44,300	67,900	94,800	211,400	224,000
Percent		53.3%	39.6%	123.0%	6.0%
Lindsay	38,600	56,300	78,000	162,100	189,700
Percent		45.9%	38.5%	107.8%	17.0%
Porterville	52,300	70,800	92,200	183,200	182,100
Percent		35.4%	30.2%	98.7%	-0.6%

Note: Data are not inflation-adjusted to current 2022 dollars.

Source: U.S. Census Bureau, Census 1980(ORG STF1), 1990(STF3), 2000(SF3); ACS 06-10, 16-20 (5-year Estimates), Table B25077.

C2.17 Distribution of Owner-Occupied Units

Table C2-40 compares data on the number of owner-occupied housing units by race In Farmersville, Tulare County, and California. In Farmersville, most owner-occupied units are occupied by residents that identify as white (55.7 percent). This is lower than in Tulare County (73.6 percent) and California (66.7 percent).

Considering ethnicity, 87.2 percent of owner-occupied units are occupied by Hispanic/Latino residents of any race. This percentage is significantly higher than in Tulare County (48.8 percent) and in California (24.0 percent).

Table C2-40 Owner Occupied Units by Race

Jurisdiction	White	Black	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some Other Race	Two or More Races	Hispanic/ Latino of any Race
Farmersville	1,051	9	25	10	4	522	267	1,647
Percent	55.7%	0.5%	1.3%	0.5%	0.2%	27.6%	14.1%	87.2%
Tulare County	58,375	710	784	2,682	45	10,916	5,841	38,702
Percent	73.6%	0.9%	1.0%	3.4%	0.1%	13.8%	7.4%	48.8%
California	4,831,347	286,043	48,100	1,111,582	18,182	576,852	369,212	1,741,159
Percent	66.7%	4.0%	0.7%	15.4%	0.3%	8.0%	5.1%	24.0%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25003.

C2.18 Housing Rents

According to 2016-2020 ACS estimates, the median gross rent in Farmersville was $846 per month (Table C2-41). This was slightly lower than the median for the county ($974) and significantly lower than the state average ($1,586).

Table C2-41 Median Gross Rent, Farmersville, 2020

	City of Farmersville	Tulare County	City % of County	California	City % of State
Median Gross Rent	$846	$974	86.9%	$1,586	53.3%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25064.

Table C2-42 below provides data on median gross rent from 1980 to 2020 in Farmersville. Median gross rent has grown from $198 per month in 1980 to $846 in 2020. Between 2000 and 2010 rents in the city grew by 45.1 percent. From 2010 to 2020 rents grew at a slower rate of 23.5 percent.

Table C2-42 Median Gross Rent Over Time, Farmersville, 2020

	1980	1990	2000	2010	2020
Median Gross Rent	$198	$367	$472	$685	$846
Percent Change		85.4%	28.6%	45.1%	23.5%

Source: U.S. Census Bureau, ACS 16-20 (5-year Estimates), Table B25064.

Table C2-43 provides an overview of median rent for rental housing by number of bedrooms. The median rent data provided by Zumper shows the estimated rent for 2022 and 2023 in Farmersville. Data on median rent by number of bedrooms is limited for the City of Farmersville.

Table C2-43 Median Rent by Number of Bedrooms

Jurisdiction	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
Farmersville*	$757	$624	$1,058	$1,058	$742
Tulare County	$660	$850	$1,425	$1,800	$1,995
California	$1,643	$1,964	$1,996	$2,349	$2,785

Source: Zumper.com, Rental data 2022 and 2023, accessed June 2023.

U.S. Census Bureau, ACS 18-22 (5-year Estimates), Table B25064.

* Median rent data for Farmersville is unavailable. The median rent values presented in the table uses ACS 2022 5-year data.

C2.19 Housing Affordability

Table C2-44 shows the maximum amount that a household can pay for housing each month without incurring a cost burden (overpayment) for Farmersville. A summary of each income category's ability to pay for housing is provided below the table.

Table C2-44 Housing Affordability Matrix – Farmersville (2021)

	Annual Income Limits	Affordable Monthly Housing Costs	Rental Utility Allowance (2020)	Taxes, Insurance, Homeowners Association Fees	Affordable Rent	Affordable Home Price
Extremely Low Income (0-30% AMI)						
1-Person (Studio)	$13,286	$332	$181	$116	$151	$58,814
2-Person (1 BR)	$14,950	$374	$202	$131	$172	$65,602
3-Person (2 BR)	$16,606	$415	$227	$145	$188	$72,369
4-Person (3 BR)	$18,270	$457	$263	$160	$194	$79,157
5-Person (4 BR)	$23,550	$589	$298	$206	$291	$99,189
Very Low Income (30-50% AMI)						
1-Person	$22,143	$554	$181	$194	$373	$98,023
2-Person	$24,917	$623	$202	$218	$421	$109,336
3-Person	$27,676	$692	$227	$242	$465	$120,615
4-Person	$30,451	$761	$263	$266	$498	$131,928
5-Person	$32,708	$818	$298	$286	$520	$137,763
Low Income (50-80% AMI)						
1-Person	$35,429	$886	$181	$310	$705	$156,836
2-Person	$39,867	$997	$202	$349	$795	$174,938
3-Person	$44,282	$1,107	$227	$387	$880	$192,985
4-Person	$48,721	$1,218	$263	$426	$955	$211,085
5-Person	$52,333	$1,308	$298	$458	$1,010	$220,420
Median Income (80-100% AMI)						
1-Person	$44,286	$1,107	$181	$388	$926	$196,045
2-Person	$49,834	$1,246	$202	$436	$1,044	$218,673

	Annual Income Limits	Affordable Monthly Housing Costs	Rental Utility Allowance (2020)	Taxes, Insurance, Homeowners Association Fees	Affordable Rent	Affordable Home Price
3-Person	$55,353	$1,384	$227	$484	$1,157	$241,231
4-Person	$60,901	$1,523	$263	$533	$1,260	$263,857
5-Person	$65,416	$1,635	$298	$572	$1,337	$275,525
Moderate Income (100-120% AMI)						
1-Person	$53,143	$1,329	$181	$465	$1,148	$235,254
2-Person	$59,801	$1,495	$202	$523	$1,293	$262,407
3-Person	$66,424	$1,661	$227	$581	$1,434	$289,477
4-Person	$73,082	$1,827	$263	$639	$1,564	$316,628
5-Person	$78,500	$1,962	$298	$687	$1,664	$330,630

Assumptions:

1. Income limits are the 2021 HCD limits for Tulare County.

2. Affordable housing costs are 30 percent of gross household income.

3. Utility costs are based on Tulare County Housing Authority Utility Allowance Schedule for 2022.

4. Taxes, insurance, private mortgage insurance, and homeowners association dues are calculated at 35 percent of monthly affordable cost.

5. Affordable home price assumes a 30-year fixed mortgage with a 7 percent interest rate and 10 percent down payment.

6. Taxes and insurance costs apply to owners only.

Sources: 2022 HCD Income Limits, Tulare County Housing Authority Utility Allowance Schedule, 2022.

Extremely Low-income Households

Extremely low-income households earn 30 percent or less of the county AMI. According to HCD estimates, extremely low-income households in Farmersville have an annual income of $13,286 or below for a one-person household and $23,550 or below for a five-person household. Extremely low-income households cannot afford market-rate rental or ownership housing in Farmersville. After deductions for utilities, an extremely low-income household can afford to pay approximately $151 to $291 in monthly rent. Given the cost of housing in Farmersville, extremely low-income households could not afford to purchase a home, as the affordable home price for extremely low-income households ranges from $58,814 to $99,189 depending on household size.

Very Low-income Households

Very low-income households earn between 31 and 50 percent of the county AMI, up to $22,143 for a one-person household and up to $32,708 for a five-person household. A very low-income household can generally afford homes offered at prices between $98,023 and $137,763, adjusting for household size. After deductions for utilities, a very low-income household can afford to pay approximately $373 to $520 in monthly rent, depending on household size. Given the cost of housing in Farmersville, very low-income households could not afford to purchase a home or rent an adequately sized unit.

Low-income Households

Low-income households earn between 51 and 80 percent of the county AMI, up to $35,429 for a one-person household and up to $52,333 for a five-person household. A low-income household can generally afford homes offered at prices between $156,836 and $220,420, adjusting for household size. After deductions for utilities, a low-income household can afford to pay approximately $705 to $1,010 in monthly rent, depending on household size. Finding appropriately sized market-rate rental housing in Farmersville can be challenging to households in this income group.

Median-Income Households

Median-income households earn between 80 and 100 percent of the county's AMI – up to $44,286 for a one-person household and up to $65,416 for a five-person household. The affordable home price for a moderate-income household ranges from $196,045 to $275,525. After deductions for utilities, a one-person median-income household could afford to pay up to $926 in rent per month and a five-person low-income household could afford to pay as much as $1,337. Finding appropriately sized market-rate rental housing in Farmersville can be challenging to households in this income group.

Moderate-Income Households

Moderate-income households earn between 100 and 120 percent of the county's AMI, up to $53,143 for a one-person household and up to $78,500 for a five-person household. The maximum affordable home price for a moderate-income household is $235,254 for a one-person household and $330,630 for a five-person family. Moderate-income households in Farmersville could afford to purchase the median priced home; however, finding an affordable adequately sized home could present a challenge for households earning incomes at the lower end of the middle/upper category. The maximum affordable rent payment for moderate-income households is between $1,148 and $1,664 per month. Appropriately sized market-rate rental housing in Farmersville is generally affordable to households in this income group.

Workforce Housing

Federal guidelines define workforce housing as housing that is affordable to households earning incomes within the range of 60 to 120 percent of the AMI (in Tulare County, that range is $50,580 to $101,160). A broader definition of workforce housing is housing that is affordable to people who work in the county. A four-person household with an annual income of $84,300 could afford monthly rent of $1,845 for a three-bedroom housing unit and a home purchase price of $304,998 without being burdened by housing costs. As noted in Table C2-41, the average monthly rental price for a three-bedroom unit is $1,720, just below the affordable rent for the AMI for the county.

As noted in Table C2-4, the salary for the largest number of workers located in Tulare County (educational services, healthcare and social assistance) receives an annual median income of approximately $52,534. At this median income level, a household of two would be considered low-income; if there were two children, then that household would be considered a low-income household.

Cost Burden

Table C2-45 and Table C2-46 identify cost-burdened households by tenure overtime in Farmersville. There has been a decrease in the number of owner-occupied cost-burdened households from 588 households in 2010 to 502 households in 2020. Cost-burdened renter-occupied households have decreased significantly from 636 in 2010 to 368 in 2020.

Table C2-45 Cost Burdened Owner-Occupied Households Over Time

Jurisdiction	1980	1990	2000	2010	2020
Farmersville	121	162	418	588	502
Percent Change		33.9%	158.0%	40.7%	-14.6%

Note: Data are not inflation-adjusted to current 2023 dollars.

Source: U.S. Census Bureau, Census 1980 (ORG STF1), 1990 (STF3), 2000 (SF3); ACS 06-10, 16-20 (5-year Estimates), Table B25077.

Table C2-46 Cost Burdened Renter-Occupied Households Over Time

Jurisdiction	1980	1990	2000	2010	2020
Farmersville	200	314	242	636	368
Percent Change		57.0%	-22.9%	162.8%	-42.1%

Note: Data are not inflation-adjusted to current 2022 dollars.

Source: U.S. Census Bureau, Census 1980(ORG STF1), 1990(STF3), 2000(SF3); ACS 06-10, 16-20 (5-year Estimates), Table B25077.

CHAS data provided by HUD provides information on cost burden by income category based on the HAMFI. This data is included in Table C2-47 below. While the totals do not align exactly with 2020 ACS data presented above, the CHAS data gives insight into which income categories are currently experiencing costs burdens in the city. As shown, households with income less than 50 percent of HAMFI experience a high rate of cost burden, including 488 of 548 extremely low-income households and 324 of 584 very low-income households.

Table C2-47 Cost Burden by Income and Tenure

Row Labels	Owner occupied	Renter occupied	Grand Total
Household income is <= to 30% of HAMFI (extremely low income)	**245**	**303**	**548**
Housing cost burden is <= to 30%	50	10	60
Housing cost burden > 30% but <= to 50%	25	119	144
Housing cost burden is > 50%	170	174	344
Income is greater than 30% but <= to 50% of HAMFI (very low income)	**349**	**235**	**584**
Housing cost burden is <= to 30%	160	100	260
Housing cost burden is > 30% but <= to 50%	125	105	230
Housing cost burden is > 50%	64	30	94
Income is > 50% but <= to 80% of HAMFI (low income)	**515**	**215**	**730**
Housing cost burden is <= to 30%	390	175	565
Housing cost burden is > 30% but <= to 50%	125	40	165
Housing cost burden is > 50%	-	-	-
Income is > 80% <= to 100% of HAMFI (median income)	**139**	**90**	**229**
Housing cost burden is <= to 30%	139	90	229
Housing cost burden is > 30% but <= to 50%	-	-	-
Housing cost burden is > 50%	-	-	-
Income is greater than 100% of HAMFI (moderate income)	**574**	**190**	**764**
Housing cost burden is <= to 30%	564	190	754
Housing cost burden is > 30% but <= to 50%	10	-	10

Row Labels	Owner occupied	Renter occupied	Grand Total
Housing cost burden is > 50%	-	-	-
Grand Total	**1,822**	**1,033**	**2,855**

US Housing and Urban Development, CHAS 2015-19 (5-Year Estimates), Table 7.

C2.20 Assisted Housing Units

Assisted housing units are those that are restricted for use by occupants with limited household incomes. These units are assisted under federal, state, and/or local programs, including HUD programs, state and local bond programs, former redevelopment agency (RDA) programs, density bonus, or direct assistance programs.

At-Risk Housing Units

The California Housing Partnership maintains an affordable housing database to monitor changes in affordable housing and to identify units or housing developments that are at risk of converting to market-rate uses. Assisted units in the preservation data base are classified by the following risk categories:

- **Low Risk:** affordable housing units that are at risk of converting to market rate in 10+ years and/or are owned by a large/stable non-profit, mission-driven developer.
- **Moderate Risk:** affordable housing units that are at risk of converting to market rate in the next 5-10 years that do not have a known overlapping subsidy that would extend affordability and are not owned by a large/stable non-profit, mission-driven developer.
- **High Risk:** affordable housing units that are at risk of converting to market rate in the next 1-5 years that do not have a known overlapping subsidy that would extend affordability and are not owned by a large/stable non-profit, mission-driven developer.

Table C2-48 shows assisted units in Farmersville by estimated affordability end date. As shown, there are 321 assisted units in the city, and 19 are at risk of conversion in the planning period at Shasta Village Apartments. Based on conversations with the owner of Shasta Village Apartments, the owner desires to extend affordability for these units beyond 2024. The City is assisting the owner to achieve the extension.

Table C2-48 Inventory of Public Assisted Complexes – Farmersville

Name	Address	City	Zip	Affordable Units	Total Units	Active Program(s)	Estimated Affordability End Year/Date	Risk Level
Shasta Villa Apartments	232 North Shasta Street	Farmersville	93223	19	20	LIHTC	2024	Very High
Park Creek Village	398 West Walnut Avenue	Farmersville	93223	47	48	LIHTC; HCD	2058	Low
Gateway Village	200 N. Stevens Avenue	Farmersville	93223	47	48	LIHTC; USDA	2063	Low
Gateway Village II	200 N. Steven Avenue	Farmersville	93223	16	16	LIHTC	2063	Low
Village Grove Apartments	675 South Farmersville Blvd.	Farmersville	93223	47	48	LIHTC; USDA	2064	Low
Palomar Court	823 Farmersville Blvd.	Farmersville	93223	39	40	LIHTC; HCD; Local	2065	Low
Los Arroyos II	Southeast Corner of Walnut Avenue and Farmersville Boulevard Farmersville, CA 93223	Farmersville	93223	53	54	LIHTC	2075	Low
Los Arroyos I	Walnut Avenue and Farmersville Boulevard, Farmersville CA, 93223	Farmersville	93223	53	54	LIHTC	2076	Low

Note: All locally assisted or restricted developments may not be included in this list.

Source: California Housing Partnership, 2023.

Costs of Replacement Versus Preservation

To understand the significance if these at-risk units in Shasta Village Apartments are lost from the supply of affordable housing, it is critical to identify the cost of construction of new regulated housing to replace these at-risk units if they are converted to market-rate units, as well as to compare this cost to the potential costs to preserve these units. The cost of developing housing depends upon a variety of factors, including density, size of the units (i.e., square footage and number of bedrooms), location, land costs, and type of construction, as discussed in Chapter C3, *Housing Constraints Analysis* under Non-Governmental Constraints. The typical cost of construction for below market-rate housing in Tulare County in 2022 was $337,540 per unit. Based on this per unit cost, the total cost to replace the 19 high-risk affordable units with new construction would be approximately $6.4 million.

With the high cost of development, the cost of preserving these units is much less than the cost of new construction. The area median income in Farmersville is $44,286. Based on this, a lower-income household making 80 percent of the area median income can afford to pay $10,629 for housing annually without a housing cost burden, which equates to $886 per month. As shown in Table C2-43, the median market rent for a three-bedroom unit in the city is $1,058 monthly. Based on the difference between the affordable rent and current market rate, the cost of preserving such a unit is approximately $172 per month, or $2,067 per year. Using this total, the cost of preserving the 19 units at Shasta Villa Apartments would be approximately $39,273 per year.

Funding Sources for Assisted Housing

There are a variety of funding sources for affordable housing, preservation, and rehabilitation from federal, state, and local sources. HCDHUD administers grants which can assist developers, local governments, and non-profits in constructing housing units.

Permanent Local Housing Allocation (State)

The 2017-18 Regular Session of the California State Legislature passed one bill (of many other housing-related legislation) sought to generate, and distribute directly to cities, funds for new affordable housing production. The Building Homes and Jobs Act (SB 2, Atkins 2017) established a permanent source of funding for affordable housing through a $75 fee on real estate document filings. The City has an agreement with the State for approximately $254,000 in PHLA funds, paid in increments over several years.

Affordable Housing and Sustainable Communities Program (State)

The statewide Greenhouse Gas Reduction Fund's Affordable Housing and Sustainable Communities program is a competitive funding program that encourages collaboration between affordable housing developers, jurisdictions, and transit agencies to fund affordable housing development and transportation infrastructure and amenities. City planning staff will continue to work with their colleagues in various departments to best position affordable housing and sustainable infrastructure planning to align with this program. Additionally, staff will continue seeking partnerships with area technical assistance programs, affordable housing developers, and area transit agencies to collaborate in an application for funding when a viable and competitive housing and transportation development is ready to move forward.

State Low Income Housing Tax Credits (State)

The federal government through the Internal Revenue Service enacted the Low Income Housing Tax Credit Program in 1986. This program has been the largest producer of affordable multifamily rental housing since its inception. Each state has a financing agency that administers the LIHTC Program, and in California that is the Tax Credit Allocation Committee (TCAC). Institutional investors or syndicates are incentivized to invest in long term affordable rental housing projects to receive tax credits. Nonprofit and private developers are eligible to apply for State LIHTC for acquisition, new construction and/or rehabilitation of affordable rental housing.

HOME

This program was created under Title II of the Cranston-Gonzales National Affordable Housing Act enacted on November 28, 1990. For Farmersville, HOME funds are made available on an annual, competitive basis through HCD's HOME Investment Partnerships Program. Farmersville uses HOME funds primarily for first-time homebuyers (down payment assistance) and to offset the costs of impact fees. The City also provides funding from the HOME program for housing rehabilitations and this program is administered through Self Help Enterprises. It should be noted that the 2018 HOME program was frozen for all agencies. The City intends to apply for the next round of funds in 2024.

CDBG Funding (Locally controlled federal funds)

The City is considered a non-entitlement city, as it has a population of under 50,000, a criterion defined by HUD for agencies seeking assistance with CDBG funds. The City received approximately $540,541 from the State administered HUD funds in 2022. Farmersville utilizes Community Development Block Grant (CDBG) funds for owner housing rehabilitation activities, downpayment assistance, infrastructure, public facilities and public services. The balance in the fund as of this writing was $518,725.

C3 Housing Constraints Analysis

Constraints to the development of adequate and affordable housing include market, governmental, infrastructure, and environmental factors. These constraints may result in housing that is not affordable to low- and moderate-income households and may render residential construction economically infeasible for developers. Constraints to housing production significantly impact households with low and moderate incomes and special needs.

According to Government Code Section 65583, local governments are required to analyze governmental and non-governmental constraints to the production, maintenance, and improvement of housing for persons of all income levels and those with special needs and, where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing as part of the housing element update. Where constraints to housing production are related to the city's regulations or land use controls, the city must identify appropriate programs to mitigate these constraints, particularly ones that impact the production of affordable housing or housing for special needs populations.

The following chapter outlines non-governmental, governmental, environmental and infrastructure constraints and was used in the development of specific policies and actions included in the Housing Plan to remove barriers to housing and to incentivize housing production, specifically targeting housing production at all income levels and housing for persons with special needs.

C3.1 Summary of Local Housing Constraints

- The costs of developing housing, including land costs and construction costs, are rising rapidly. There is a lack of federal, state, and local funding and the funding that is available is increasingly competitive. The time and effort needed to identify, compete for, and layer affordable housing funds is a major constraint to development of affordable housing.
- Loan denial rates in Tulare County were higher for Hispanic/Latino applicants (18 percent) compared to non-Hispanic/Latino applicants (16 percent). Although discrimination in mortgage lending is prohibited by the federal Fair Housing Act, other factors may contribute to a potential homebuyer's ability to secure safe financing, such as credit history, savings, and education regarding the home-buying process. The higher denial rate in for Hispanic/Latino applicants indicates a financial constraint to purchasing a home which puts higher pressure on the rental markets.
- Although Farmersville's development regulations allow for a variety of densities throughout the city, development standards are not sufficiently flexible. Residential parking requirements, and Zoning Code provisions restricting residential care homes in residential zones pose constraints to development. Additionally, use permit regulations for small group homes in certain zoning districts could pose a constraint to housing for individuals with special needs.
- Farmersville's development review and impact fees are higher than in other small cities in the region, which may be a constraint to development.

C3.2 Non-Governmental Constraints

The availability of housing is affected by a complex set of interrelated market factors including but limited to cost of land, cost of construction, and availability of financing. These factors contribute to

determining a new home's sale price or the rents required to make a project feasible. Non-governmental constraints include factors outside of direct governmental control that directly impact housing prices. The cost of construction and the availability of financing contribute to the cost of housing and can hinder the production of affordable housing. The following analysis accounts for these non-governmental constraints.

C3.2.1 Land Costs

The cost of land can impede the production of affordable housing. Land costs are influenced by many variables, including land scarcity and developable density (both of which are indirectly controlled through governmental land use regulations), location, site constraints, and the availability of public utilities.

Table C3-1 provides the average price per acre for listed land for sale throughout Farmersville in June 2023. The average price per acre for all plots listed for sale was $360,611. The average price per acre was significantly higher for smaller lots at $621,233 per acre. However, only one property listed was less than ten acres. The price for larger lots listed for sale was $100,000 per acre, on average. Only two properties over ten acres were listed for sale in June 2023.

Table C3-1 Listed Land Prices – Farmersville

Lot Size	Average Price per Acre (Listed)
Less than 10 acres	$621,223.79
10 or more acres	$100,000.00
Average $/acre	$360,611.90

Source: Zillow, Inc., 2023.

Table C3-2 provides the average price per acre for land sold in 2022 and 2021 in Farmersville. The average price per acre for all plots was $133,237, lower than the average list price. The average sales price per acre was higher for smaller lots at $230,240 per acre. The price per acre was less for larger lots, averaging $36,233, which is significantly less than the average price per acre for currently listed properties.

Table C3-2 Sold Land Prices – Farmersville

Lot Size	Average Price per Acre (Listed)
Less than 10 acres	$230,240.78
10 or more acres	$36,233.97
Average $/acre	$133,237.38

Source: Zillow, Inc., 2023.

Conclusion

Land costs in Farmersville are consistent with neighboring cities and are not considered a constraint to development.

Recommended Action

None required.

C3.2.2 Construction Costs

Construction costs can be broken down into two primary categories: materials and labor. A major component of the cost of housing is the cost of building materials, including wood and wood-based products, cement, asphalt, roofing materials, and pipe. The availability and demand for such materials affect prices for these goods.

Another major cost component of new housing is labor. The cost of labor in Tulare County is comparatively low because the area's cost of living is relatively low compared to other areas in California. However, labor for government subsidized housing work is additionally costly for the Central Valley, as wages are rooted in the required State Labor Standards based on higher northern and southern California prevailing wages.

Table C3-3 shows the estimated cost of constructing a basic 2,000 square foot single-family home in Tulare County to be around $337,540. The estimate includes direct and indirect (e.g., insurance, permits, utilities, plans) construction costs, including material, labor, and equipment costs, but does not include the price of land or development impact fees.

Table C3-3 Estimated Construction Cost

Item	Cost
Material	$204,226
Labor	$126,001
Equipment	$7,313
Total	**$337,540**

Source: Promatcher.com, 2023.

There is little that municipalities can do to mitigate the impacts of high construction costs except by avoiding local amendments to uniform building codes that unnecessarily increase construction costs without significantly adding to health, safety, or construction quality. Because construction costs are similar across jurisdictions in Tulare County, the cost of construction is not considered a major constraint to housing production in Farmersville.

C3.2.3 Availability of Financing

Mortgage interest rates have a large influence over housing affordability. Higher interest rates increase a homebuyer's monthly payment and decrease the range of housing that a household can afford. Lower interest rates result in lower costs and monthly payments for the homebuyer.

When interest rates rise, housing prices typically fall to compensate. Similarly, when interest rates decrease, housing prices begin to rise. There is often a lag in the market, causing housing prices to remain high when interest rates rise, until the market catches up. Lower-income households often find it most difficult to purchase a home during this time period.

Where financing is available, construction capital seems to be directed at the best transactions, or those with large, established, and well-capitalized sponsors. Given recent trends of increasing interest rates, the availability of financing is likely to be more of a constraint on new housing construction during this housing element planning period than it has been in the recent past.

Market-Rate Development Financing

As discussed in *Land Costs and Construction Costs*, above market-rate development is generally financed by investors, and the cost to build a project must be recovered by revenue from sales or rents, which drives up the ultimate rent or sales prices of new housing as the component costs increase. A market in which housing supply is limited and demand is high can support higher housing prices, but lower-income segments of the community are priced out. Therefore, it is difficult for the private sector, for-profit developers, and market-rate housing to meet the housing needs of all community members.

Affordable Housing Financing

A description of available funding sources for affordable development is provided in Chapter *C2 Housing Needs Assessment.*

Mortgage and Rehabilitation Financing

The availability of financing affects the ability of residents to purchase or improve a home. Under the Home Mortgage Disclosure Act (HMDA), lending institutions are required to disclose information on the disposition of loan applications and the income, gender, and race of loan applicants. The primary purpose of reviewing the lending activity is to determine whether home financing is available to city residents. The data presented in this section includes the disposition of loan applications submitted to financial institutions for home mortgages, home improvement, and refinance loans.

Lending activity data provides information regarding home financing availability for city residents. The most recent data set available for the County of Tulare from 2022 shows that 18,154 households applied for a home financing loan which includes loans for home purchase, home improvement, and refinancing. As discussed in Chapter 3, *Regional Housing Constraints Analysis*, of the total applications received for home purchase 54 percent of the loans originated while 6 percent were denied.

Conventional loans are made by the private sector (banks, mortgage companies, etc.) and are not guaranteed or insured by the United States (U.S.) government. Conversely, government-backed loans, such as those issued by the Federal Housing Administration, Department of Veterans Affairs, and the Rural Housing Services/Farm Service Agency, are completely or partially insured by the U.S. government. Within the county, 12,849 of the applications received were for conventional loans and 5,305 were for government backed loans. As discussed in Chapter 3, Regional Housing Constraints, 49 percent of the conventional loans were originated, and 18 percent of the applications were denied. Additionally, 43 percent of the government backed loans were originated and 10 percent of the applications were denied.

County data shows that the white racial group had the highest number of loan applications with 5,463 applications. Per racial group, white applicants also had the highest percentage of loans originated out of applications received (56 percent). In terms of ethnicity, Hispanic/Latino applicants comprised 38 percent of the total number of loan applications while non-Hispanic or Latino residents comprised 29 percent. However, of the loan applications made by Hispanic/Latino applicants, only 53 percent of loans originated compared to 56 percent for non-Hispanic/Latino applicants. Hispanic/Latino applicants also had a higher loan denial rate (18 percent) compared to non-Hispanic/Latino applicants (15.5 percent).

Construction Financing Timing

The timing between project approval and requests for building permits affects project viability. Project delays may result from developers' inability to secure financing for construction. In Farmersville, the average time between project approval and request for building permit is typically three to nine months

but varies by type of project. Some projects take years to pull building permits and secure financing. Single-family homes usually experience the least delay (three to nine months). Multifamily housing construction tends to be more complex and usually requires more time between entitlement and building permit issuance (six to nine months).

Conclusion

Although discrimination in mortgage lending is prohibited by the federal Fair Housing Act, other factors may contribute to a potential homebuyer's ability to secure safe financing, such as credit history, savings, and education regarding the home-buying process. Federal Financial Institutions Examination Council (FFIEC) HMDA data, by itself, does not provide insight into these other factors. Therefore, it is important that the city supports housing education and opportunities for all residents.

Recommended Action

The City will implement Housing Plan Program 12 to support moderate-income homeownership by advertising homeownership programs, such as Homes for Heroes and other moderate-income loan opportunities on the City's website.

C3.2.4 Requests for Lower Development Densities

Requests for lower development densities in Farmersville are not common. The City has received one request on a small infill lot zoned for multifamily residential wherein the property owner is interested in building a single-family home.

C3.3 Governmental Constraints

Although local governments have little influence on market factors such as interest rates, local policies and regulations can impact where, how much, and what type of residential development is built. Land use controls, site improvement requirements, fees and exactions, and permit processing procedures, among other policies and regulations, may constrain the maintenance, development, and improvement of housing.

C3.3.1 Land Use Controls

Land use controls provided in the General Plan and the Zoning Code influence housing production in several ways. The permitted and conditionally permitted uses in each district guide new development and provide both developers and the public with an understanding of how vacant land will develop in the future. This includes the density of development that will occur within a particular zone, the compatibility of planned uses in each area, and the range and type of buildings and uses that will be located throughout Farmersville.

C3.3.1.1 General Plan

Farmersville adopted its current General Plan in 2002. The Land Use Element of the City's General Plan sets forth the vision, goals, and policies for the city's urban form and land use patterns, including residential development.

The General Plan Land Use Element establishes land use categories that define the allowable uses and building densities/intensities throughout the city. The various types of housing units allowed in the city include single-family dwellings, multifamily dwellings, townhomes, condominiums, and mobile homes.

Residential densities in Farmersville cover a wide spectrum that promotes the development of various housing types.

The Farmersville General Plan contains the following residential land use designations:

- **Low Density:** maximum of 5 units per acre, or 14 persons per acre.
- **Medium Density:** maximum of 15 units per acre, or 42 persons per acre.
- **Medium-High Density:** maximum of 29 units per acre, or 84 persons per acre.

In addition, the Mixed Use Overlay designation encourages flexibility in new development by allowing for the combination of residential, office and commercial uses on one site, as well as by allowing densities consistent with the RM-2.5 zone, which allows one unit per 1,700 square feet of lot area.

The City has started work on a comprehensive update of the General Plan, expected to be complete in 2025.

Conclusion

The General Plan includes residential land use designations with a density range from one to 29 dwelling units per acre. The density ranges are sufficiently high to allow the development of affordable housing for all income levels. However, the persons per acre standard could be a constraint to development.

Recommended Action

The City will implement Housing Plan Program 7, to revise the Land Use Element to remove the standard for persons per acre for residential land use designations.

C3.3.1.2 Zoning Code

The City regulates the type, location, density, and scale of residential development primarily through the Zoning Code, as well as specific plan development codes. A zoning district is assigned to every parcel in the city and the Zoning Code identifies compatible uses. In general, the City's zoning regulations are designed to balance the goal of providing a mix of residential and commercial land use types while protecting the health and safety of residents and preserving the character of existing neighborhoods. Additionally, development standards such as setbacks, height limits, lot coverage, open space requirements, and parking identified for each zoning district. Some zoning districts may allow similar uses but have different development standards. Development standards may be considered a constraint to the development of housing units if they are too restrictive or reduce the development potential on a specific parcel.

The City's Zoning Code allows residential uses in the following zoning districts:

- **Urban Reserve Zone (U-R):** The purpose of the U-R district is to preserve an agricultural or open space use, land suited to eventual development in other uses until such time as streets, utilities, and other community facilities may be provided or programmed so as to ensure the orderly and beneficial conversion of these lands to non-agricultural use, and to provide appropriate areas for certain predominantly open uses of land which are not injurious to agricultural uses. The U-R district allows for single family dwellings as a permitted use. The minimum site area is 2.5 acres.
- **Single Family Residential Zone (R-1):** The purpose of the R-1 district is to provide living areas where development is limited to low-density housing; to ensure adequate light, air, privacy, and open space for each dwelling; to provide space for community facilities needed to complement urban

residential areas and for institutions which require a residential environment. The R-1 district allows for single family dwellings as a permitted use. The minimum site area is 6,000 square feet.

- **Multiple Family Residential Zone (RM):** The purpose of the RM district is to provide residential areas which can accommodate a suitable mixture of more intensive land uses, including multiple family dwellings, community facilities and offices, compatible with the surrounding area and consistent with the General Plan. This district provides for two multiple family residential base zones: RM-2.5 and RM-4.0. The R-M districts allow for multifamily and single-family development as a permitted use. The minimum site area is 9,000 square feet for apartments and 8,400 square feet for duplexes.

Additionally, boarding and rooming houses are permitted in C-C (Central Commercial) and C-G (General Commercial) Zones.

The P-D (Planned Development) overlay zone may be applied with a CUP to parcels of land of any size in any zone which are found to be suitable for the proposed development. In the P-D overlay zone, all uses shall conform to the area, height, lot width and yard regulations required in the underlying zone except where the total development will be improved by a deviation from such regulations. Maximum increased density shall not exceed twenty-five percent of the standard density permitted in the zone, except as otherwise permitted by state law.

Conclusion

The City's Zoning Code provides for a range of densities and is consistent with the General Plan land use designations.

Recommended Action

None required.

C3.3.2 Residential Development Standards

Table C3-4 shows the development standards for residential zones. The minimum parcel area for residential zones ranges from 6,000 square feet to 2.5 acres. The front setback requirement ranges from 15 to 35 feet for all residential districts and 15 to 35 feet for all non-residential districts. Side setback requirements range from 5 to 12 feet for residential and nonresidential districts. Rear setback requirements range from 10 to 40 feet for all residential and nonresidential districts. The maximum height standard is 18 feet for the R-1 district and 30 feet for all districts. Maximum site coverage is 70 percent for the RM districts and no requirements were provided for the R-1 and U-R districts. Maximum density ranges from 0.4 units per acre in the U-R districts up to 25.62 units per acre in the RM-2.5 district. In cases where residential developers request reductions in lot size or modifications to development standards such as setbacks, the City is able to accommodate these requirements through the use of a Planned Development (PD) overlay.

Table C3-4 Residential Development Standards

Zoning District	Minimum Parcel Area	Minimum Setback (in feet)			Maximum Height (feet)	Maximum Height (Accessory Structure)	Maximum Site Coverage (percent of lot)	Maximum Density (du/acre)
		Front (feet)	Side (feet)	Rear (feet)				
U-R	2.5 acres	35	10 to 20	40	30	30	No standard	0.4
O-S	–	35	10 to 25	45	30	–	–	–
R-1	6,000 sq. ft.	25	5 to 7.5	10	18	18	No standard	7.26
RM-2.5	8,400 to 9,000 sq. ft.	15	5 to 10	10	30	30	70	25.62
RM-4.0	8,400 to 9,000 sq. ft.	15	5 to 10	10	30	30	70	10.89

Notes:

Developments on a corner lot in the U-R district require a setback of 20 feet on the street side.

In the O-S district, interior side set back is 10 feet and street side corner lot setback is 25 feet.

Two story homes in the R-1 district require a side setback of 7.5 feet.

In the RM districts, duplexes require 8,400 square foot parcel areas and apartments require 9,000 square feet.

Developments over one story in the R-M districts require a setback of 10 feet.

Source: Farmersville Zoning Code.

Conclusion

Development standards related to parcel area, setbacks, site coverage, and density do not constrain residential development. The City can accommodate requests for concessions on development standards through use of the Planned Development process. However, limiting maximum height to 30 feet in the RM-2.5 zone is a potential constraint to achieving the maximum density of 25.62 du/ac.

Recommended Action

The City will implement Housing Plan Program 6 to increase the maximum allowable height in the RM-2.5 zone to accommodate the maximum allowable density.

C3.3.2.1 Parking

According to the Terner Center for Housing Innovation at UC Berkeley, parking can cost $25,000 to $75,000 per space to construct. However, given the age of data and the increased cost of land and construction costs discussed above, the costs per parking space are likely much higher.[1] Parking provided in underground or structured parking facilities, or if required to be covered or enclosed, can significantly increase the cost of housing and could affect the feasibility of various housing projects in the city. In addition, requirements for parking space locations and maximum distances from dwelling units may also increase the cost of housing and affect the feasibility of housing projects. Requiring less parking not only reduces the project budget but can allow for more space to build additional housing units.

Table C3-5 provides the residential parking requirements in Farmersville.

[1] Terner Center for Housing Innovation at UC Berkeley, 2016. Available at: http://ternercenter2.berkeley.edu/proforma/

Table C3-5 Residential Parking Requirements

Residential Use		Required Parking Spaces
Single-family units		2 per unit
Multifamily units	Duplexes	2 per unit
	Apartments	1.5 per unit
Senior residential units		1 per unit

Spaces for single family units require a garage or carport.

Multi-family units require one guest parking space per five dwelling units.

Source: Farmersville Zoning Code.

Conclusion

The residential parking requirements, which are standard per unit and not related to the number of bedrooms, may pose a constraint to residential development. The requirement of more than one parking space per unit for one-bedroom and studio multifamily units can be cost prohibitive to the development of such units.

Recommended Action

The City will implement Housing Plan Program 6 to revise parking requirements related to studios and one-bedroom multi-family units to require no more than one space per unit.

C3.3.2.2 Open Space and Park Requirements

Under Chapter 13.36 of the municipal code, the city requires that every person who subdivides land shall dedicate a portion of such land, pay a fee, or both, for the purposes of providing park and recreational facilities to serve future residents of the subdivision. The amount of land required to be dedicated by the subdivider is 0.003 acre per inhabitant which the subdivision is designed to accommodate. The number of subdivision inhabitants shall be determined using a formula of three and one-half persons per single-family dwelling unit or two persons per multifamily dwelling unit or mobile home. The City adopted the following open space impact fees in 2022:

- Detached Dwelling Unit: $6,267 per unit
- Attached Dwelling Unit: $5,410 per unit
- Mobile Home Unit: $4,601 per unit

Where private open space for park and recreational purposes is provided in a proposed subdivision and such space is to be privately owned and maintained by the future residents of the subdivision, such areas shall be credited against the requirement of dedication for park and recreation purposes or the payment of fees in lieu thereof, provided the City Council finds it is in the public interest to do so.

During the fourth and fifth housing element cycles, the City received a number of new applications for residential subdivisions, all of which met the City's park land dedication or in-lieu fee requirements. These recent trends indicate that the City's dedication requirements do not impose undue financial constraints on development.

Conclusion

Open space and park requirements do not pose a constraint to residential development.

Recommended Action

None required.

C3.3.2.3 Density Bonus

Density Bonus provisions are regulated in Chapter 17.88.050 of the Farmersville Municipal Code.

The City provides a density bonus and other incentives or concessions to applicants for residential projects who agree to provide affordable or senior housing pursuant to the provisions of Government Code Sections 65915 through 65918 or successor statute.

Allowed Density Bonuses

The amount of the density bonus granted shall be determined pursuant to state law. The City may choose to grant a density bonus greater than provided in the provisions of Government Code Sections 65915 through 65918 or successor statute for a development that exceeds the requirements of state law. The granting of a density bonus shall not be interpreted, in and of itself, to require a General Plan amendment, zoning change or other discretionary approval separate from the discretionary approval otherwise required for the project.

An application for a density bonus may be made to the planning department on a form prescribed by the department. The application must be accompanied by a fee set by resolution of the City Council.

Government Code Section 65915 indicates that when an applicant seeks a density bonus for a housing development, the density bonus requirements are triggered when the residential development sets aside at least ten percent of the total units as affordable to low-income households; or at least five percent of the total units as affordable to very low-income households; at least ten percent of the total units as affordable for moderate-income households in a common-interest for sale development. Further a density bonus request may be made when at least ten percent of the units are designed as large family household units or all units are reserved for senior citizens, or for a mobile home park restricted to senior citizen residents. Finally, a density bonus can be requested when a developer of affordable housing provides a site of at least one acre for the development of housing for target groups.

Development concessions or incentives that may be provided by the City of Farmersville include a reduction in site development standards; a modification of Zoning Code requirements (including a reduction in setbacks, square footage requirements, or parking spaces; or architectural design requirements which exceed the minimum building standards); approval of mixed use zoning in conjunction with the housing project if commercial, office, industrial, or other land uses will reduce the cost of the housing development, and if such nonresidential uses are compatible with the project; or other regulatory incentives or concessions proposed by the developer or the City of Farmersville which result in identifiable cost reductions. The number of incentives will be based on the following project affordability factors:

- For projects with at least five percent very low income, ten percent lower income, ten percent moderate income units, or ten percent large family units, one incentive or concession is required.
- For projects with at least ten percent very low income, twenty percent lower income, twenty percent moderate income units, or twenty percent large family units, two incentives or concessions are required.
- For projects with at least fifteen percent very low income, thirty percent lower income, thirty percent moderate income units, or thirty percent large family units, three incentives or concessions are required.

Processing of Density Bonus and Incentive Request

The Planning Department prepares a report on the density bonus application, which is reviewed by the Planning Commission. Within 10 days of adopting a resolution on the density bonus, the Planning Department forwards the Planning Commission's recommendation to the City Council and transmits a copy of the commission's resolution to the applicant. The City Council can approve, approve with modifications, or deny the density bonus application. The target units must be compatible in floor plan, furnishings, and exterior design to non-designated units. Further, the target units must be reasonably dispersed throughout the development. Each density bonus project shall record an affordable housing agreement and resale and/or rental restrictive covenant, or other equivalent document approved as to form by the City attorney.

Assembly Bill 1287 Additional Density Bonus for Very Low- to Moderate-income Units

California Assembly Bill 1287, signed into law on June 21, 2023, requires that a city, county, or city and county grant an additional density bonus. Additional density bonuses are to be administered when housing development conforms to specified requirements and provides 24 percent of the total units to lower income households, conforms to specified requirements and provides 15 percent of the total units to very low-income households, or conforms to specified requirements and provides 44 percent of the total units to moderate-income units.

State Density Bonus law prohibits a local government from conditioning the submission, review, or approval of an application pursuant to the Density Bonus Law on the preparation of an additional report or study that is not otherwise required by state law, but provides that this provision does not prohibit a local government from requiring an applicant to provide reasonable documentation to establish eligibility for a requested density bonus, incentives or concessions, waivers or reductions of development standards, and parking rations, as specified.

Conclusion

Chapter 17.88.050: *Density Bonuses* was last updated in 2015. The Zoning Code should be updated to equally provide for density bonuses in all zoning districts where residential uses are permitted and to include provisions relative to density bonuses, incentives, and concessions as required by state law.

Recommended Action

The City will implement Housing Plan Program 6, which requires the City to revise the Zoning Code to refer to State Density Bonus Law.

C3.3.2.4 On/Off Site Improvement Standards

The typical improvements required by the city for development of property include curb, gutter, sidewalk, and street improvements. Extension of necessary utilities is also generally required as new subdivisions are developed. As stated in HUD's study of Subdivision Requirements as a Regulatory Barrier, such requirements can reasonably be considered regulatory barriers to affordable housing if Farmersville determines that the requirements are greater (and hence, more costly) than those necessary to achieve health and safety requirements in the community.[2] Farmersville requires that the subdivider installs improvements in accord with the general requirements set forth in the City's Zoning

[2] U.S. HUD. 2007. Study of Subdivision Requirements as a Regulatory Barrier. https://www.huduser.gov/portal/publications/commdevl/subdiv_report.html

Code; however, the city engineer may require changes in typical sections and details if unusual conditions appertain to the subdivision or arise during the construction to warrant such change.

The Zoning Code states that all developers are responsible for improvements to underground utilities, including sanitary sewers and storm drains, streets and highways, structures, sidewalks, curbs, gutters, driveway approaches, water mains, fire hydrants, street signs, access barricades, streetlights, railroad crossings, and monuments. All required improvements must be constructed under the inspection of the director of public works and/or the city engineer. The cost of inspection of work is to be paid by the subdivider in an amount sufficient to pay for the inspection and no less than two percent of the estimated cost of improvements.

Public improvement requirements for housing projects in Farmersville are consistent with most other cities in the region. For single-family residential subdivisions, Farmersville requires the subdivider to install curbs, gutter, sidewalks, and roadways; extend sewer and water lines; and provide for storm drainage and park facilities. Multifamily housing projects, in addition to providing the above improvements, are required to provide on-site parking, landscaping and irrigation, and trash enclosures.

Improvement Standards

Public improvement standards and approximate values are listed below.

- Local Street – 58-60-foot right of-way with 36 feet of paving, though 32-foot-wide streets have been allowed in planned unit development projects. 2 inches A.C. over 6 inches compacted aggregate. Value: $155 per lineal foot.
- Curb and Gutter – 30 inches from asphalt pavement to back of curb, 7 ½ inches concrete over compacted native soil. Value: $11.50 per linear foot, dependent upon method of construction.
- Sidewalk – 60 inches from back of curb, 4 inches concrete over compacted native soil. Value: range between $4.00 to $5.00/sf.
- Sewer Lateral – 4-inch PVC (dependent upon depth) with minimum slope of ¼-inch per foot. Value: $35 per lineal foot.
- 1-inch Water Service – 1 inch CTS polyethylene pipe, meter boxes, bronze saddles, straps, and bolts. Value: $1,400 each.

Conclusion

On/off site improvement standards for the City of Farmersville are typical of small cities and comparable to surrounding jurisdictions. It should be noted that once the improvements are completed, they are typically granted to the City which will be responsible for operating, maintaining, repairing, and replacing the improvements in perpetuity. The city does not consider the requirements to be greater than those necessary to achieve health and safety requirements.

Recommended Action

None required.

C3.3.2.5 Provision of a Variety of Housing Types

Housing Element law specifies that jurisdictions must identify adequate sites that are zoned to encourage the development of a variety of housing types available to all economic segments of the population. People and households of different ages, types, incomes, and lifestyles have a variety of housing needs and preferences that evolve over time and in response to changing life circumstances.

This includes single-family homes, multifamily housing, accessory dwelling units, mobile homes, agricultural employee housing, homeless shelters, and transitional housing, among others. Table C3-6 summarizes the housing types permitted and conditionally permitted for the City of Farmersville.

Table C3-6 Residential Use Matrix

Residential Use	U-R	O-S	R-1	R-M
Agricultural employee housing	P		P	P
Apartments and Multifamily dwellings				P
Boarding and rooming houses				C
Duplexes				P
Emergency housing				P
Foster homes			C	C
Guest houses	P		P	P
Manufactured and/or mobile homes	P		P	P
Mobile home parks	C		C	C
Nursing and convalescent homes				C
Caretaker residence	P		P	
Attached ADU			P	
Detached ADU			P	
Single-family dwellings	P		P	P
Residential care homes (up to 6)			P	P
Residential care homes (7 to 14 persons)			C	C
Single room occupancy				P
Supportive housing			P	P
Transitional housing			P	P

P = permitted by right
C = Conditional use permit required.
If left blank the use is not permitted.
Source: Farmersville Zoning Code.

Manufactured Housing

Manufactured housing is permitted by right in the R-1, RM, and U-R districts. Manufactured housing is permitted by right as long as the unit is occupied only for residential purposes, the unit conforms to all the residential use development standards for single family structures applicable to the zone, the unit is certified under the National Manufactured Housing Construction and Safety Standards Act of 1974 and has been constructed after June 15, 1976, and the unit is attached to a permanent foundation system approved by the city building inspection division.

Conclusion

Farmersville's manufactured housing requirements are not a constraint to development of this housing type.

Recommended Action

None required.

Accessory Dwelling Units

In recent years, several bills have added requirements for local governments related to accessory dwelling unit (ADU) regulation. Updates to state law in 2016 and 2017 included changes pertaining to the allowed size of ADUs, permitting ADUs by right in at least some areas of a jurisdiction, and reduced parking requirements related to ADUs. More recent bills reduce the time to review and approve ADU applications to 60 days and remove lot size and replacement parking space requirements. AB 68 allows an ADU and a junior ADU (JADU) to be built on a single-family lot, if certain conditions are met. The State has also removed owner-occupancy requirements for ADUs, created a tiered permit fee structure for ADUs based on their size and location, and prohibits fees on units of less than 750 square feet. In addition, AB 671 requires the Housing Element to include plans to incentivize and encourage affordable ADU rentals.

In 2022, two laws were passed that affect ADU law and came into effect in 2023. SB 897 increases the existing height limit for attached and detached ADUs that meet certain conditions. AB 2221 clarifies existing ADU law to close procedural and permitting loopholes for approving ADUs, including the requirement for approving or denying applications within 60 days of application submittal and providing a full set of comments and remedies to applicants with denied applications. Additionally, AB 2221 adds front setbacks to the list of local development standards that local governments cannot impose if they would preclude construction of an attached or detached ADU of at least 800 square feet, that is at least 16 feet in height and that has at least four-foot side and rear yard setbacks.

Farmersville adopted a second unit ordinance in 2006. This ordinance allows the development of second dwelling units on R-1 zoned lots (Single Family Residential) that contain at least 6,000 square feet, the minimum lot size in the R-1 zone.

Farmersville allows the development of attached and detached ADUs by-right in the R-1 district and requires that ADUs do not exceed 25 percent of the existing living area. ADUs are not permitted in any other residential district.

Conclusion

The City of Farmersville does not allow multiple ADUs on residential parcels and does not allow ADUs in multifamily and mixed-use zones, as required by state law.

Recommended Action

The City will implement Housing Plan Program 5, which directs the City to amend the Zoning Code to be in compliance with state law and promote the development of ADUs.

Multifamily

Duplexes, apartments, and multifamily dwellings are permitted by-right in the RM-2.5 and RM-4.0 districts.

Conclusion

Multifamily development requirements are not a constraint to residential development. However, allowing single-family residences by-right in multifamily zones potentially constrains the development of multifamily housing.

Recommended Action

The City will implement Housing Plan Program 6 to amend the Zoning Code provisions for RM districts to prohibit single-family uses.

Group Homes/Residential Care Facilities

Farmersville defines residential care homes as State authorized, certified, or licensed family care homes or foster homes serving six or fewer mentally disordered or otherwise handicapped persons or dependent and neglected children on a twenty-four-hour basis. Residential care homes of up to six residents are permitted by-right in the R-1 and RM districts, in accordance with state law. Residential care homes with more than six residents require a Conditional Use Permit (CUP) in the R-1 and RM districts. There are no restrictions on groupings or concentrations of such homes in the Zoning Code. Further, the Zoning Code does not require improvements beyond those required for permitted uses in the zone (i.e., setbacks, parking, etc.).

Conclusion

Group homes/residential care facility requirements are not a constraint to development of facilities with six or fewer residents. Facilities with seven or more residents should be allowed by-right in all residential zones.

Recommended Action

The City will implement Housing Plan Program 6 to allow care facilities of seven or more residents in all zones that permit residential uses, approved with objectivity and certainty, and subject only to the requirements of residential uses of similar type and form.

Emergency Shelters

The City of Farmersville defines "emergency housing" as housing with minimal supportive services for homeless persons that is limited to occupancy of six months or less by a homeless person. Emergency shelters are allowed by-right in the R-M zone, which also allows residential uses. Emergency shelters must provide minimal supportive services for homeless persons that is limited to occupancy of six months in which no individual or household may be denied emergency shelter because of an inability to pay. Emergency housing is a permitted use in the RM zoning districts and is subject to development standards that apply to other residential uses in those zones. Development standards for emergency shelters housing are as follows:

- Off-street parking: one parking space for every ten beds, plus one space per employee on the maximum shift.

This requirement is not compliant with AB 2339 which requires cities to only require sufficient parking to accommodate all staff working in the emergency shelter, provided that the standards do not require more parking for emergency shelters than other residential or commercial uses within the same zone.

In 2019, AB 101 was passed requiring that a Low Barrier Navigation Center development be a use by right in mixed-use zones and nonresidential zones permitting multifamily uses. A Low Barrier Navigation Center is a low barrier, temporary, service-enriched shelter that helps homeless individuals and families obtain permanent housing. The City will need to amend its Zoning Code to explicitly allow the development of Low-Barrier Navigation Centers, by right, in residential use and mixed-use zones, as well as nonresidential zones permitting multifamily uses.

AB 2339 was passed in 2022 and went into effect January 1, 2023. AB 2339 requires that jurisdictions identify zoning designations where emergency shelters are allowed to include sites that meet at least one of the following:

- Vacant and zoned for residential use;
- Vacant and zoned for nonresidential use and located near amenities and services for homeless individuals;
- Nonvacant and is suitable for use as a shelter in the current planning period.

Zoning designations identified to allow emergency shelters as a permitted use without a discretionary permit must also allow residential uses. The City permits emergency shelters by-right in the R-M zone which also permits residential development, which satisfies that requirement of AB 2339.

Identified sites with the R-M zone must have a minimum area of 200 square feet per unsheltered person to accommodate the number of people experiencing homelessness and the zoning designations identified to allow emergency shelters as a permitted use without a discretionary permit must allow residential uses. Additionally, AB 2339 requires that emergency shelters can only be subject to parking requirements such that the jurisdiction can require sufficient parking to accommodate all staff working in the emergency shelter, provided that the standards do not require more parking for emergency shelters than other residential or commercial uses within the same zone.

The Kings/Tulare County Point-in-time count estimated that 1,053 people experienced homelessness in Tulare County in 2023, including 299 in Porterville, 284 in Tulare, and 434 in Visalia and 36 in the remainder of the county areas including Farmersville. To meet the requirements of AB 2339, 200 square feet per person, totaling 0.17 acres of appropriately zoned land, would be needed to potentially support emergency shelter uses. Table C3-7 lists the parcels that are zoned R-M that are within 0.5 miles of a public transit stop. These parcels have the potential capacity for 1,724 individuals in the R-M zone, which is significantly more than the 36 individuals counted in 2023. There are sufficient parcels that could provide space for potential emergency shelters to meet the requirements of AB 2339.

Table C3-7 Potential Emergency Shelter Capacity Analysis

APN	Acreage	Realistic Capacity (beds)	Vacant/Non-Vacant
130120005	0.48	104	Vacant
130132003	0.84	182	Non-vacant
130120021	1.15	250	Vacant
130120024	0.95	208	Non-vacant
130142016	0.35	76	Vacant
130132024	1.06	230	Vacant
130141009	0.42	91	Non-vacant
130050009	0.42	92	Vacant
130143008	0.25	55	Non-vacant
128330001	4.46	972	Vacant
Total for vacant sites	**7.92**	**1,724**	

Source: City of Farmersville and Tulare County, 2023

Conclusion

The maximum stay requirements set forth for emergency shelters pose a constraint to housing access for residents experiencing homelessness. In addition, the definition of an emergency shelter is restrictive and Farmersville requires more parking than directed by state law.

Recommended Action

The City will implement Housing Plan Program 6 to revise the emergency housing definition in the Zoning Code and remove maximum stay requirements; revise the Zoning Code to be consistent with AB 2339, expanding the definition of emergency shelters to include other interim interventions, including but not limited to, navigation centers, bridge housing, and respite or recuperative care and ensure that emergency shelters are only subject to objective development standards that apply to residential or commercial development within the same zone; and revise parking requirements for emergency shelters to comply with AB 2339.

Transitional and Supportive Housing

"Transitional housing" is defined as buildings configured as rental housing operating under program requirements that require the termination of assistance and recirculation of the assisted unit to another eligible program recipient at some predetermined future point in time, which shall be no less than six months from the beginning of the assistance. Transitional housing units are residential uses subject only to those requirements and restrictions that apply to other residential uses of the same type in the same zone.

"Supportive housing" is defined as housing with no limit on length of stay that is occupied by the target population and that is linked to on-site or off-site services that assist the supportive housing resident in retaining permanent housing, health services, and employment, as needed. Supportive housing units are residential uses subject only to those requirements and restrictions that apply to other residential uses of the same type in the same zone. AB 2162, which went into effect on January 1, 2019, requires that cities allow supportive housing with up to 50 units by-right in multi-family and mixed-use zones and precludes cities from imposing parking requirements on supportive housing developments located within 0.5-mile of a public transit stop.

The City requires that transitional housing be operated under program requirements that call for the termination of assistance and recirculation of the assisted unit to another eligible program recipient at some predetermined future point in time, which shall be no less than six months. Transitional housing is permitted by right in the R-1 and RM districts.

Supportive housing is required to have no limit on length of stay and provides residents with on-site or off-site services that assist the resident in retaining the housing, improving his or her health status, and maximizing his or her ability to live and, when possible, work in the community. This housing can include apartments, single-room occupancy residents or single-family homes. Supportive housing is a permitted use in the R-1 and RM zones, subject to development standards that apply to other residential uses in those zones.

Conclusion

Transitional and supportive housing is permitted by-right in accordance with all other residential dwelling types in compliance with state law. The City complies with AB 2126.

Recommended Action

None required.

Farmworker Housing/Employee Housing

The Employee Housing Act (Health & Safety Code Section 17021.6) requires that any employee housing consisting of no more than 36 beds in a group quarters or 12 units or spaces designed for use by a single family or household shall be deemed an agricultural land use. For all local ordinances, employee housing shall not be deemed a use that implies that the employee housing is an activity that differs in any other way from an agricultural use. No conditional use permit, zoning variance, or other zoning clearance shall be required of employee housing that is not required of any other agricultural activity in the same zone. The permitted occupancy in employee housing in a zone allowing agricultural uses shall include agricultural employees who do not work on the property where the employee housing is located.

In Farmersville, housing for agricultural employees is allowed by-right in agricultural and residential zones (U-R, R-1, and R-M), subject only to the requirements of residential uses. However, agricultural employee housing is not permitted in other zones that allow agricultural uses, including the O-S and I zones.

Conclusion

The Zoning Code does not comply with state law regarding agricultural employee housing.

Recommended Action

The City will implement Housing Plan Program 6 to amend the Zoning Code to ensure compliance with the Employee Housing Act (Health & Safety Code Section 17021.6).

Single Room Occupancy Units (SROs)

SROs are defined as a living or efficiency unit by California Health and Safety Code section 17958.1, intended or designed to be used as a primary residence by not more than two persons for a period of more than 30 consecutive days and having either individual bathrooms and kitchens or shared bathrooms and/or kitchens. Farmersville requires that all Single Room Occupancy (SRO) units provide a minimum floor area of 150 square feet and a maximum floor area of 400 square feet. These units may have kitchen or bathroom facilities and shall be offered monthly or longer. SROs are allowed by right in the RM district.

Conclusion

Requirements for SROs are not a constraint to the development of this type of housing in residential zones; however, this unit type is not allowed in zones that permit hotel or motel uses. Recent development trends indicate that older hotel or motel uses are good candidates for redevelopment as SRO units.

Recommended Action

The City will implement Housing Plan Program 6 to revise the Zoning Code to allow for the development of SROs in zones allowing hotel or motel uses.

C3.3.3 Housing for Persons with Disabilities

California Government Code Section 65583 requires local jurisdictions to analyze potential and actual government constraints on the maintenance, improvement, and development of housing for people with disabilities. This is to ensure that persons with either physical or mental disabilities are provided reasonable accommodation for access to and the enjoyment of all facilities, including housing. Government Code Section 65583(c)(3) also requires housing elements to provide a program to "…address, and where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing for persons with disabilities."

This section analyzes if the zoning policies and permitting procedures in Farmersville impose any constraints to persons with disabilities accessing appropriate and adequate housing in the city.

C3.3.3.1 Definition of Family

Local jurisdictions may restrict access to housing for households that do not meet the jurisdiction's definition for "family." A restrictive definition of "family" that limits the number of individuals living together may illegally limit the development and siting of group homes for persons with disabilities, but not for housing families that are similarly sized or situated. The City of Farmersville's definition of family is as follows:

> "Family" means one or more persons occupying a premises and living as a single housekeeping unit, as distinguished from a group occupying a boarding house, lodging house, or hotel, as defined in the Zoning Code.

Conclusion

The City's definition of "family" is not restrictive.

Recommended Action

None required.

C3.3.3.2 Reasonable Accommodation Process

The federal Fair Housing Act and the California Fair Employment and Housing Act require that cities and counties provide reasonable accommodation where such accommodation may be necessary to afford individuals with disabilities equal housing opportunities. Cities and counties must also consider requests for accommodations related to housing for people with disabilities and provide the accommodation when it is determined to be "reasonable" based on fair housing laws and the case law interpreting the statutes.

Reasonable accommodation is one of the tools intended to further housing opportunities for people with disabilities. These accommodations require that local jurisdictions make modifications or exceptions in their zoning laws and other land-use regulations when accommodations are necessary to afford individuals with disabilities an equal opportunity to use and enjoy a dwelling. For example, it may be a reasonable accommodation to waive a setback requirement so that a paved path of travel can be provided to residents with mobility impairments.

Reasonable accommodation enables developers and providers of housing for people with disabilities a means of requesting from the local government flexibility in the application of land use and zoning regulations or, in some instances, even a waiver of certain restrictions or requirements because it is necessary to achieve equal access to housing.

Farmersville requires that people with disabilities are provided flexibility in the application of land use and zoning regulations and procedures, or even waiving certain requirements, when necessary to eliminate barriers to housing opportunities. This may include yard area modifications for ramps, handrails, or other accessibility improvements; hardscape additions, such as widened driveways, parking area or walkways; building additions for accessibility; tree removal; or reduced off-street parking where the disability clearly limits the number of people operating vehicles. Reasonable accommodation does not include accommodation which would impose an undue financial or administrative burden on the city or require a fundamental alteration in the nature of the city's land use and zoning program.

Requests for reasonable accommodation are reviewed by the City Planner, using the criteria set forth in subsection 17.100.090(E). The City Planner shall issue a written decision on a request for reasonable accommodation within thirty days of the date of the application and may either grant, grant with modifications, or deny a request for reasonable accommodation in accordance with the required findings set forth in subsection 17.100.090(E).

Required Findings

1. The written decision to grant, grants with modifications, or deny a request for reasonable accommodation shall be consistent with fair housing laws and based on the following factors:
    a. Whether the housing, which is the subject of the request for reasonable accommodation, will be used by an individual with disabilities protected under fair housing laws.
    b. Whether the requested accommodation is necessary to make housing available to an individual with disabilities protected under the fair housing laws.
    c. Whether the requested accommodation would impose an undue financial or administrative burden on the city and.
    d. Whether the requested accommodation would require a fundamental alteration in the nature of the city's land use and zoning or building program.
    e. In granting a request for reasonable accommodation, the reviewing authority may impose any conditions of approval deemed reasonable and necessary to ensure that the reasonable accommodation will comply with these findings including the following:
        i. Inspection of the property periodically, as specified, to verify compliance with this section and any conditions of approval.
        ii. Removal of the improvements, where removal could not constitute an unreasonable financial burden, when the need for which the accommodation was granted no longer exists.
        iii. Time limits and/or expiration of the approval if the need for which the accommodation was granted no longer exists.
        iv. Recordation of a deed restriction requiring removal of the accommodating feature once the need for it no longer exists.
        v. Measures to reduce the impact on surrounding uses.
        vi. Measures in consideration of the physical attributes of the property and structures.
        vii. Other reasonable accommodations that may provide an equivalent level of benefit and that will not result in an encroachment into required setbacks, exceed the maximum height, lot coverage, or floor area ratio requirement specified for the zone district; and
        viii. Other conditions necessary to protect the public health, safety, and welfare.

Conclusion

Farmersville provides an appropriate reasonable accommodation procedure. However, the City's Reasonable Accommodation Policy is not easily accessible on the city's website.

Recommended Action

The City will implement Housing Plan Program 8 to provide a link to its Reasonable Accommodations policy on the Housing page of the City's website with contact information for city staff who manage the application process.

C3.3.4 Planning and Development Fees

The City charges various fees and assessments to cover the cost of processing permits and providing certain services and utilities. Fees for a site plan review, variance, zone change, lot line adjustment, or annexation are higher than most other similarly sized jurisdictions in Tulare County, such as Exeter, Woodlake, and Dinuba. Table C3-8 describes some of the residential development planning fees for both single- and multifamily development.

Table C3-8 Residential Development Planning Fees

Fee Title	Amount
Conditional Use Permit	$1,780
CUP Amendment	$955
CUP Extension	$830
Site Plan Review	$2,210
Minor Deviation	$240
Variance	$1,780
Zone Change	$2,275
General Plan Amendment	$2,275
Specific Plan Review/Amendment	$2,275
Combined GP Amend/Zone Change Map	$2,765
Combined Tent Tract/Planned Dev	$4,765
Tentative Parcel Map	$3,015
Tentative Tract Map	$6,060
Lot Merger	$1,515
Lot Line Adjustment	$2,210
Annexation	$9,125
Categorical Exemption	$315
Environmental Impact Report	Actual
Time Extension	$830

Source: Farmersville Service Fee Schedule, dated January 1, 2022.

Table C3-9 shows development impact fees for single-family and multifamily developments, set into effect in July 2022.

The following information is provided on recent residential development in Farmersville. Self Help Enterprises (SHE) has completed Phase 1 and is nearing completion of Phase 2 of an affordable

multifamily housing project called Los Arroyos. The project contains a total of 107 dwelling units (plus a manager's unit).

According to SHE, the total hard cost construction of Los Arroyos I was $16,071,958 in addition to $1 million for land and solar combined ($212,500 land and $836,034 solar) and $1 million for fees and permits ($625,555 fees and $400,000 permits) for a total of approximately $18.1 million.

Farmersville received one application for a single-family residential development over the past 10 years, although that development was never completed. As such, data for single-family development is not available. However, costs are expected to be similar to neighboring smaller jurisdictions such as Woodlake, Exeter and Lindsay.

Table C3-9 Residential Development Fees

	Cost Per Unit	
Number of Units	**Multifamily**	**Single Family**
Law enforcement facilities	$2,318	$1,698
Fire Rescue facilities	$1,870	$1,466
Circulation system facilities	$411	$760
Storm drainage facilities	$861	$2,623
Water distribution facilities	$1,554	$2,097
Wastewater collection facilities	$759	$808.00
General government facilities	$1,122	$1,122
Library collection and computers	$37	$44
Community center facilities	$2,058	$2,384
Park land and park improvements	$5,410	$6,267
Total per Unit	**$16,400.00**	**$19,269**

Source: City of Farmersville, Adopted Summary of Development Impact Fees, July 1, 2022.

According to a 2019 National Impact Fees Survey of 37 jurisdictions in California, the average impact fees are $37,471 per single family unit and $21,703 per multifamily unit[3]. Farmerville's fees for a single-family unit and multifamily are less than the survey average.

Single-family and multifamily development fees in Farmersville are higher than similarly sized cities in the county, such as Exeter, Lindsay, and Woodlake. Fees for a single-family unit are approximately $19,269 in Farmersville and range from $12,009 to $16,482 in the cities of Exeter, Lindsay, and Woodlake. Similarly, fees for a multifamily unit are approximately $16,400.00 per multifamily unit in Farmersville and range from $11,478 to $15,486.67 per unit in other cities. Table C3-10 below shows a comparison of development fees in other Tulare County jurisdictions.

[3] National Impact Fee Survey, 2019. Available at http://www.impactfees.com/publications%20pdf/2019survey.pdf

Table C3-10 Residential Development Fee Comparison

Jurisdiction	Total Cost Per Unit	
	Multifamily	Single Family
Dinuba	$32,796 to $33,962	$37,059 to $38,888
Exeter	$10,495.25	$16,482
Farmersville	$16,400.00	$19,269
Lindsay	$40,342.88	$12,009
Porterville	$12,000 to $14,500	$17,000 to $20,000
Tulare	$17,781	$18,677
Woodlake	$11,478	$14,607

Conclusion

Planning and development fees are higher than similarly sized cities and therefore may be a constraint to development.

Recommended Action

The City will implement Housing Plan Program 8 to review planning and development fees and revise fees to be competitive with other cities in the county.

C3.3.5 Permit Types

The City of Farmersville provides the full range of services relating to the development of property within its city boundaries and Sphere of Influence. Subdivision maps, parcel maps, conditional use permits, and building plans are all processed by the city.

Site Plan Review

For Site Plan Review, the site plan may only be denied if the project does not comply with city codes, standards, policies, or California Environmental Quality Act (CEQA) requirements. The Site Plan Review process follows objective approval standards and is not considered a constraint to development. The Site Plan Review Committee reviews the application and approves or denies a project within 15 days and provides recommendation to the Planning Commission. The Planning Commission decides on the project (although this decision is not subject to a public hearing). The decision can be appealed to the City Council.

The findings for Site Plan Review are:

1. All applicable provisions of the Zoning Code are complied with.
2. The following are so arranged that traffic congestion is avoided and pedestrian and vehicular safety and welfare are protected and there will be no adverse effect on surrounding property:
    a. Facilities and improvements
    b. Vehicular ingress, egress and internal circulation
    c. Setbacks
    d. Location of service
    e. Walls and Landscaping

3. Proposed lighting is deflected away from traffic areas and adjacent residential areas.
4. On-site signs will not interfere with visibility or traffic circulation.
5. The required findings shall conform to all established policies and regulations of the city.

Conditional Use Permits

The CUP review process consists of an analysis to verify consistency of the project with the City's Zoning Code and General Plan, and requirements of CEQA. A conditional use permit requires a public hearing and approval by the city's Planning Commission. The Planning Commission may impose reasonable conditions upon a project, subject to appeal to the City Council. The Planning Commission may impose reasonable conditions upon a project, subject to appeal to the City Council.

To be able to approve the CUP, the Planning Commission must be able to make the following findings:

1. That there are circumstances or conditions applicable to the land, structure or use which makes the granting of a use permit necessary for the preservation and enjoyment of a substantial property right.
2. That the proposed location of the conditional use and the conditions under which it would be operated or maintained will not be detrimental to the public health, safety or welfare, or materially injurious to, or inharmonious with, properties or improvements in the vicinity.
3. That the proposed location of the conditional use is in accordance with the objectives of the Code and the purposes of the district in which the site is located.
4. That the proposed use will comply with each of the applicable provisions of this ordinance. A use permit may be revocable, may be granted for a limited time period, or may be granted subject to such conditions as the Planning Commission may prescribe.

Requirements related to neighborhood character ("inharmonious with properties or improvements in the vicinity") are subjective.

Variances

An applicant must request a variance when seeking an exception to specific requirements of the Zoning Code, Parking Regulations, and Sign Regulations, if those requirements would result in a hardship due to physical conditions of a property. The Planning Director or the Planning Commission acts on variance requests. Administrative action on a variance request takes place two to four weeks after the application is deemed complete; additional time is necessary if Planning Commission review is required.

General Plan Amendment and Zone Change

Projects that are not consistent with the General Plan or Zoning Code may require approval of a General Plan Amendment or a Zone Change. Approval of these types of proposals is discretionary, subject to CEQA, and requires public hearings before the Planning Commission and City Council.

Conclusion

Findings for discretionary permits that require projects not to be "inharmonious with properties or improvements in the vicinity" are subjective.

Recommended Action

The City will implement Housing Plan Program 6 to revise findings for discretionary permits to be objective.

C3.3.6 Permit Procedures and Processing Times

Farmersville contracts with consultants for planning and engineering services and contracts with Tulare County for building plan check and inspection services.

Processing of applications usually begins within days of receiving the application. A typical single family residential subdivision will require four to six months to process, from submittal of application to filing of final subdivision map with the Tulare County Recorder's Office. Each processing phase of a typical residential subdivision is listed below along with the amount of time required to process each phase. Subdivision applications that require an annexation typically add four months to the processing time. The average number of days from entitlement to building permit is 199 days, or approximately 6 to 7 months, based on a review of projects from the past 18 months.

Table C3-11 Timelines for Permit Procedures

Type of Approval or Permit	Typical Processing Time	Approval Body
Site Plan Review/Design Plan Review	4 - 6 weeks	Planning Commission (PC)
Minor Modifications	1 day	City Staff
Conditional Use Permit	4 - 8 weeks	PC
Variance	4 - 8 weeks	PC
Zone Change	3 - 5 months	PC and City Council (CC)
General Plan Amendment	3 - 5 months	PC and CC
Tentative Subdivision Map	3 - 5 months	PC, CC
Final Subdivision Map	4 - 6 weeks	CC
Tentative Parcel Map	4 - 8 weeks	PC, CC if easements
Final Parcel Map	4 - 6 weeks	CC
Negative Declaration	2 months	PC and CC
Environmental Impact Report	4 - 6 months	PC and CC
Single Family Unit/Bldg. Permit Review	3 - 4 weeks	Building Official

Source: Farmersville Zoning Code

Table C3-12 shows the typical processing procedures by project type for Farmersville. As shown, single-family units have the shortest estimated processing times (one week) while planned unit development has the longest (3-4 months). Farmerville's permit processing times are consistent with typical permit processing times for cities in Tulare County.

Table C3-12 Typical Processing Procedures by Project Type

	One Single-Family Unit	Subdivision	Multifamily Units	Planned Unit Development
			Site Plan Review	
		Tentative Map	Conditional Use Permit	Conditional Use Permit
		Environmental Assessment	Environmental Assessment	Environmental Assessment
		Final Map		
		Final Map		
Estimated Processing Time	1 week	2 - 3 months	2 months	3 - 4 months

Source: Farmersville Zoning Code

Building Permits

Building permit review timelines for all projects are as follows depending on complexity and scope of work:

- First review: 1 to 20 working days
- Second review: 1 to 15 working days
- Third review: 1 to 15 working days
- Fourth review: 1 to 10 working days
- Fifth review: 1 to 10 working days

Conclusion

Permit procedures and processing times are not considered a constraint to development.

Recommended Action

None Required.

State Streamlining

Under the 5th Cycle Housing Element reporting period (2015-2023), the City of Farmersville has made insufficient progress toward its Above Moderate income RHNA and is subject to SB 35 streamlining provisions for projects that include at least 10 percent affordability. SB 35 requires that eligible projects be reviewed for compliance and consistency with the city's objective standards and are not subject to discretionary processes, such as CEQA environmental review and public hearings. Eligible projects with 150 units or fewer must be approved within 90 days and projects with more than 150 units must be approved within 180 days.

The City has not adopted procedures for processing SB 35 applications nor has it created a checklist for SB 35 applications. There have been no projects approved through SB 35 ministerial approval in Farmersville.

Conclusion

The lack of permit procedures and resources for SB 35 applicants may be a constraint to development.

Recommended Action

The City will implement Housing Plan Program 6 to establish written procedures for the processing of SB 35 and SB 330 projects pursuant to State law.

C3.3.7 Short-Term Housing Rentals

Farmersville does not have a short-term housing rental program that regulates short-term vacation rentals in the jurisdiction. As of July 2023, there were no active VRBO and Airbnb rentals in the city. Therefore, short-term rentals do not pose a constraint to long-term rental housing supply.

Conclusion

Short-term rentals are not considered a constraint.

Recommended Action

None Required.

C3.3.8 Code Enforcement

Building codes regulate the physical construction of dwellings and include, for example, the plumbing, electrical, and mechanical codes. Farmersville follows the 2013 Uniform Building Code (UBC) as established by state law and as such, has little control over State standards. There have been no local amendments to the UBC.

Building codes are enforced by the city through inspections. Inspections normally occur because of building permits for new construction, remodels, or rehabilitations. Other inspections may result from requests from individuals for assessments of building quality or from enforcement complaints or when the inspector notices construction occurring without permits. The City contracts with the Tulare County Building Department for plan check and inspection services.

The City has the power to inspect and declare unsafe any structure or piece of equipment, be it existing or under construction, that does not meet specific Municipal Code standards. These include, but are not limited to, structures with insufficient modes of egress; structures that are unsafe or that have been made structurally unsound due to fire, earthquake, or other natural disaster; buildings that are deemed a public nuisance; and buildings that have been constructed or maintained in violation of local or state law. Once a building has been declared unsafe, the building official may issue notice that the structure be repaired, vacated, or demolished within a reasonable amount of time and with the appropriate permits.

The enforcement of building codes in the city is centered on the inspection of new construction and remodels or renovations requiring building permits. However, for existing structures, City staff prioritize code enforcement complaints according to the severity of the violation on the community and individuals. Situations that appear to pose a serious risk to health and safety are given top priority; others are pursued in the order in which they are received, as resources are available. In most cases for non-emergency complaints, a warning letter or courtesy notice is sent to the alleged violator to verify the status of the potential compliant and to obtain compliance.

Conclusion

The City has not adopted the most recent (2022) California Building Code.

Recommended Action

The City will implement Program 11 to adopt the most recent version of the California Building Code in the Zoning Code.

C3.3.9 Transparency in the Development Process

To increase transparency in the development process, the City's website publishes resources that help developers and homeowners navigate the residential development and home improvement processes. Information pertaining to planning and building is spread across multiple department webpages on the City's website. The City's Departments webpage (http://www.cityoffarmersville-ca.gov/196/Departments), Planning & Development webpage (http://www.cityoffarmersville-ca.gov/201/Planning-Development), and the Code Enforcement Division of the Fire Department webpage (http://www.cityoffarmersville-ca.gov/198/Code-Enforcement) provide links to planning and building permit resources, including permit information, online permit submittal, fee estimate calculator, and staff contacts. The zoning map and permit application checklists are available on the City's website; however, links to these documents are broken and can only be accessed by directly searching for them.

Conclusion

While the City's website provides information on permit processing, application checklists, zoning, and staff contacts, this information can be difficult to locate and is not easily accessible.

Recommended Action

The City will implement Housing Plan Program 8 to evaluate its compliance with the new transparency requirements per Government Code Section 65940.1(a)(1) and make changes as necessary, as well as update the City's website to provide clear links to planning and building resources, applications, and checklists.

C3.3.9.1 Cumulative Impact of Development Standards

The housing element must analyze the cumulative effect of development standards on the development of housing and/or achieving densities after considering how all standards and/or ordinances relate to each other. In Farmersville, overly restrictive density requirements, parking requirements, height limits, multifamily requirements, together with comparably high development impact fees, may constrain development of multifamily housing.

C3.4 Environmental Constraints

A community's environmental setting affects the feasibility and cost of developing housing. Environmental issues range from the availability of water to the suitability of land for development due to potential exposure to seismic, flooding, wildfire, and other hazards. If not properly recognized and accommodated in residential design, these environmental features could potentially endanger lives and property. This section summarizes environmental constraints to housing development in the city.

C3.4.1 Floodplains

Maps prepared by the Federal Emergency Management Agency indicate that portions of the city are within the 100-year and 500-year flood plains. Most of the 100-year flood plain area is situated west of

Farmersville Boulevard, south of Walnut Avenue. Most of this area is fully developed. Much of the remaining area of the community including future growth areas are either in the 500-year flood zone or in areas of minimal or no flooding. The City has enacted measures to mitigate flood risk including elevated building pads and foundations above the known flood level. Complying with flood plain requirements (such as elevating building pads) does generate an added cost but is not a constraint.

C3.4.2 Seismic Zones

While Farmersville is in proximity to major California fault lines there is no specific threat or hazard from seismic ground shaking to residential development within the county, and all new construction will comply with current local and state building codes. Between the minimal historical hazard of earthquakes in the city and the use of the most current building codes and construction techniques, earthquakes pose a less than significant danger to residential development.

C3.4.3 Wildfire

The California Department of Forestry and Fire Prevention (CAL FIRE) has designated the entire city of Farmersville and surrounding area as "Local Responsibility Area Unzoned." The City of Farmersville Fire Department is responsible for wildfire prevention activities in the city. While there are no fire severity zones within the city boundaries, the City ensures that developments comply with California Fire and Building Code requirements for health and safety though the city's site plan review process.

C3.4.4 Soil

Agricultural uses may contaminate sites due to the use of pesticides and other chemicals. Soil contamination may be a concern if a Phase One Environmental Site Assessment determines there is a potential for soil contamination and contamination is substantiated by a Phase Two study. The City ensures that the necessary steps are taken to clean up residual hazardous wastes on any contaminated sites proposed for redevelopment or reuse. Soil evaluations are required as needed to ensure that risks are assessed, and appropriate remediation is provided. Developing housing on these sites can involve costs to remediate contaminated soil or groundwater. The remediation cost would typically be on the developer to address the clean-up and potential site contamination is not considered a constraint.

Conclusion

Environmental conditions in Farmersville are not considered a constraint to development.

Recommended Action

None required.

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C4 Farmersville Housing Resources

This section documents the methodology and results of the Site Inventory analysis conducted to demonstrate the City of Farmersville's ability to meet the 6th cycle Regional Housing Needs Allocation (RHNA). Infrastructure, services, and financial and administrative resources that are available for the development, rehabilitation, and preservation of housing in the City of Farmersville are also discussed in this chapter. Background information on regional development trends and analysis are included in Chapter 4, *Regional Housing Resources.*

The Site Inventory was developed through the analysis of development trends, the identification of vacant land, and community input. Community engagement events included an online, interactive community survey, where residents identified areas for potential future residential development throughout Farmersville, and a virtual community workshop held via Zoom on May 31, 2023.

C4.1 Regional Housing Needs Allocation (RHNA)

This Housing Element covers the planning period of December 2023 through December 2031 (also referred to as the 6th housing cycle). The Tulare County Association of Governments (TCAG), as the Metropolitan Planning Agency for the Tulare County region, is responsible for preparing the RHNA for the region based on recent growth trends, income distribution, and capacity for future growth. This methodology must align with state objectives, including but not limited to:

- Promoting infill, equity, and environmental protection
- Ensuring jobs-housing balance
- Affirmatively furthering fair housing

Farmersville must identify adequate land with appropriate zoning and development standards to accommodate its RHNA or assigned share of the region's housing need. Farmersville's RHNA is 654 units, which is distributed among five income categories, as shown below in Table C4-1.

Table C4-1 Farmersville 2023-2031 RHNA

Income Category (Percent of Tulare County Area Median Income [AMI])	Number of Units	Percent of Total Units
Extremely Low (< 30% of AMI)*	68	10.4%
Very Low (30 to 50% of AMI)	67	10.2%
Low (51 to 80% of AMI)	83	12.7%
Moderate (81% to 120% of AMI)	121	18.5%
Above Moderate (> 120% of AMI)	315	48.2%
Total	**654**	**100%**

* The RHNA does not project the need for extremely low-income units, but pursuant to state law (AB 2634), the City must project its extremely low-income housing needs based on Census income distribution or assume 50 percent of the very low-income units required by the RHNA as extremely low-income units. The City's very low-income requirement is 135 units. The number of extremely low-income units that the City must plan for shown here was projected using Census data. According to the Comprehensive Housing Affordability Strategy (CHAS), data developed by HUD, 40.5 percent of households in the city earned less than 50 percent of the AMI. Among these households, 50.4 percent earned incomes below 30 percent (extremely low-income). Therefore, the City's RHNA allocation of 135 very low-income units was distributed as 68 extremely low-income (50.4 percent of the 135 very low-income units required by the RHNA) and 67 very low-income units. However, for purposes of identifying adequate sites for the RHNA allocation, state law does not mandate the separate accounting for the extremely low-income category.

Source: TCAG, 2022. Final Regional Housing Needs Plan.

C4.2 Meeting the RHNA

Each jurisdiction must identify adequate land with appropriate zoning and development standards to fulfill its required RHNA. Jurisdictions can use planned and/or approved projects, estimated accessory dwelling unit (ADU) production, and vacant and/or underutilized sites to accommodate the RHNA. In some cases, rezoning must occur to ready sites for future residential development.

Once the City has demonstrated In the Housing Element that it has the development capacity to accommodate the RHNA, it has two implementation-related obligations during the planning period:

1. Maintain a "no net loss" policy of its residential development capacity over the housing element planning period, meaning that sites listed in the adopted Housing Element land inventory may not be down-zoned to a lower-density residential zone or rezoned to a nonresidential zone, unless the City up-zones or rezones alternative sites prior to the density reduction or rezone on the inventoried site.
2. Continue to allocate available funding resources to and facilitate the development of affordable housing.

C4.2.1 RHNA Credits

The City may use units in approved and/or permitted residential developments which will be completed within the planning period, and anticipated ADU production, as credit towards fulfillment of its RHNA.

Planned and Approved Projects

Residential developments approved and permitted, but not yet built (also called "pipeline projects") can be credited towards the City's RHNA provided it can be demonstrated that the units can be built by the end of the 6th cycle planning period. Similarly, units that have not yet received a building permit as of June 30, 2023, can also be credited towards the RHNA. Affordability (the income category in which the units are counted) is based on the actual or projected sale prices, rent levels, or other mechanisms establishing affordability of the units within the project. Pipeline projects that can count toward the City's 6th cycle RHNA are listed in Table C4-2. All pipeline projects are affordable to low-, moderate-, and above moderate-income households.

Figure C4-1 shows the locations of pipeline projects. For the purposes of analysis in this Housing Element, the city is divided into four neighborhoods:

- East Farmersville
- North Farmersville
- South Farmersville
- West Farmersville

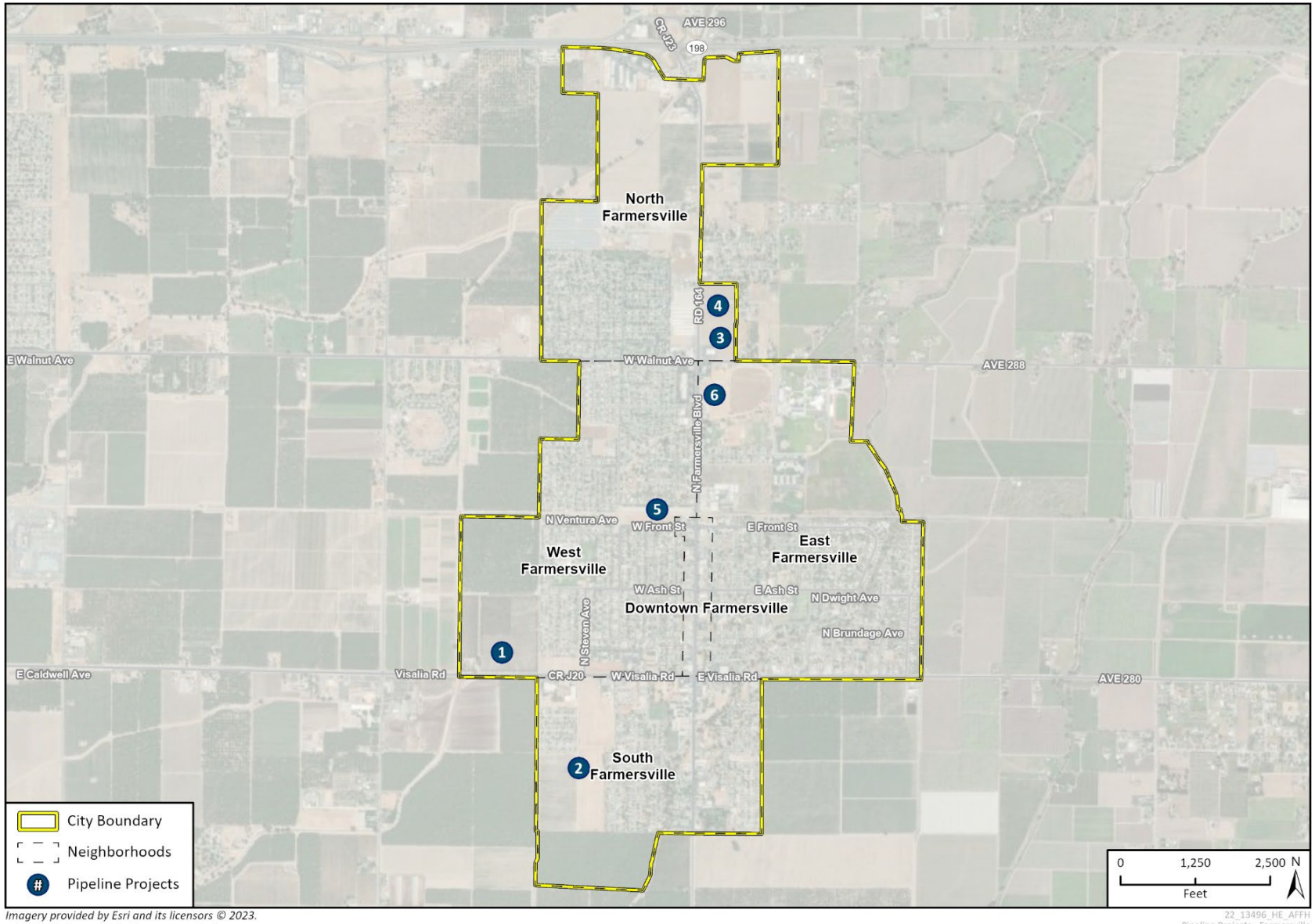
These pipeline projects are mostly concentrated in North and West Farmersville and consist of single-family and multifamily projects. The projects Cameron Creek and Eagle Meadows both include moderate-income units available through financing from the United States Department of Agriculture (USDA) and the Federal Housing Administration. The Gardenia Courtyard apartments and Los Arroyos are able to achieve all low-income units through tax credits. Based on the status of these projects, all units are expected to receive Certificates of Occupancy during the 2023-2031 planning period. There are no known barriers that would preclude development of these projects.

Table C4-2 Pipeline Projects

Map ID	Project Name	Assessor's Parcel Number (APN)[1]	Very Low-Income Units	Low-Income Units	Moderate-Income Units	Above Moderate-Income Units	Total Units	Status
1	Cameron Creek	128320001, -003	38	0	75	38	151	Application submitted. Construction to begin in 2024.
2	Eagle Meadows	130040014, -020	60	0	121	61	242	Application submitted. Construction is expected to begin in 2025.
3	Camino Castaneda	111290002, -014	0	0	0	24	24	Approved by the City Council on 2/13/2023. Construction to begin in 2024.
4	Gardenia Courtyards	111290015	0	142	0	0	142	Application submitted. Construction to begin in 2025.
5	Petunia Estates	128040026	0	0	0	18	18	Final subdivision map approved.
6	Los Arroyos	129010082	107	0	0	0	107	Construction completed in 2024.
Total			**205**	**142**	**196**	**141**	**684**	

[1] An assessor's parcel number is a series of numbers/digits that are used as a file number to inventory or identify property. Each parcel is assigned an APN that corresponds to a location on a page in a book of maps maintained by the County Assessor's Office.

Figure C4-1 Pipeline Projects



C4.3 Summary of RHNA Credits

The City can satisfy 52 percent of its RHNA requirement with planned and approved units. Since no ADU permits were recorded during the previous planning period, ADUs are not assumed to contribute to the overall share of RHNA. To achieve the remaining RHNA, the City must demonstrate the availability of sites with appropriate zoning and development standards that allow and encourage the development of 352 units. This unit count is broken down by household income level. As shown on Table C4-3, Farmersville has a remaining RHNA of 339 units affordable to very low-income households and 315 units affordable to above moderate-income households. The City's RHNA obligation for low- and moderate-income units is accommodated through pipeline projects, resulting in a remaining RHNA of zero for these income categories.

Table C4-3 Remaining Share of RHNA

Affordability Category (Percent of AMI)	RHNA Allocation	Units Pending or Approved or under Construction	Estimated ADUs	Remaining RHNA
Very-Low	135	205	0	0
Low	83	142	0	0
Moderate	121	196	0	0
Above Moderate	315	0	0	315
Total	**654**	**543**	**0**	**315**

C4.4 Nonvacant Sites

Nonvacant sites included in the Site Inventory have comparable predevelopment characteristics to developed residential projects in the region. As discussed in Chapter 4*, Regional Housing Resources*, residential development in Tulare County has occurred primarily on vacant sites and sites used for agriculture.

The Housing Element must analyze the extent to which existing uses may impede additional residential development. The City's Site Inventory accommodates approximately 38 percent of its lower-income RHNA, 100 percent of its moderate-income RHNA, and none of its above moderate-income RHNA on vacant sites. The remaining 62 percent of lower-income RHNA and 100 percent of above moderate-income RHNA are proposed on sites currently being used for agriculture.

C4.4.1 Redevelopment of Existing Uses

Of the 15 sites included in the City's Site Inventory, nine are vacant and six are on sites with current agricultural uses. Of the six nonvacant sites, all sites are currently zoned for residential. The City anticipates development of these sites to accommodate medium and medium high-density residential uses. The City does not consider existing uses in these areas to impede housing development, as regional development trends indicate that sites zoned for residential with agricultural uses are likely to be redeveloped with residential projects.

C4.4.2 Adequacy of Nonvacant Sites

In considering sites, the City identified agricultural land with residential zoning to facilitate the development of a variety of housing types. All identified nonvacant sites were selected for high potential

for redevelopment and probability of turnover from agriculture to residential uses, as supported by development trends discussed in Section C4.5, below.

C4.5 Development Trends

As discussed in detail in Chapter 4.4, *Regional Housing Resources, Development Trends*, the development characteristics in the region indicate that most of the recently developed residential projects, or projects that are planned to be developed, are on vacant land or land zoned for agricultural use. Approximately one-third of the regional development trend projects include housing affordable to very low- and low-income households. The densities of these projects range from 2.63 to 60.00 dwelling units per acre due to the various zoning requirements per jurisdiction and use of state density bonus. The average density of projects is approximately 16 dwelling units per acre, with 99 percent density achieved. Projects located in low density residential zones averaged 92 percent density achieved, projects located in medium density residential zones averaged 96 percent density achieved, and projects high density residential zones achieved 105 percent of allowable density.

Of the projects discussed in Chapter 4.4, *Regional Housing Resources, Development Trends*, one of the recently approved residential developments is in Farmersville. Los Arroyos is a multifamily affordable housing complex with an achieved density of 73 percent, as seen in Table C4-4. The planned projects listed in Table C4-2 will achieve an average density of 16.31 units per acre and an average density achievement of 161 percent of allowable density.

Table C4-4 Farmersville Development Trends

Project Name	Total Units	Acreage	Density	Zoning District	Zoning District Density (du/ac)	Number of Units Allowed	Percent Density Achieved
Los Arroyos	108	5.81	18.59	Multifamily	25.62	148.87	73%
Farmersville Average			**18.59**				**73%**
Regional Average			**16.18**				**99%**

C4.5.1 Realistic Development Capacity

To create a realistic development assumption, the City assumes that the development capacity on each site will be less than the full development capacity allowed by the parcel's zoning or land use designation. Sites do not always develop to their full capacity potential due to factors such as site-specific conditions and development standards such as open space or parking requirements. To determine a realistic development achievement on the sites in the Site Inventory, the City reviewed the development achievement of pipeline and recently developed projects in the region. On average, the pipeline and recent projects in Farmersville, as shown in Table C4-2, achieved an average density of 148 percent of the maximum density allowed on the site based on the site's zoning and development standards. As discussed in Chapter 4.4, *Regional Housing Resources, Development Trends*, the average percentage of achieved maximum density for projects collectively in the region is 99 percent. Based on the local and regional trends, the City conservatively assumes the realistic capacity of each site would be 75 percent of the maximum density allowed under the applicable zoning or General Plan designation.

The Site Inventory includes parcels in three residential zoning districts with varying allowable densities and development standards. The City's Zoning Code classifies each site into the following zones:

- Single-Family Residential (R-1): This district allows single-family residential uses with a maximum residential density of 7.26 dwelling units per acre.
- Multifamily Residential (RM-4.0): This district allows multifamily residential units with one unit per 4,000 square feet of lot area, equal to a maximum density of 10.89 units per acre.
- Multifamily Residential (RM-2.5): This district allows multifamily residential units with one unit per 1,700 square feet of lot area, equal to a maximum density of 25.62 units per acre.

Table C4-5 details the realistic capacity of available sites by zoning district.

Table C4-5 Realistic Capacity of Sites by Zoning District

Zoning District	Total Acreage	Maximum Density	Realistic Density	Lower-Income Units	Moderate-Income Units	Above Moderate-Income Units	Total Units
R-1	92.37	7.26	5.45	0	0	501	501
RM-2.5	5.92	5.92	20	209	37	0	246
Total	**170.56**			**209**	**37**	**501**	**747**

C4.6 Site Inventory

A description of development capacity by neighborhood is provided below. Sites are listed in Table C4-6 and shown geographically on Figure C4-2.

The table of sites includes the following items in the column heading order from left to right:

- Map Identification number (a unique reference number assigned by the City to reference the parcel on each map)
- Address or nearest cross street
- APN (Government Code Section 65583.2(b)1))
- Size in acres (Government Code Section 65583.2(b)(2))
- General Plan land use designation (Government Code Section 65583.2(b)(2))
- Zoning designation (Government Code Section 65583.2(b)(2))
- Description of existing uses (Government Code Section 65583.2(b)(3))
- Minimum allowable density by zone
- Maximum allowable density by zone
- Inventoried income level (units appropriate for lower-, moderate-, above moderate-income households) (Government Code Section 65583.2(c))
- Total number of units realistically assumed on the site
- Opportunity category as designated by the California Tax Credit Allocation Committee (TCAC)[1]

C4.6.1 East Farmersville

East Farmersville is bounded by Avenue 288 to the north, Visalia Road to the south, city boundaries to the east, and Farmersville Boulevard to the west. This neighborhood consists primarily of single-family

[1] Resource levels designated by TCAC/HCD denote access to economic and educational opportunities such as low-cost transportation, jobs, and high-quality schools and the quality of environmental factors in the area such as proximity to hazards and air quality. TCAC has a composite opportunity score for each census tract. Source: https://www.treasurer.ca.gov/ctcac/opportunity/2023/methodology.pdf

residential, with a large portion of the northern end zoned for schools. East Farmersville is designated as an Urban Unzoned Fire Hazard[2] area and in an area of minimal flood hazard[3]. This neighborhood can accommodate one site with an assumed capacity of 67 above-moderate-income units. The site located in this neighborhood is currently used for agricultural purposes and designated as an area of High Segregation and Poverty by TCAC.

C4.6.2 North Farmersville

North Farmersville is bounded by city boundaries to the north, east, and west, and Avenue 288 to the south. This area primarily consists of industrial and commercial uses, with some single-family residential. North Farmersville is designated as Non-Wildland/Non-Urban Fire Hazard area and in an area of minimal flood hazard. This neighborhood has a modest capacity for residential units. North Farmersville cannot accommodate housing opportunity sites.

C4.6.3 South Farmersville

South Farmersville is bounded by city boundaries to the south, east, and west, and Visalia Road to the north. This neighborhood primarily consists of single-family and multifamily (RM-2.5) residential and commercial space. Most of the sites in South Farmersville are designated as an Urban Unzoned Fire Hazard area, with one site identified in a Non-Wildland/Non-Urban Fire Hazard area and in an area of minimal flood hazard. Based on community input highlighting the opportunity for housing development along West Visalia Road and west of Farmersville Junior High, residentially zoned parcels 130-142-016, 130-143-008, 130-120-005, 130-132-003 (shown as Sites 3 through 10 respectively in Figure C4-2) in South Farmersville have been included in the Site Inventory. South Farmersville has the second largest development potential in the city. South Farmersville can accommodate 11 sites with an assumed capacity of 79 units lower-income units, 37 moderate-income units, and 153 above moderate-income units. This area is beneficial for low-income units due to its proximity to Snowden Elementary School and commercial uses along Visalia Road and Farmersville Boulevard. The sites identified in this area are currently vacant, with one property currently used for agricultural purposes. Both sites are located in areas designated by TCAC as Moderate Resource areas or High Segregation and Poverty.

C4.6.4 West Farmersville

West Farmersville is bounded by Avenue 288 to the north, Visalia Road to the south, city boundaries to the west, and Farmersville Boulevard to the east. This neighborhood primarily consists of single-family residential. West Farmersville is designated as a Non-Wildland/Non-Urban Fire Hazard area in an area of minimal flood hazard. Based on community input highlighting the opportunity for housing development southeast of West Visalia Road and Farmersville Boulevard. West Farmersville has the highest development potential in the city. West Farmersville can accommodate four sites with an assumed capacity of 130 units affordable to lower-income households and 281 units affordable to above moderate-income households. This area is beneficial for low-income units due to its proximity to Farmersville Junior High School and commercial uses along Visalia Road and Farmersville Boulevard. All sites identified in this area are currently used for agricultural purposes and are in TCAC-designated Moderate Resource areas of the city.

[2] The Urban Unzoned Fire Hazard is defined as an urban area that does not have a severity assigned because it does not have the same degree of risk for wildfire than other zones fire hazard areas. https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/

[3] The City has the Flood Hazard designation of "X" and "AH". Zone X is the area determined to be outside the 500-year flood and protected by levee from 100- year flood. Zone AH means that the area has a one percent annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage.

Figure C4-2 Farmersville Site Inventory

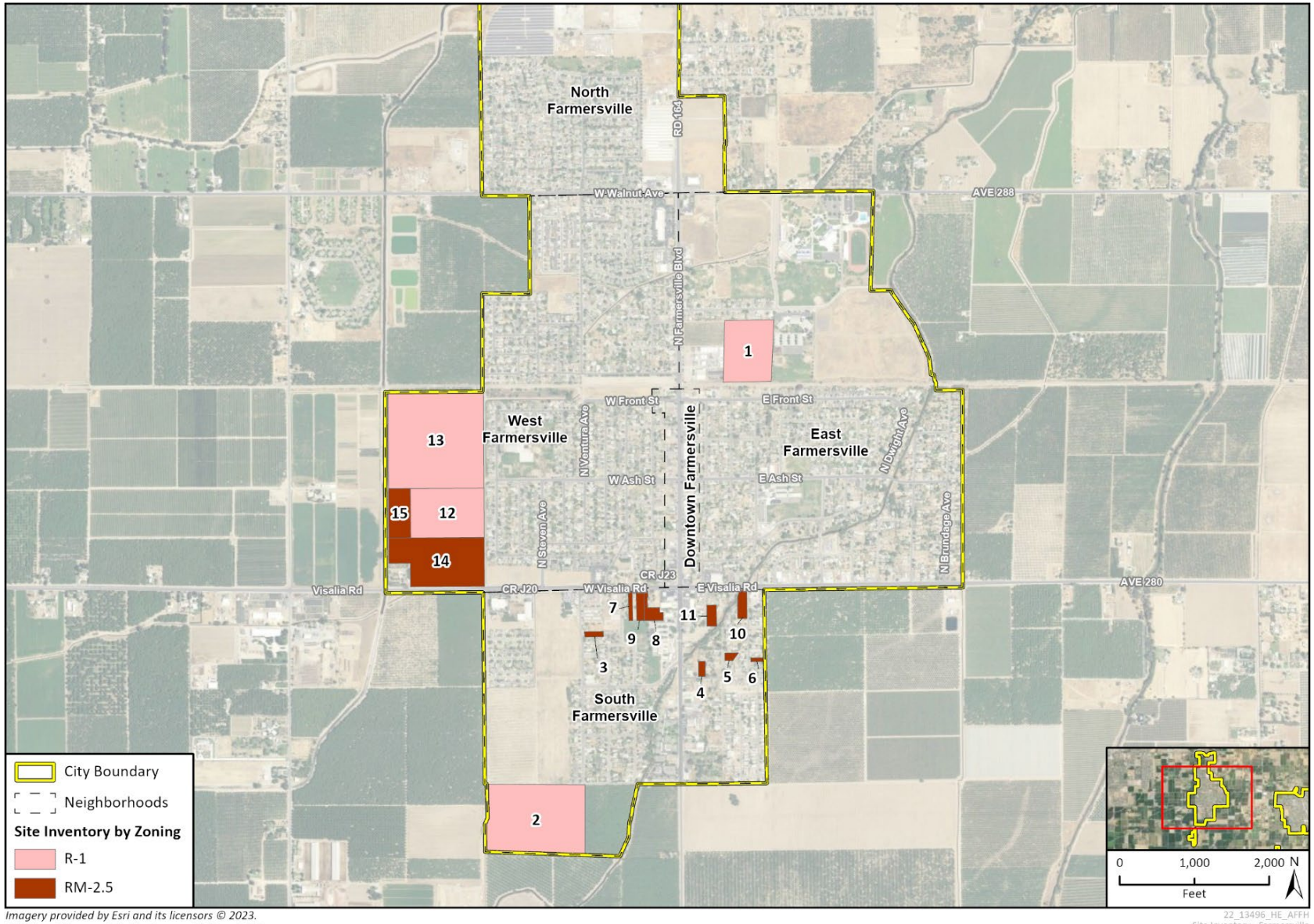


Table C4-6 Farmersville Site Inventory

Map ID	Site Address or Street	APN	Acres	Land Use	Zoning	Current Use	Minimum Density	Maximum Density	Lower-Income Capacity	Moderate-Income Capacity	Above Moderate-Income Capacity	Total Capacity	TCAC Opportunity Category
East Farmersville													
1	E Citrus Dr & N Rose Ave	129010017	12.31	MDR	R-1	Agriculture	0	7.26	0	0	67	67	High Segregation & Poverty
Total									**0**	**0**	**67**	**67**	
South Farmersville													
2	W Tulare St	130030014	28.28	MDR	R-1	Agriculture	0	7.26	0	0	153	153	Moderate Resource
3	274 S Ventura Ave	130050009	0.42	MHDR	RM-2.5	Vacant	0	25.62	0	8	0	8	High Segregation & Poverty
4	192 E Oakland St	130141009	0.42	MHDR	RM-2.5	Vacant	0	25.62	0	8	0	8	High Segregation & Poverty
5	394 S Camelia Ave	130142016	0.35	MHDR	RM-2.5	Vacant	0	25.62	0	7	0	7	High Segregation & Poverty
6	E Oakland St & S Rose Ave	130143008	0.25	MHDR	RM-2.5	Vacant	0	25.62	0	5	0	5	Moderate Resource
7	W Visalia Rd & S Dode Ave	130120005	0.48	MHDR	RM-2.5	Vacant	0	25.62	0	9	0	9	High Segregation & Poverty
8	233 W Visalia Rd	130120021	1.15	MHDR	RM-2.5	Vacant	20	25.62	23	0	0	23	High Segregation & Poverty
9	251 W Visalia Rd	130120024	0.95	MHDR	RM-2.5	Vacant	20	25.62	19	0	0	19	High Segregation & Poverty
10	Corner of S Rose Ave/E Visalia Rd	130132024	1.06	MHDR	RM-2.5	Vacant	20	25.62	21	0	0	21	High Segregation & Poverty

Map ID	Site Address or Street	APN	Acres	Land Use	Zoning	Current Use	Minimum Density	Maximum Density	Lower-Income Capacity	Moderate-Income Capacity	Above Moderate-Income Capacity	Total Capacity	TCAC Opportunity Category
11	208 S Magnolia Ave	130132003	0.84	MHDR	RM-2.5	Vacant	20	25.62	16	0	0	16	High Segregation & Poverty
Total									**79**	**37**	**153**	**269**	
West Farmersville													
12	W Ash St & N Virginia Ave	128330001	14.00	MDR	R-1	Agriculture	0	7.26	0	0	76	76	Moderate Resource
13	W Ash St	128080002	37.78	MDR	R-1	Agriculture	0	7.26	0	0	205	205	Moderate Resource
14	Avenue 280 & S Virginia Ave	128320003	2.50	MHDR	RM-2.5	Agriculture	20	25.62	50	0	0	50	Moderate Resource
15	Avenue 280 & S Virginia Ave	128330001	4.00	MHDR	RM-2.5	Agriculture	20	25.62	80	0	0	80	Moderate Resource
Total									**130**	**0**	**205**	**281**	
Farmersville Total									**209**	**37**	**501**	**747**	

C4.6.5 Sites Used in Previous Planning Periods

In accordance with Government Code Section 65583, vacant parcels from both the 4th and 5th RHNA cycles and non-vacant parcels from the 5th RHNA cycle may be reused in this Housing Element to accommodate lower-income housing, provided they are rezoned to allow projects that have at least 20 percent of the units set aside as affordable for lower-income households to be allowed by-right (i.e., can be approved administratively without requiring Planning Commission or City Council approval). A total of two sites identified in the Site Inventory are subject to this by-right requirement, as shown on Table C4-7. The City will update the Zoning Code to address by-right approval requirements for these sites, as specified in Housing Plan Program 3.

Table C4-7 Sites Used in Previous Planning Periods

Address	APN	Acres	Land Use	Zoning	Existing Use	Total Units
208 S Magnolia Ave	130132003	0.84	MHDR	RM-2.5	Vacant	16
Avenue 280 & S Virginia Ave	128320003	2.5	MHDR	RM-2.5	Agriculture	50
Total		**3.34**				**66**

C4.6.6 Adequacy of Residential Site Inventory in Meeting RHNA

The Site Inventory identifies 290 lower-income units, 37 moderate-income units, and 501 above moderate-income units on 15 sites. No sites smaller than 0.5-acre in size are used to accommodate lower-income housing.

Of the identified sites, nine are vacant and six are located on land currently used for agriculture. All sites are in a residential zone and would not require rezoning to allow for housing development. Since the land is currently zoned for residential uses, the existing agricultural uses are not subject to the Williamson Act. Regional trends indicate the high likelihood of redevelopment of sites with agricultural uses to residential development; therefore, existing uses on these sites are not considered an impediment to redevelopment.

The Site Inventory includes a surplus of 338 lower-income units, giving the city a 155 percent buffer for this income category. The summary of the residential Site Inventory is presented in Table C4-8.

Table C4-8 Adequacy of Residential Site Inventory

	Lower-Income	Moderate-Income	Above Moderate-Income	Total
RHNA Allocation	**218**	**121**	**315**	**654**
Planned and Approved Units	347	196	0	543
ADUs Anticipated	0	0	0	0
Remaining RHNA	**0**	**0**	**315**	**315**
East Farmersville	0	0	67	67
South Farmersville	79	37	153	269
West Farmersville	130	0	281	411
Total Units on Sites	**209**	**37**	**501**	**747**
Total Unit Surplus	**338**	**112**	**186**	**636**
Percent Buffer over RHNA	**155%**	**93%**	**59%**	**202%**

C4.7 Availability of Infrastructure and Services

The City's Public Works Department ensures the continued maintenance and improvement of the City's infrastructure. This includes all public utilities provided by the City: domestic water, refuse/recycling collection, wastewater treatment, sanitary sewer services, and street and signal maintenance. The City will ensure adequate capacity of all infrastructure and utilities to accommodate the housing growth discussed in this Housing Element. The City has a Comprehensive Infrastructure Master Plan that guides the installation of infrastructure in greenfield areas. All sites identified in the inventory have existing and available infrastructure that can support residential development. Within one week of adoption, the City will provide a copy of the adopted 2023-2031 Housing Element to the City's Public Works Department, pursuant to Government Code Section 65589.7.

C4.7.1 Wastewater System

The Farmersville Department of Public Works is responsible for the safe collection, transportation, and treatment of all wastewater generated by residential, industrial, and commercial customers in the City of Farmersville. In 2021, the City opened a new wastewater treatment facility to meet the growing demand. With this new facility, there are no capacity issues anticipated with new development. The City confirms there is sufficient wastewater capacity to serve the capacity of the Site Inventory.

C4.7.2 Potable Water System

The City of Farmersville provides water service to developed properties in its city limits. The City pumps groundwater from seven wells (with an additional well out of service) located throughout the community, that produce up to two million gallons of water per day.

The City prepared a Comprehensive Infrastructure Master Plan (CIMP) in 2012 which served to amend and update previous utility master plans. The CIMP establishes programs to upgrade and expand the water system with future wells, distribution lines, and a storage tank. Although a new well site is recommended to increase the water production to accommodate peak hour demands with more development, the City confirms there is sufficient water supply to serve the capacity of the Site Inventory.

C4.7.3 Storm Water and Drainage

Storm drainage infrastructure within the community is provided by the City of Farmersville. The City is divided into 26 individual drainage sub-areas. Most of these sub areas discharge drainage water into one of the canals or creeks running through the city. Several discharge into retention basins. The City has adopted a storm drainage master plan that identifies improvements that will be necessary to serve future development in the planning area. This master plan was augmented with preparation of the Comprehensive Infrastructure Master Plan in 2012, which prescribes future improvements to the system. As with other utilities, project developers are responsible for installing storm drainage improvements to serve their site. Existing and planned storm drainage and infrastructure is sufficient for development of the Site Inventory.

C4.7.4 Dry Utilities

Dry utilities are defined as electricity, natural gas, cable, and telephone services. In Farmersville, each dry utility has one provider: Southern California Edison supplies electricity, Southern California Gas provides natural gas service, and Spectrum provides telecom services. The City does not anticipate any limitations on the provision of dry utility service to the sites in the inventory.

C4.8 Environmental Considerations

Environmental constraints to housing development in Farmersville include risk of wildfire, earthquakes, landslides and erosion, and flooding, as discussed in C3, *Housing Constraints Analysis*. The sites identified in the Site Inventory are all located outside of identified wildfire and flood zones. The City does not anticipate environmental remediation to be needed on sites currently used for agriculture.

C4.8.1 Opportunities for Energy Conservation

Farmersville has established, and will continue implementation of, the following programs related to energy conservation:

1. Amending the Subdivision Ordinance to require solar orientation of streets.
2. Weatherization programs for senior and low-income households. The rehabilitation of housing units using Community Development Block Grant (CDBG) funds.
3. Implementation of a solar program, adopting reduced building permit fees for the installation of residential solar power systems.
4. Rehabilitation Program with Self Help Enterprises by rehabilitating housing units using CDBG funds to include energy conservation improvements.

Additionally, the City has partnered with Southern California Edison and Valley Innovative Energy Watch to make cost-effective and lasting changes to the way the city uses energy. Southern California Edison also offers Demand Response Programs. These programs allow customers to reduce energy consumption during peak demand hours.

C5 Affirmatively Furthering Fair Housing Analysis

C5.1 Introduction

This section of the Housing Element analyzes issues relating to fair housing for the City of Farmersville. This analysis is based on the directives from State Assembly Bill (AB) 686. Background information on AB 686, countywide fair housing services, data sources, and analysis of the regional Affirmatively Furthering Fair Housing (AFFH) issues are included in Chapter 5, *Regional Affirmatively Furthering Fair Housing Analysis*. The data contained throughout this chapter may differ from the data included in Chapter C2, *Housing Needs Assessment*, based on HCD recommended data sources for AFFH analyses and the availability of data at the time the document was written.

C5.2 Methodology

This local AFFH analysis evaluates fair housing issues on the following topics:

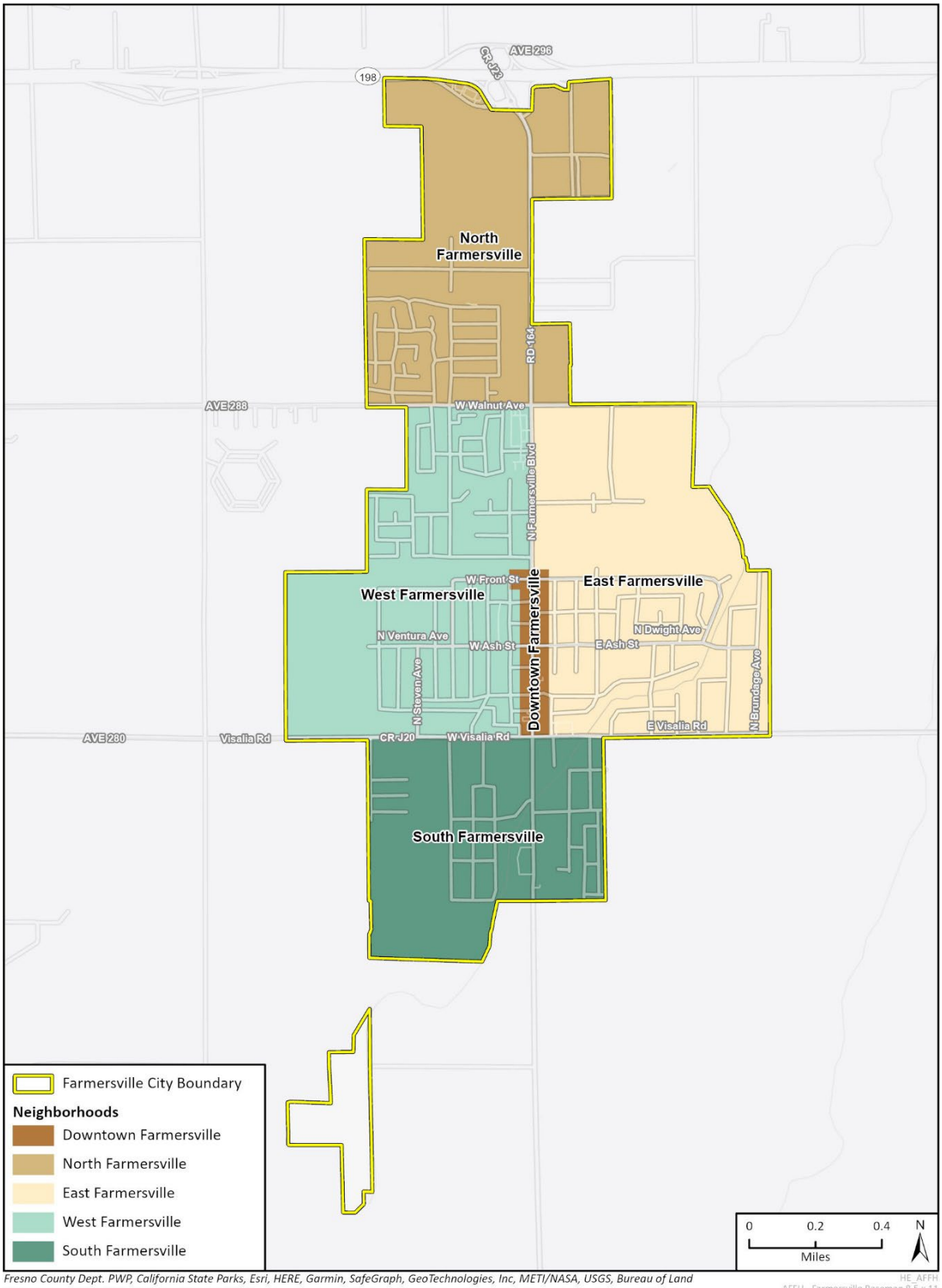
- Fair Housing Enforcement and Outreach Capacity
- Integration and Segregation Patterns and Trends
- Racially and Ethnically Concentrated Areas of Poverty
- Disparities in Access to Opportunity
- Disproportionate Housing Needs
- Local Area Knowledge and Stakeholder and Community Input
- Other Relevant Factors
- Analysis of Housing Site Inventory Using AFFH Indicators

This analysis identifies patterns and trends at the local level. Where appropriate, the analysis refers to the regional AFFH analysis provided in Chapter 5, *Regional Affirmatively Furthering Fair Housing Analysis,* which analyzes patterns and trends of the county and Tulare County/Kings County/Fresno County tri-county area.

For the purposes of this analysis, the city is divided into five neighborhoods: North, South, East, West, and Downtown Farmersville (Figure C5-1). These neighborhoods were based on the City's planning documents, including the General Plan, as well as local knowledge from City staff. Most of the geographic analysis of fair housing issues in Farmersville is based on the California Department of Housing and Community Development (HCD) AFFH Data Viewer described in Chapter 5, *Regional Affirmatively Furthering Fair Housing Analysis*. The AFFH Data Viewer relies on information provided by the United States (U.S.) Census and other data sources at the census tract and block group level. The data contained throughout this chapter may differ from the data included in Chapter C2, *Housing Needs Assessment*, due to the availability of data at the time of drafting.

For reference, the area south of the main city limits (south of South Farmersville) that is not connected to the rest of the city consists entirely of the Farmersville Wastewater Treatment Plant. This area does not contain any existing housing units and residential uses are not allowed so this area is not included in this analysis. While the Wastewater Treatment Plant is shown on figures throughout the analysis, it is part of a larger census tract that includes portions of East and South Farmersville and unincorporated parts of the county.

Figure C5-1 Farmersville Neighborhoods



There are three census tracts in the city, two of which overlap large areas within the unincorporated part of the county (Census Tracts 06107001602 and 06107001400). Downtown, East, West, and South Farmersville are all comprised of parts of Census Tracts 06107001601 and 06107001602, while North Farmersville is comprised of Census Tract 06107001400.

C5.3 Summary of AFFH Analysis Findings

Similar to other cities in Tulare County, Farmersville has a high percentage of non-white residents (92 percent of all residents) and low-income households (66 percent of all households). Overall, rates of overcrowding and cost burden are high among homeowners and renters. In addition, the California Tax Credit Allocation Committee (TCAC) opportunity mapping, which identifies areas with characteristics shown by research to support positive economic, educational, and health outcomes for low-income families, indicates low access to economic, educational, and environmental opportunities throughout most of the city. Compared to other areas of the city, North Farmersville has a slightly lower percentage of non-white households, lower poverty rates, slightly higher median income, and newer housing units. North Farmersville is also the only part of the city that is considered a high resource area. While North Farmersville has slightly more positive income characteristics and a lower percentage of non-white residents, it is largely similar to the rest of the city with a high percentage of Hispanic/Latino residents and high percentage of low- and moderate-income (LMI) populations.

Below is a summary of AFFH analysis findings by neighborhood in Farmersville.

North Farmersville

- Slightly lower percentage of non-white residents
- Lower percentage of LMI residents and lowest percentage of residents living below the poverty line
- Highest median household income
- Lowest percentage of renters
- Lowest percentage of overcrowding and lowest percentage of homeowners experiencing overpayment
- Highest resource areas

East and Downtown Farmersville

- High concentration of non-white residents, LMI populations, residents living below the poverty line
- Lowest household median income
- High rates of overcrowding and overpayment
- Highest percentage of older structures
- Low-income residents are at risk of displacement
- Area of high segregation and poverty

West and South Farmersville

- High concentration of non-white residents and residents living below the poverty line
- Lower percentage of LMI residents
- Lowest household median income
- High percentage of overcrowding and high percentage of homeowners experiencing overpayment
- Area of high segregation and poverty and moderate resource areas

C5.4 Data Sources

To conduct this analysis, the City utilized data from a variety of sources discussed in Chapter 5, *Regional Affirmatively Furthering Fair Housing Analysis*. The Community Development Block Grant (CDBG) Consolidated Plan and Analysis of Impediments (AI) were used to identify issues that impede fair housing choice. Additionally, the analysis includes a discussion of historic land use and segregation patterns and input from sources of local knowledge, including advocates for people with special needs,

housing development and advocacy organizations, housing and social services providers, and low-income residents. The data contained throughout this chapter may differ from the data included in Chapter C2, *Housing Needs Assessment*, based on HCD recommended data sources for AFFH analyses and the availability of data at the time the documents were written.

C5.5 Fair Housing Resources

Enforcement and Outreach Capacity

The City of Farmersville works with the Fair Housing Council of Central California (FHCCC), a nonprofit organization, to provide fair housing information and resources to residents and housing providers. The FHCCC investigates complaints involving housing discrimination and predatory lending practices to ensure compliance with federal and state housing laws. The City also works with the Housing Authority of Tulare County (HATC) and Self-Help Enterprises to respond to complaints of housing discrimination for rental housing and homeownership opportunities.

Compliance with Existing State and Federal Fair Housing Laws

The fair housing assessment should include a description of state and local fair housing laws and how the City complies with those laws. These laws include the following:

- California Fair Employment and Housing Act (FEHA) (Part 2.8 (commencing with Section 12900) of Division 3 of Title 2)
- FEHA Regulations (California Code of Regulations (CCR), Title 2, Sections 12005-12271)
- Government Code Section 65008 covers actions of a city, county, city and county, or other local government agency, and makes those actions null and void if the action denies an individual or group of individuals the enjoyment of residence, landownership, tenancy, or other land use in the state because of membership in a protected class, the method of financing, and/or the intended occupancy.
- For example, a violation under Government Code Section 65008 may occur if a jurisdiction applied more scrutiny to reviewing and approving an affordable development as compared to market-rate developments, or multifamily housing as compared to single-family homes.
- Government Code Section 65008, subdivision (e), authorizes preferential treatment of affordable housing.
- Government Code Section 8899.50 requires all public agencies to administer programs and activities relating to housing and community development in a manner to affirmatively further fair housing and avoid any action that is materially inconsistent with its obligation to affirmatively further fair housing.
- Government Code §11135 et seq. requires full and equal access to all programs and activities operated, administered, or funded with financial assistance from the state, regardless of one's membership or perceived membership in a protected class.
- Density Bonus Law (Gov. Code, §65915.)
- Housing Accountability Act (Gov. Code, § 65589.5.)
- No-Net-Loss Law (Gov. Code, § 65863)
- Least Cost Zoning Law (Gov. Code, § 65913.1)
- Excessive subdivision standards (Gov. Code, § 65913.2.)

- Limits on growth controls (Gov. Code, § 65302.8.)
- Housing Element Law (Gov. Code, § 65583, esp. subds. (c)(5), (c)(10).)

The City of Farmersville ensures compliance with these laws through the City's daily operations, with any complaints referred to the City Attorney and/or the City Manager for investigation and action, as appropriate. Further analysis of the City's compliance with fair housing laws is also provided in the Constraints chapter of this Housing Element.

C5.6 Ability to Address Complaints

The City is limited in its ability to address fair housing complaints directly. The City refers fair housing issues and complaints to FHCCC, the HATC, and the State Department of Fair Employment and Housing. The Department of Fair Employment and Housing (DFEH) maintains a record of housing discrimination complaints filed in local jurisdictions.

Fair housing complaints based on discrimination are also reported to the U.S. Department of Housing and Urban Development's (HUD) Office of Fair Housing and Equal Opportunity (FHEO). Based on data provided by HUD, one FHEO inquiry was reported in Farmersville between 2013 and 2021. This inquiry was not considered an official case and did not provide a basis for understanding fair housing issues.

C5.7 Segregation and Integration Patterns and Trends

Race and Ethnicity

Farmersville has a significantly larger Hispanic/Latino population than Tulare County and the tri-county area. The percentage of residents that identify as Hispanic/Latino are as follows:

- Farmersville: 90%
- Tulare County: 66%
- Tri-County Area: 58%

Farmersville has a greater percent of Hispanic/Latino residents than most of Tulare County and the Tulare County/Fresno County/Kings County tri-county area. Hispanic/Latino residents comprise nearly 90 percent of the city's residents, which is a greater percentage than every city in the county except the city of Woodlake. Throughout most of the city, between 61 and 80 percent of residents identify as non-white, as shown in Figure C5-2. In small portions of North Farmersville, between 41 and 60 percent of residents identify as non-white. However, this census tract overlaps with parts of North Farmersville that includes large areas of the unincorporated county, and it is likely that the trends presented in these areas may not accurately represent the population in this neighborhood.

Over the past decade, the percent of Hispanic/Latino residents increased in Farmersville, while the percent of non-Hispanic/Latino white residents decreased (Table C5-1). The percentage of all other races and ethnicities only saw small increases or decreases, and remained small, between zero and one percent.

Table C5-1 Population by Racial Group (City of Farmersville)

Race	Percent of Population	
	2011	2021
Hispanic/Latino	81.7%	89.7%
Not Hispanic/Latino		
White	16.4%	8.3%
Black/African American	0.0%	0.7%
Asian/Pacific Islander	0.0%	0.0%
Native American/Native Alaskan	1.1%	0.3%
Other or Multiple Races	0.9%	0.1%

Source: U.S. Census Bureau, American Community Survey 5-Year Data (2007-2011, 2017-2021), Table DP05.

The AFFH Data Viewer identifies the degree to which areas have a predominant racial/ethnic majority. The predominant racial/ethnic group in each census tract is that with the largest population. Throughout the entire city, the racial/ethnic majority is Hispanic/Latino (Figure C5-3). Downtown and East Farmersville and portions of West and South Farmersville have the greatest majority of Hispanic/Latino residents. North Farmersville has the smallest majority of Hispanic/Latino residents. However, as previously stated, North and South Farmersville are included in census tracts that also include large portions of unincorporated county lands, and the AFFH Data Viewer may not accurately represent the population living in those neighborhoods of Farmersville.

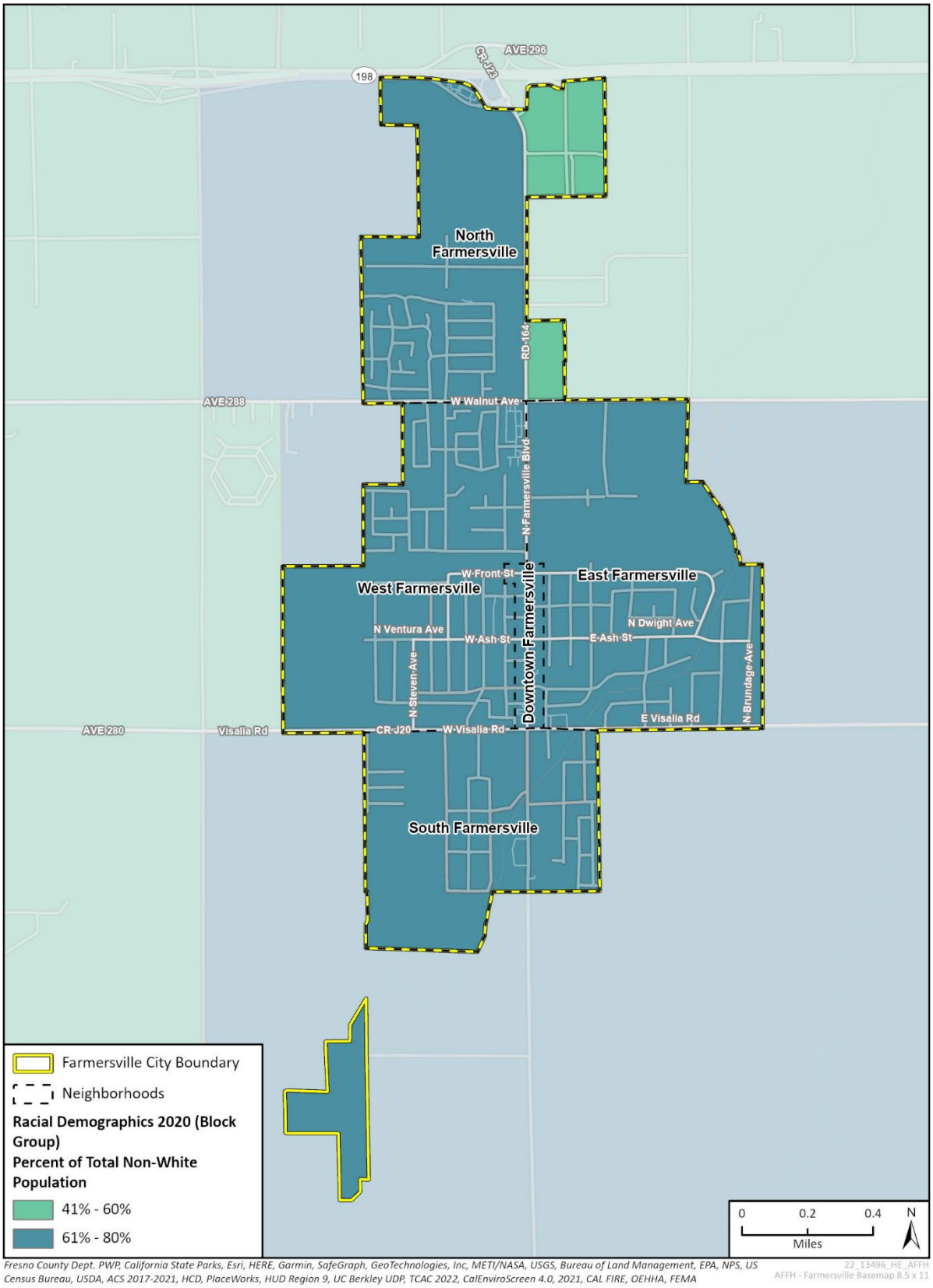
According to Othering and Belonging Institute (OBI) racial segregation/integration data, most of Farmersville has a low-medium level of segregation based on race/ethnicity (neither highly segregated nor integrated) (Figure C5-4). North Farmersville is considered racially integrated (i.e., racial demographics do not differ greatly from the surrounding region) and at least 20 percent of the population is Black/African American and Hispanic/Latino.

Persons with Disabilities

As referenced in Chapter C2, *Housing Needs Assessment*, approximately 13 percent of the population in Farmersville (1,174 residents) reported living with one or more disabilities, slightly less than the percent of residents living with a disability in Tulare County (12 percent) and the tri-county area (12 percent). The most common disability in the city is ambulatory difficulty, defined as having serious difficulty walking or climbing stairs (Figure C5-5). Disabilities are most prevalent among senior residents. Approximately 33 percent of residents aged 65 and over have a disability, whereas five percent of residents under 65 years old have a disability. In addition, Asian American/Pacific Islander and Black/African American residents reported the highest rates of disability by racial/ethnic group, at 80 percent and 51 percent, respectively.

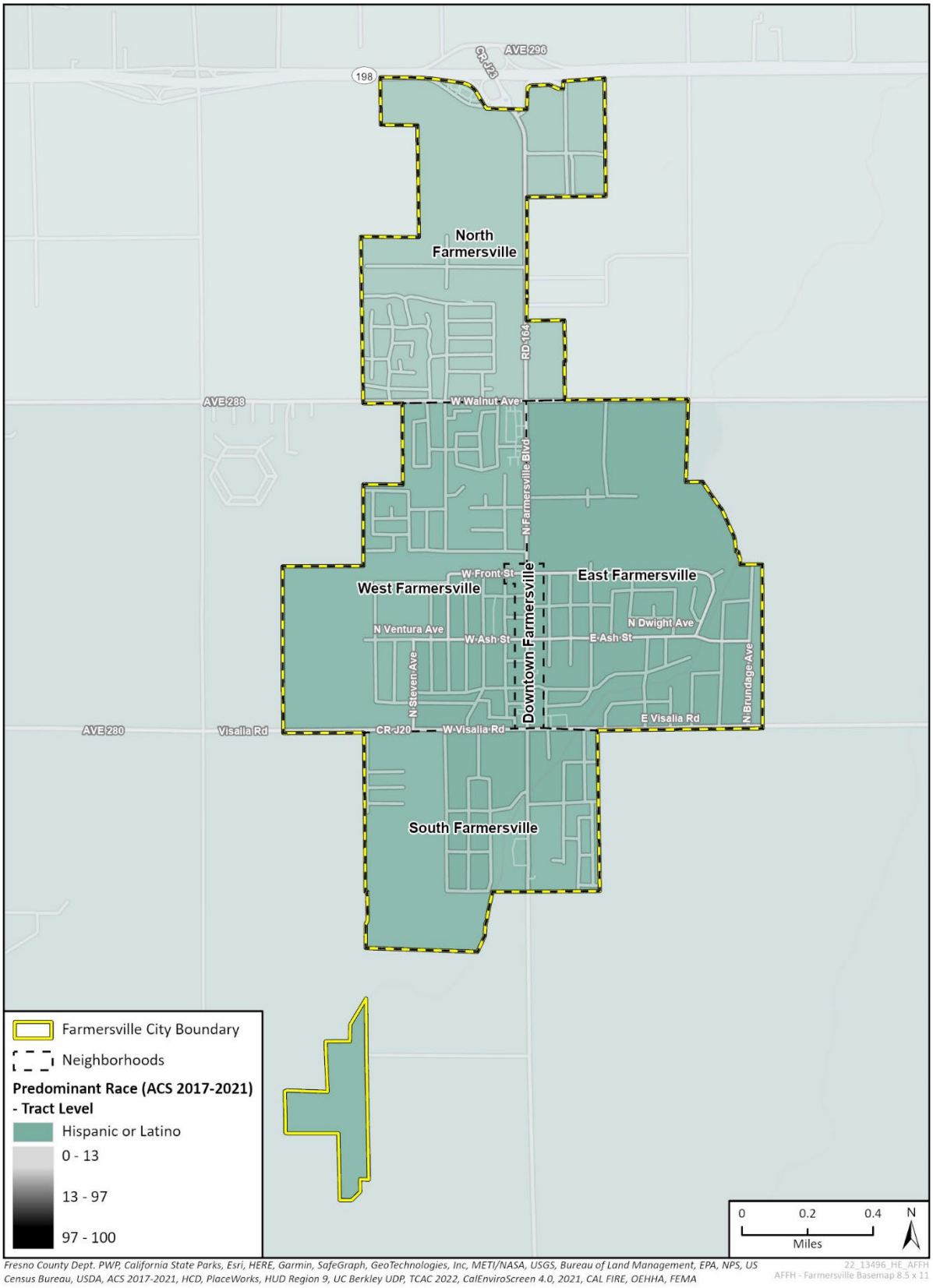
Throughout the entire city, between 10 to 20 percent of the population has a disability (Figure C5-6). There are no concentrated areas of residents living with a disability in Farmersville.

Figure C5-2 Percent of Total Non-White Population (City of Farmersville)



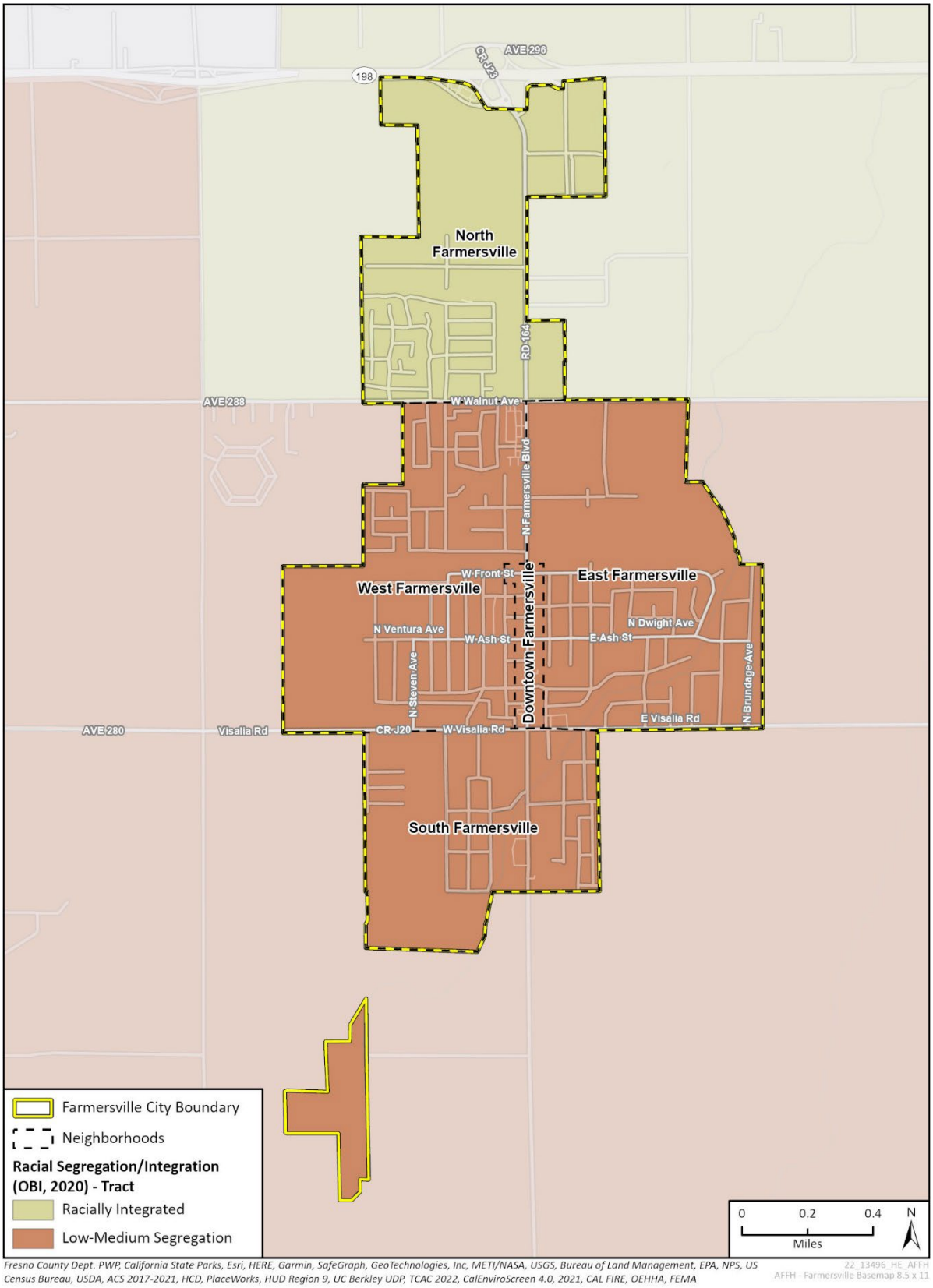
Source: AFFH Data Viewer, 2023.

Figure C5-3 Predominant Populations (City of Farmersville)



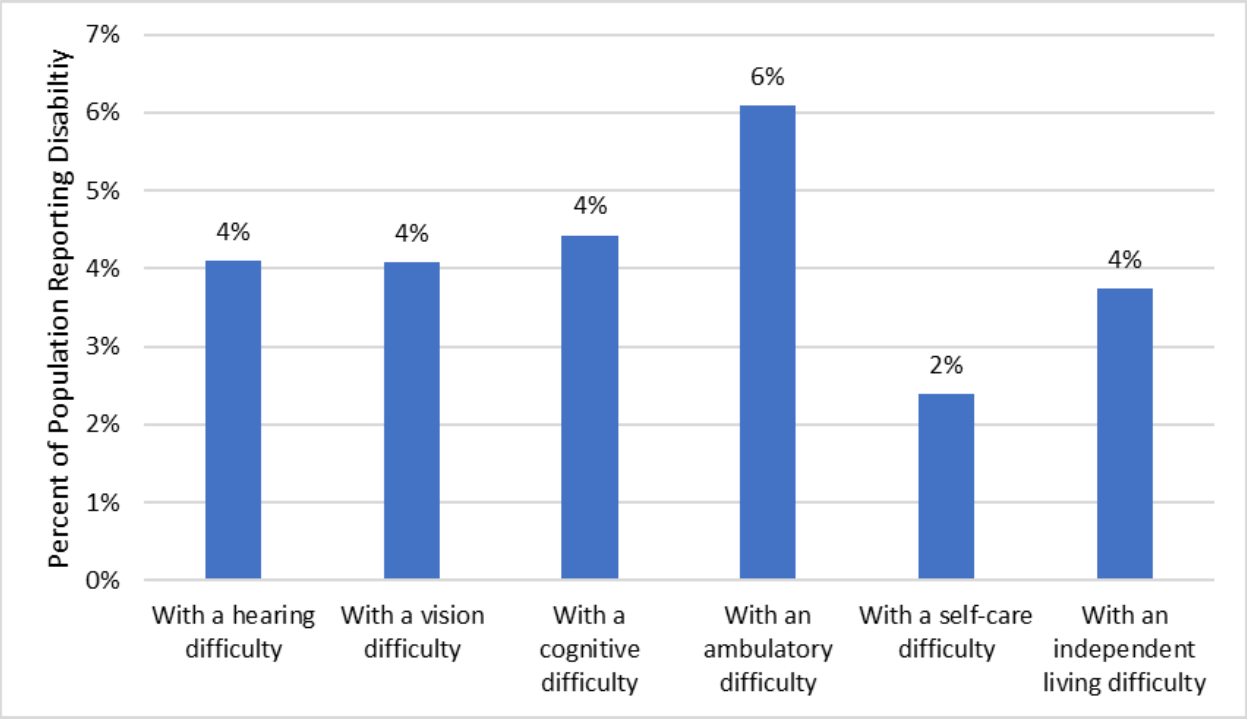
Source: AFFH Data Viewer, 2023.

Figure C5-4 Racial Segregation and Integration (City of Farmersville)



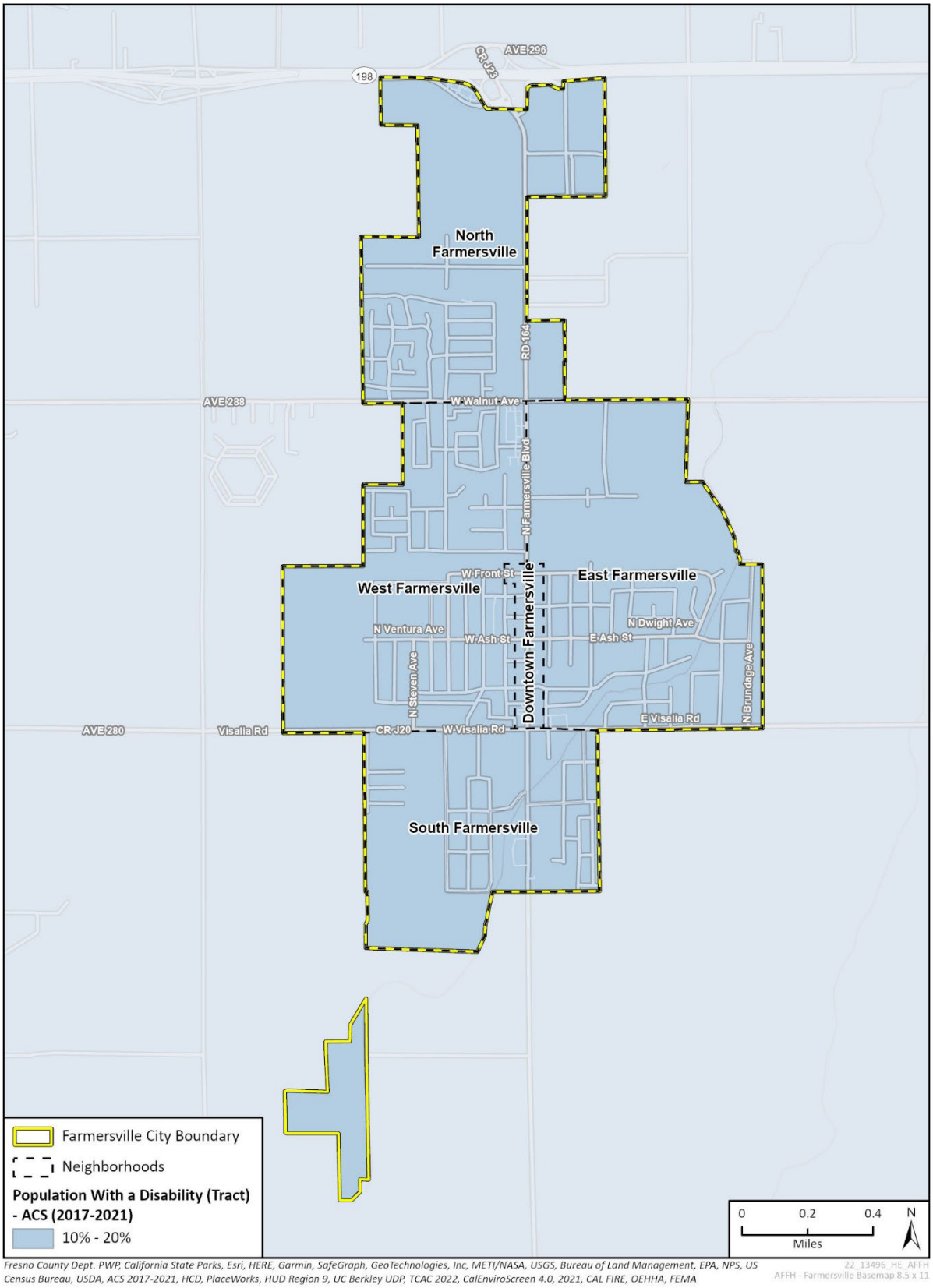
Source: AFFH Data Viewer, 2023.

Figure C5-5 Disability by Type (City of Farmersville)



Notes: These disabilities are counted separately and are not mutually exclusive, as an individual may report more than one disability. These counts should not be summed.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2017-2021), Table S1810.

Figure C5-6 Percent of Population with a Disability (City of Farmersville)



Source: AFFH Data Viewer, 2023.

Familial Status

As described in Chapter C2, *Housing Needs Assessment,* familial status refers to the presence of children under the age of 18 and the marital status of the head of the household. Families with children may face housing discrimination by landlords who fear that children will cause property damage. Examples of differential treatment that are potentially discriminatory include limiting the number of children in an apartment complex or confining households with children to a specific location. Single-parent households are also protected by fair housing law.

Household composition in Farmersville is similar to that of the county. As of 2021 (latest available data), households with children comprised approximately 38 percent of the total households in the city. Married-couple families with children comprised the largest share of households with children (58 percent), followed by female, single-parent households (35 percent). Male householders with children comprised seven percent of all households with children. Single-parent, female-headed households are more likely to rent than own, comprising approximately 32 percent of all renter-occupied households in the city but only two percent of owner-occupied households (Table C5-2).

Table C5-2 Tenure by Household Type and Presence of Children (City of Farmersville)

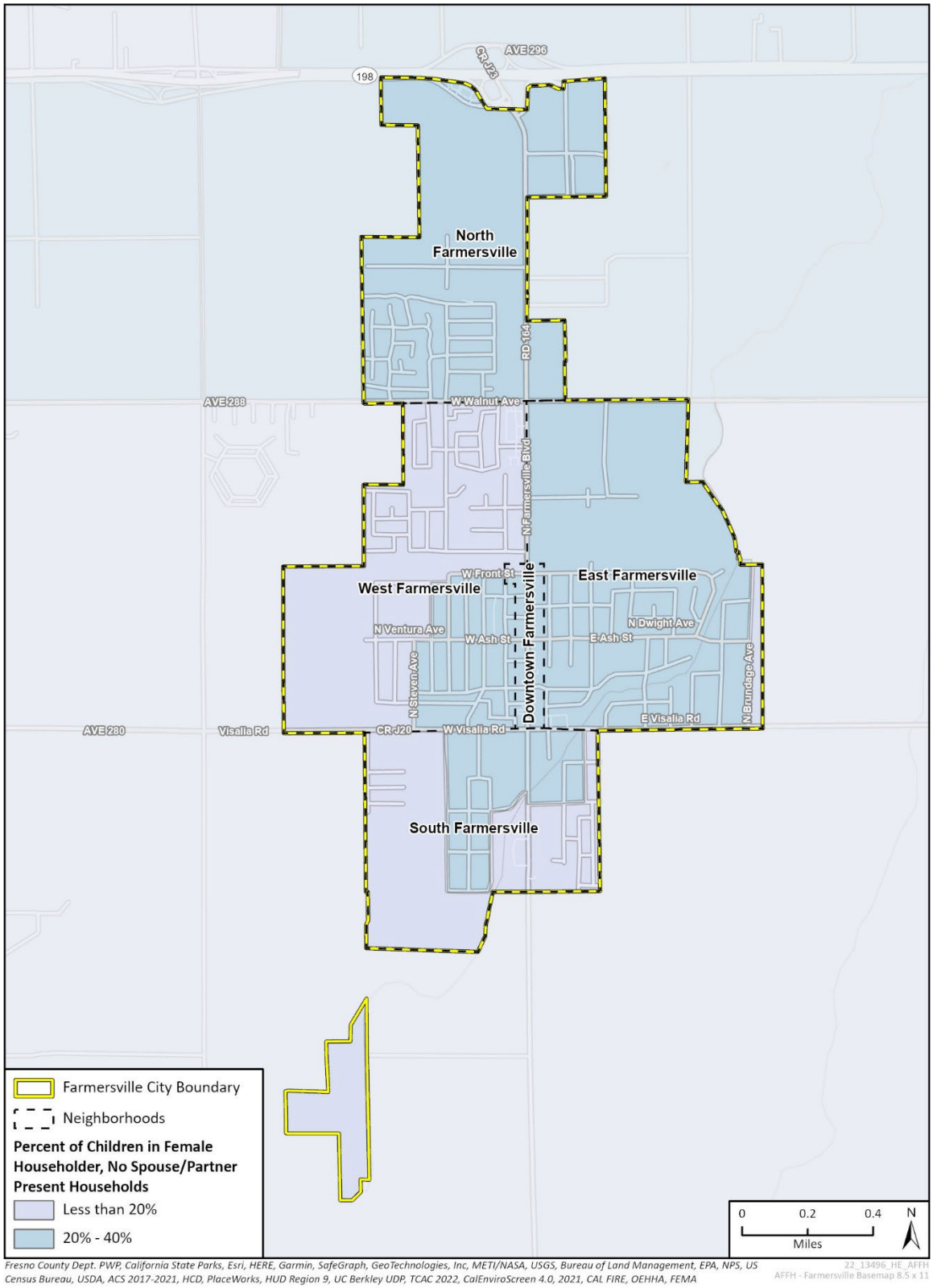
Household Type	Residing in Owner-Occupied Household	Percent of Total Owner-Occupied Households	Residing in Renter-Occupied Household	Percent of Total Renter-Occupied Households	Percent of Households with Children
Married Couple Family, with Children Present	225	22.4%	386	21.7%	58%
Single-Parent, Male Householder, no Spouse Present	34	3.4%	42	2.4%	7%
Single Parent, Female Householder, No Spouse Present	323	32.2%	41	2.3%	35%
Total Households with Children Present	582	58.0%	469	26.4%	
Total Households	1,004		1,775		

Source: U.S. Bureau of the Census, American Community Survey (ACS), Table B25115 Tenure by Household Type and Presence and Age of own Children, 2017-2021 Estimates.

East, Downtown, North, and parts of West and South Farmersville have the highest percentage of children living in female-headed, single-parent households (Figure C5-7). In most of West and South Farmersville less than 10 percent of children live in female-headed, single-parent households.

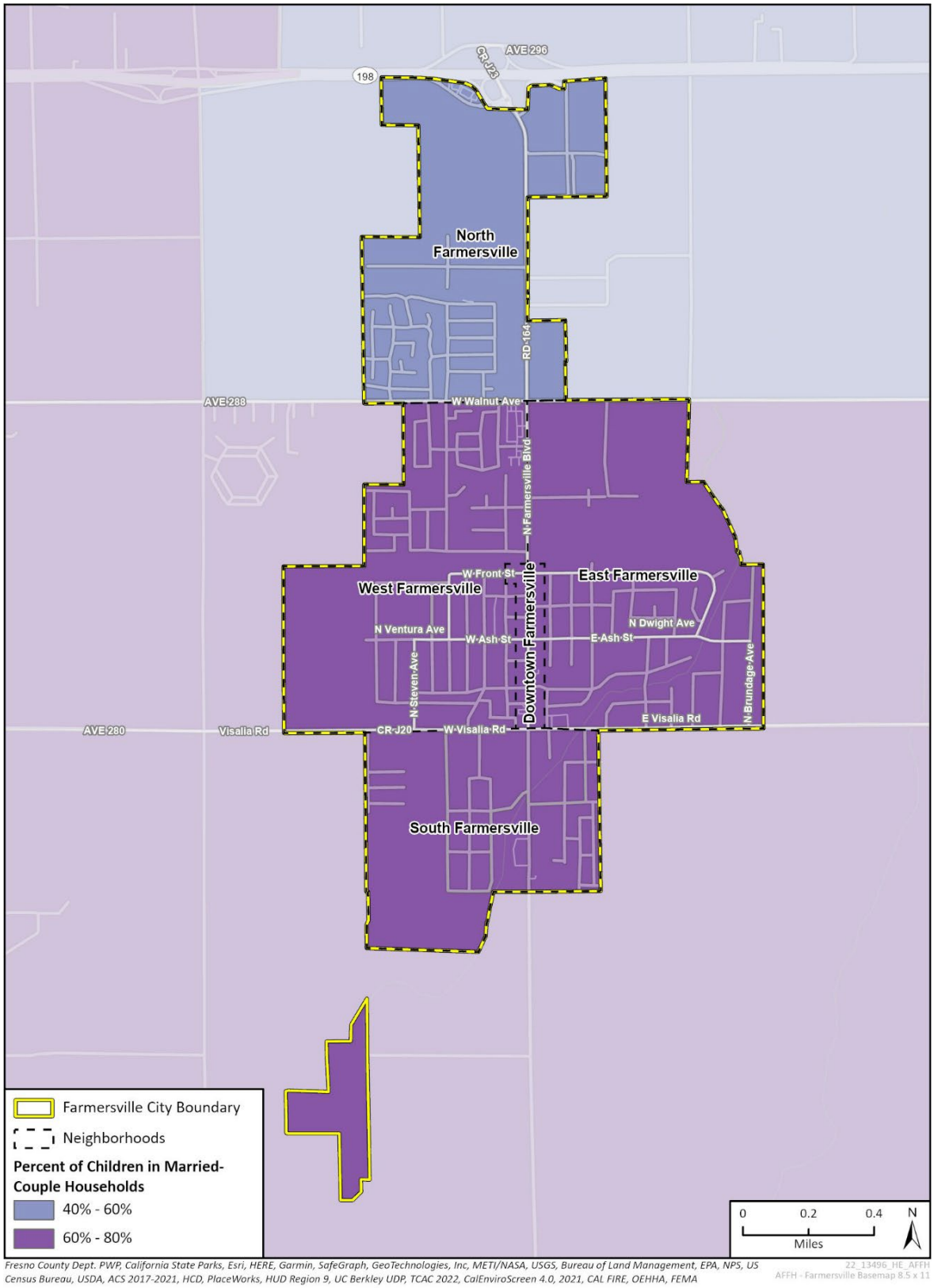
The percentage of children residing in married-couple households is lowest in North Farmersville, where between 40 and 60 percent of children live in married-couple households (Figure C5-8). Throughout the rest of the city, between 60 and 80 percent of children live in married-couple households.

Figure C5-7 Children in Female-Headed Households, No Spouse/Partner Present (City of Farmersville)



Source: AFFH Data Viewer, 2023.

Figure C5-8 Children in Married-Couple Households (City of Farmersville)



Source: AFFH Data Viewer, 2023.

Household Income

Household income is directly connected to the ability to afford housing. Higher-income households are more likely to own rather than rent housing. As household income decreases, households tend to pay a disproportionate amount of their income for housing and the number of persons occupying unsound and overcrowded housing increases. To achieve fair housing objectives, people in low-income households must have choice in housing opportunities, that is, when they are able to locate units that are affordable and well maintained in all parts of a jurisdiction and region.

This section identifies household income disparities using data based on median household income and LMI geographies. HUD defines an LMI area as a census tract or block group where over 51 percent of the population is LMI. The definition of low or moderate income is based on HUD income definitions of up to 80 percent of the area median income (AMI). Data for this analysis is from the HUD Low and Moderate Income Summary based on the 2011-2015 American Community Survey.[1]

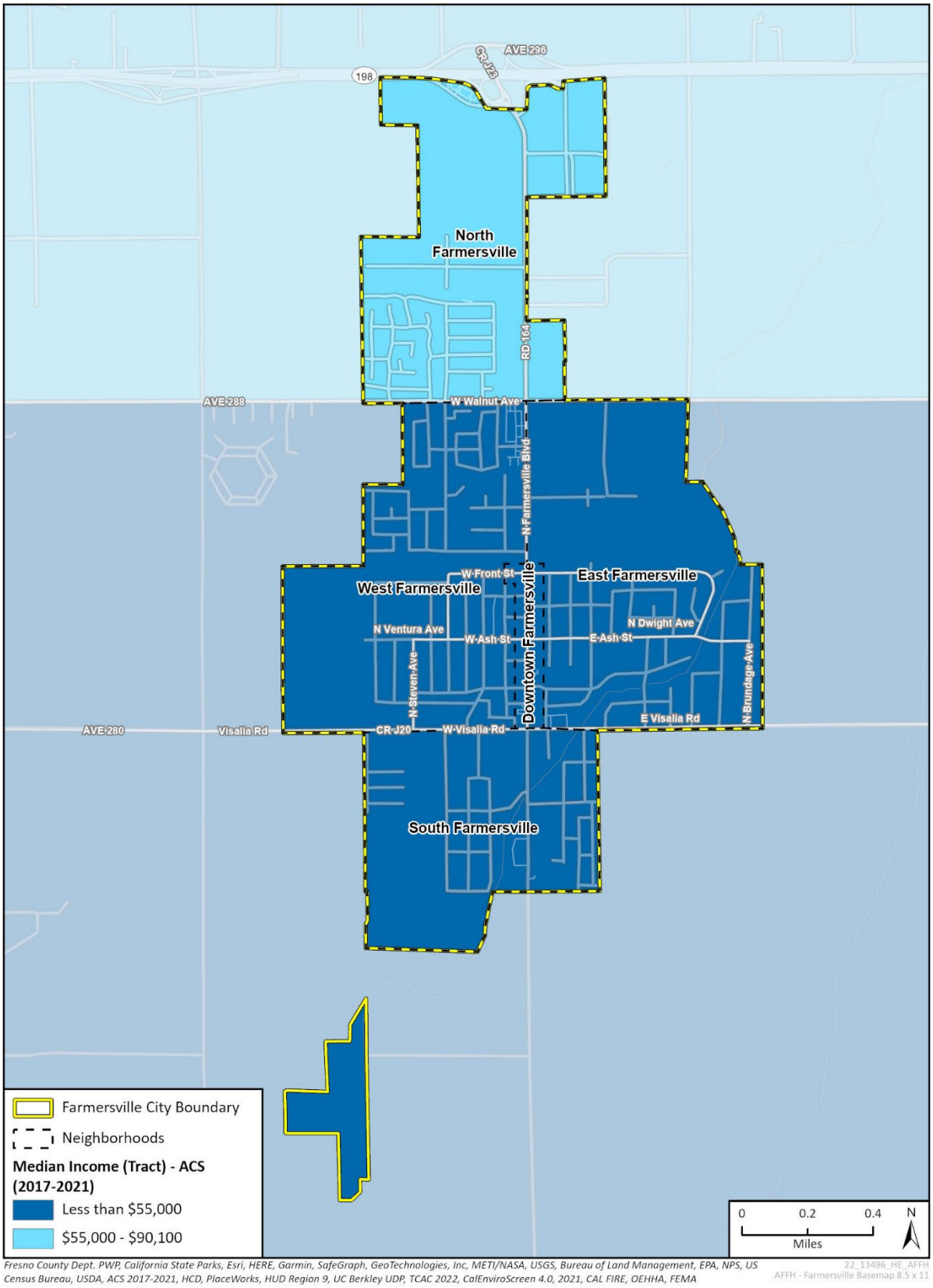
As of 2021 (most recent available data), Farmersville had a median household income of $47,957 per year, 18 percent less than the county's median income of $57,394 and much less than the state median household income of $87,100.

Households in North Farmersville has the highest median household income in the city, approximately $86,676 per year (Figure C5-9). In comparison, throughout the rest of the city median household income is less than $55,000 per year, significantly lower than the state average. North Farmersville is part of a larger census tract that encompasses large portions of unincorporated county lands, and the AFFH Data Viewer may not accurately represent the population living in this neighborhood. However, North Farmersville's residential area has one main residential neighborhood primarily comprised of single-family homes that are relatively newer and larger than in other neighborhoods in Farmersville. One 48-unit rental multifamily complex is located in North Farmersville.

LMI populations are prevalent throughout Farmersville and generally follow the same patterns as median household income. Across the city, more than 25 percent of residents are LMI. Downtown, East, West, and portions of South Farmersville have a higher percentage of LMI residents compared to other areas of the city (Figure C5-10). The areas with the highest percentage of LMI residents in the city are West and South Farmersville, where 78 percent of the population is considered LMI.

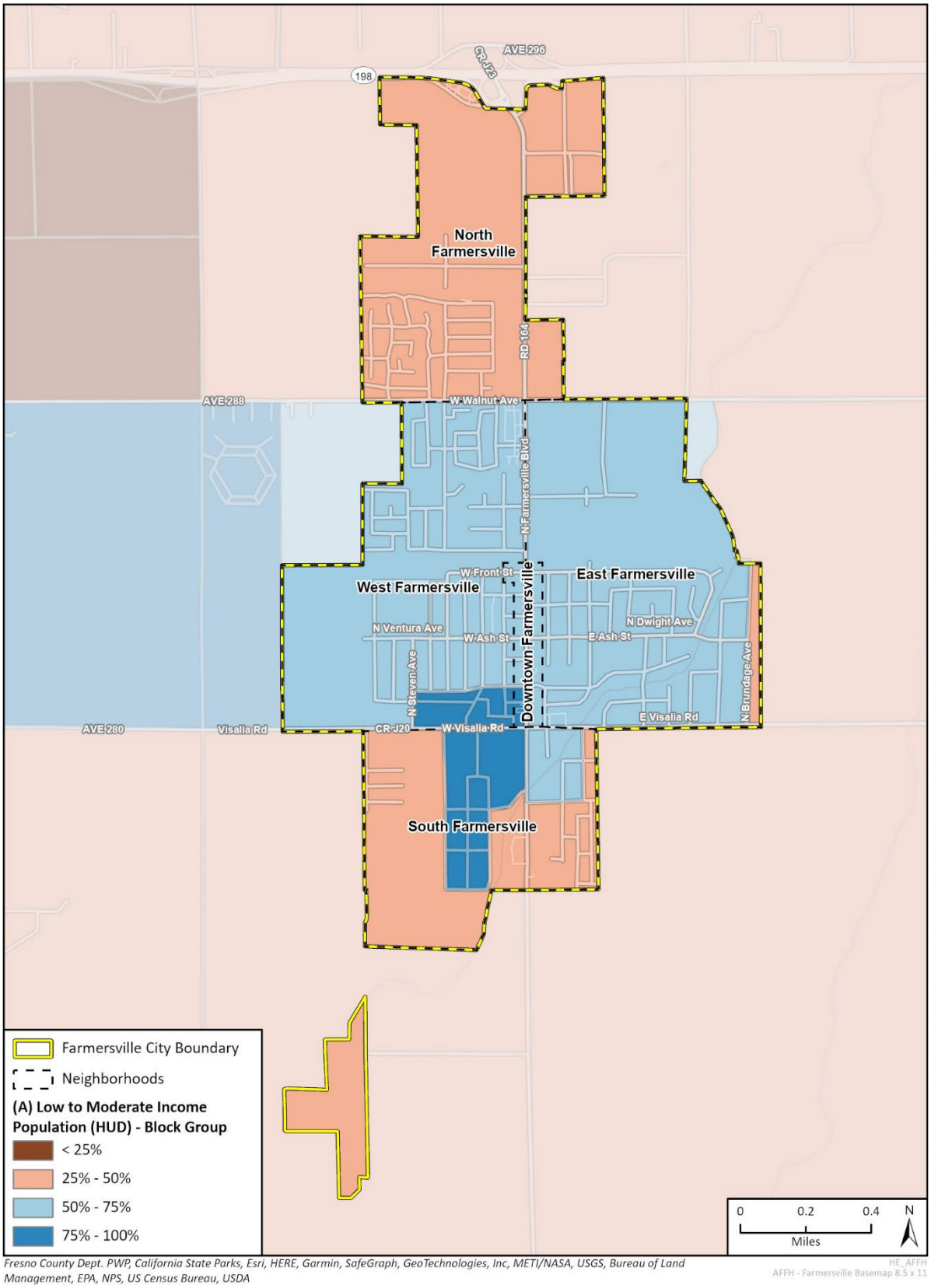
[1] HUD Exchange 2021: https://www.hudexchange.info/programs/acs-low-mod-summary-data/

Figure C5-9 Median Household Income (City of Farmersville)



Source: AFFH Data Viewer, 2023

Figure C5-10 Low and Moderate Income Population (City of Farmersville)



Source: AFFH Data Viewer, 2023

Racially and Ethnically Concentrated Areas of Poverty

To identify racially and ethnically concentrated areas of poverty (known as R/ECAPs), TCAC includes a poverty concentration and racial segregation filter that aligns with HUD's R/ECAP methodology.

TCAC categorizes census tracts that have both a poverty rate of over 30 percent and that are designated as being racially segregated (overrepresentation of people of color relative to the county) as areas of high segregation and poverty. There is one census tract of high poverty and segregation in Farmersville, located in East Farmersville and portions of West and South Farmersville (Figure C5-11). This census tract is predominantly Hispanic/Latino, with 89 percent of residents identifying as Hispanic/Latino and approximately 27 percent of households earning an income below the poverty line.

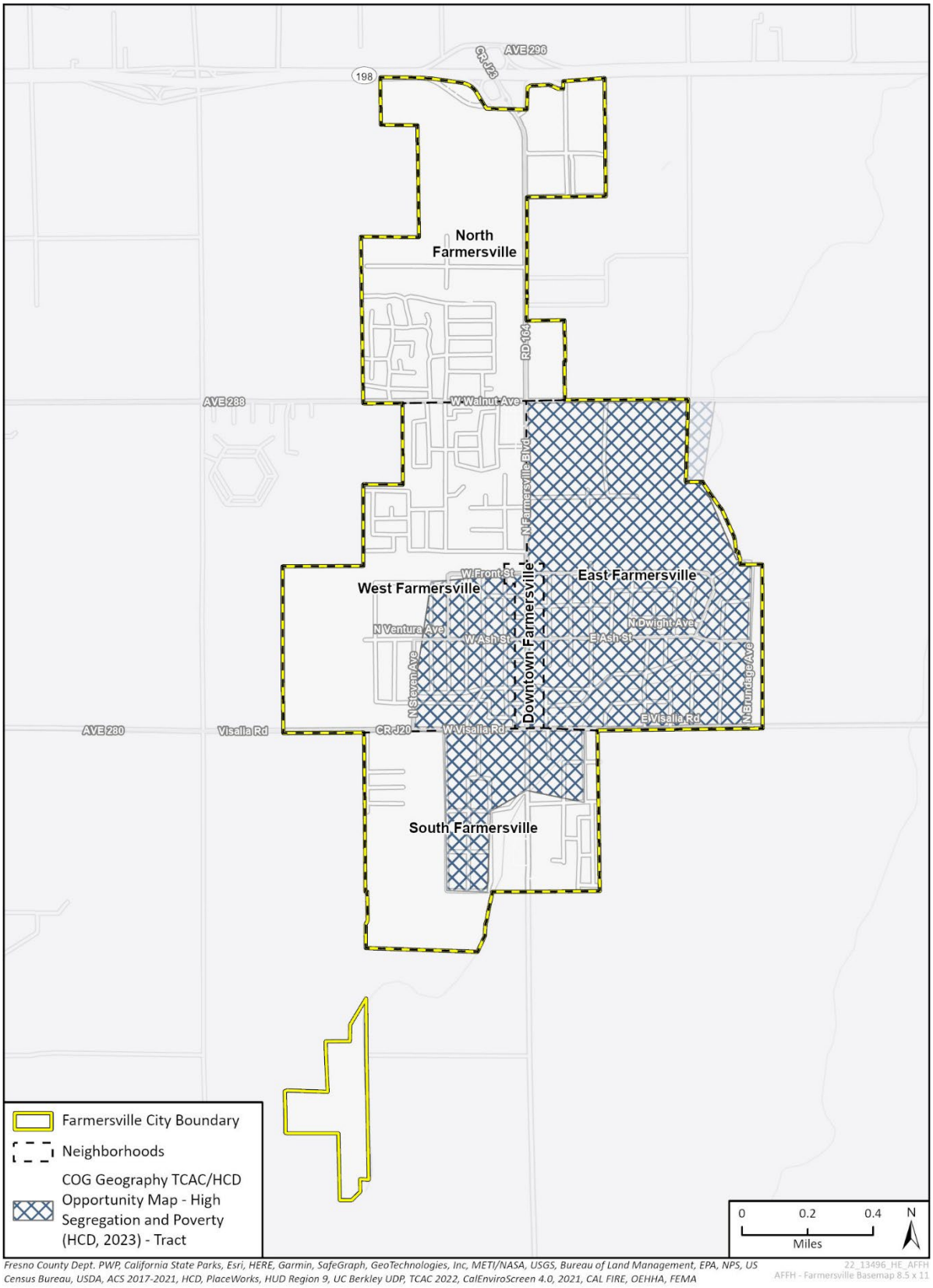
Poverty and Segregation

Similar to Tulare County, nearly one quarter (24 percent) of the households in Farmersville earn an income below the poverty line. Throughout most of the city, between 20 and 30 percent of residents live below the poverty line (Figure C5-12). North Farmersville has the lowest percentage of residents living below the poverty line, less than 10 percent.

Concentrated Areas of Affluence

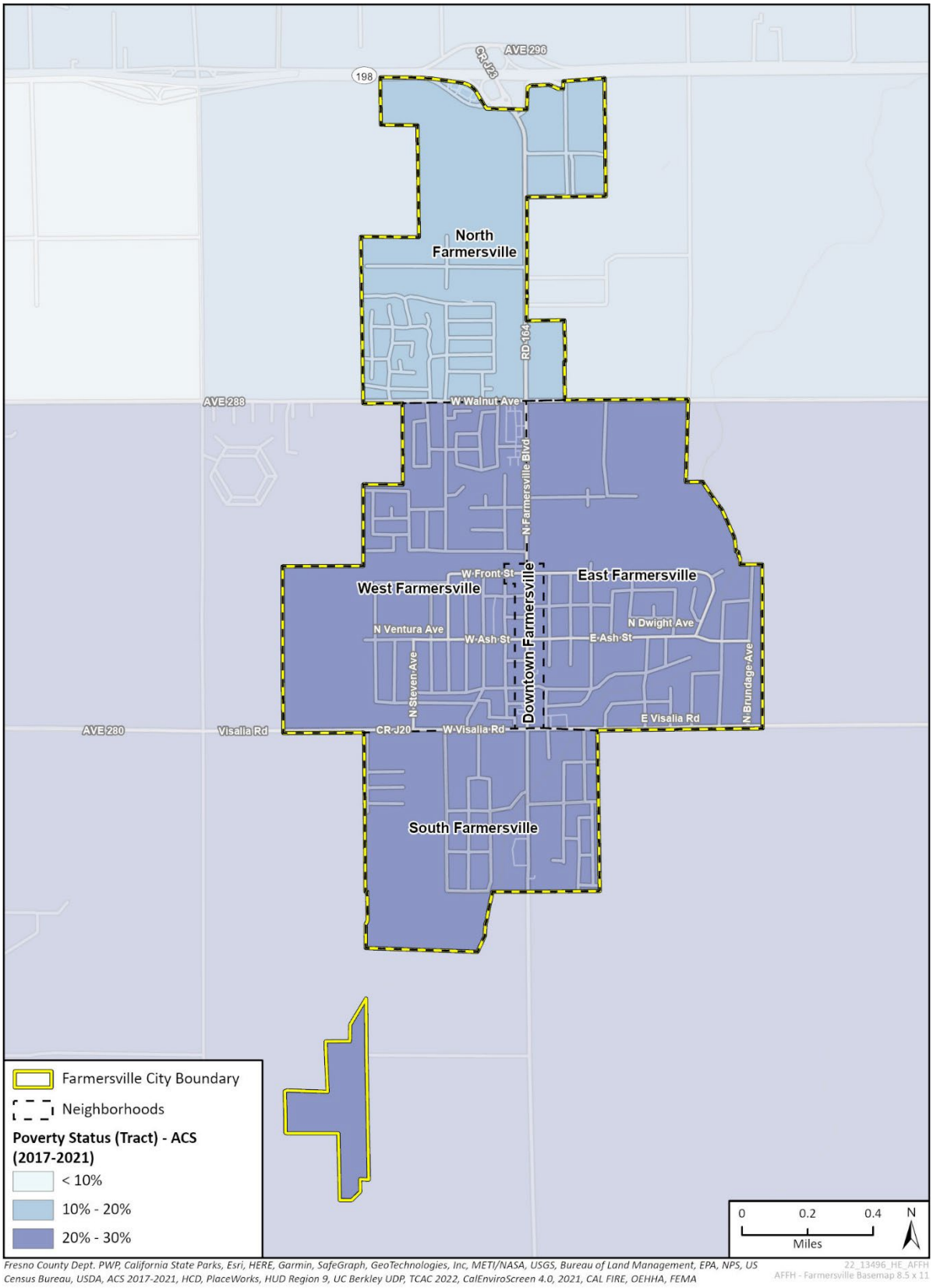
The AFFH Data Viewer identifies Racially Concentrated Areas of Affluence (RCAAs) as census tracts that have a white population that is 1.25 times higher than the Council of Governments (COG) region (which is all of Tulare County and the incorporated cities) and a household median income 1.5 times higher than the AMI. There are no RCAAs in Farmersville. Very few areas in Farmersville have a household median income that is higher than the county's household median income of $57,394 per year. However, there is one neighborhood with a higher median household income and a greater percentage of white residents compared to other areas of the city. North Farmersville has a higher median household income than the county, at $86,676, 41 percent higher than the county. This area has a higher percentage of white residents than the rest of the city (41 percent). In the rest of the city, 20 percent or less of the population is white.

Figure C5-11 Areas of High Segregation and Poverty (City of Farmersville)



Source: AFFH Data Viewer, 2023

Figure C5-12 Poverty Status (City of Farmersville)



Source: AFFH Data Viewer, 2023

C5.8 Disparities in Access to Opportunities

Transit Access and Walkability

One transit organization, Visalia Transit, operates throughout the city of Farmersville, offering fixed route bus services to residents.

Transit opportunities operating in Farmersville

- Visalia Transit operates two fixed bus routes serving Farmersville; one route connects Visalia and Farmersville and the other connects Visalia, Farmersville, and Exeter. These routes run from 6:00 am to 8:47 pm Monday through Friday and 8:00 am to 6:17 pm on weekends. One route has one stop in Downtown Farmersville at the intersection of Visalia Road and Farmersville Boulevard (City Hall) which stops at about one and a half hour intervals. The other route has two stops in Farmersville at City Hall and at Roy's Park at the southern end of Farmersville Boulevard which stops at one-hour intervals.
- Visalia Transit also operates Dial-a-Ride that services the city, which is a shared ride, advanced reservation, origin-to-destination service for persons with disabilities. The Dial-a-Ride service area includes anywhere within city limits.

Residents in Farmersville have lower access to transit and lower transit ridership compared to residents in other cities in the region. Farmersville received an average AllTransit performance score of 3.7 out of 10, which is based on a combination of a low number of transit trips per week and low number of jobs accessible by transit.[2] For comparison, the cities of Visalia, Tulare, and Porterville received higher performance scores, 6.5, 5.4, and 4.7 respectively. According to the American Community Survey (ACS) estimates, 85 percent of commuters commute by driving alone, 13 percent carpool, one percent walk, and less than one percent use transit or bicycle.

Walk Score is a private company that offers a walkability index on its website and measures the pedestrian friendliness of a given location by analyzing walking routes to nearby amenities and examining population density and road metrics, including block length and intersection density.[3] Farmersville received a walk score of 65 out of 100, which is considered "somewhat walkable." The Environmental Protection Agency (EPA) walkability index ranks block groups according to their relative walkability. According to the EPA index, walkability in Farmersville is considered low throughout the city.

[2] AllTransit.Org, 2021. https://alltransit.cnt.org/
[3] Walk Score, 2021. https://www.walkscore.com/methodology.shtml

East and West Farmersville are the most walkable areas in the city (Figure C5-13). North and South Farmersville are not considered to be walkable. Larger cities in the tri-county area, including Visalia, Fresno, Reedley, and Hanford, have areas that are much more walkable than Farmersville.

According to the TCAG 2022 Regional Active Transportation Plan for the Tulare County Region, priority active transportation improvements in the city of Farmersville emphasize improving pedestrian and bicycle connections throughout the city. Projects include installation of bike lanes and Americans with Disabilities Act compliant sidewalks and ramps and widening East Walnut Avenue and Visalia Road, new bike trails along Deep Creek and San Joaquin Valley Railroad, and new pedestrian crossing at the intersection of Farmersville Boulevard and Citrus Street. In addition, the City of Visalia plans to construct a multi-use trail along the south side of the San Joaquin Valley Railroad tracks from Visalia to Rocky Hill that would connect Farmersville to Visalia and Exeter. These planned improvements will increase walkability and access to active transportation throughout Farmersville, particularly in central parts of the city.

Access to Quality Education

TCAC Educational outcomes are measured through the educational opportunity index, which measures the percentage of 4th graders who meet math and literacy proficiency standards, percentage of high schoolers who graduate on time, and percentage of students not receiving free or reduced-price lunch. Scores are generated by comparing each census tract to all other census tracts within the same COG. Scores range from 0-1, with 1 being the most positive educational outcome, and 0 being the least positive educational outcome. Educational outcomes are mostly less positive throughout Farmersville (Figure C5-14). North Farmersville has more positive education outcomes compared to the rest of the city, indicating students in North Farmersville will be more likely to have higher education attainment levels and greater access economic advancement opportunities than students in other parts of the city.

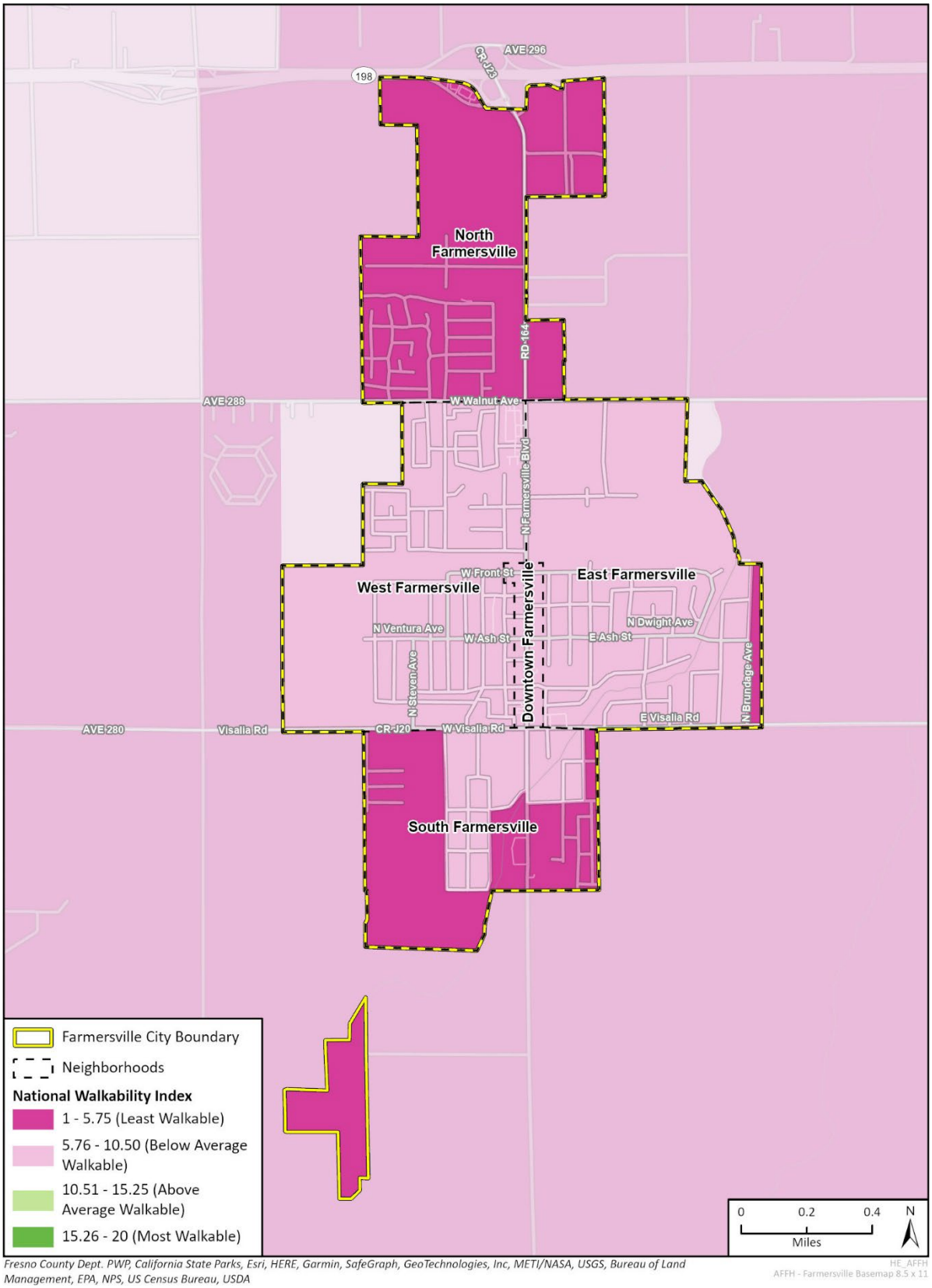
Farmersville is served by the Farmersville Unified School District (FUSD). FUSD includes a total of six schools: 10 elementary schools, three middle schools, five high schools, two kindergarten through 12th grade schools, one alternative school, one continuation school, and one community day school.

According to Kidsdata.org, a data compilation program of the Lucile Packard Foundation for Children's Health, FUSD had a high school graduation rate of 88 percent in 2021. The student population is primarily Hispanic/Latino (96 percent), with less than one percent of students identifying as white, Asian American/Pacific Islander, Black/African American, Native American/Alaskan Native, and multiracial. [4] Thirty-six percent of students are English learners, almost all of whom are Spanish speakers. Approximately 92 percent of students are eligible for free and reduced-price meals, indicating they are living in low-income households. In addition, approximately seven percent of students are eligible for the Migrant Education Program, meaning their parent/guardian is a migratory worker in the agricultural, dairy, lumber, or fishing industries and whose family has moved during the past three years.[5] [6]

Education attainment levels of Farmersville residents are lower than the county and tri-county averages. According to ACS estimates, 95 percent of the city's adult population (25 years of age and older) does not have a college degree (compared to 86 percent of the county and 83 percent of the tri-county area), and 42 percent do not have a high school degree (compared to 30 percent of the county and 25 percent in the tri-county area).

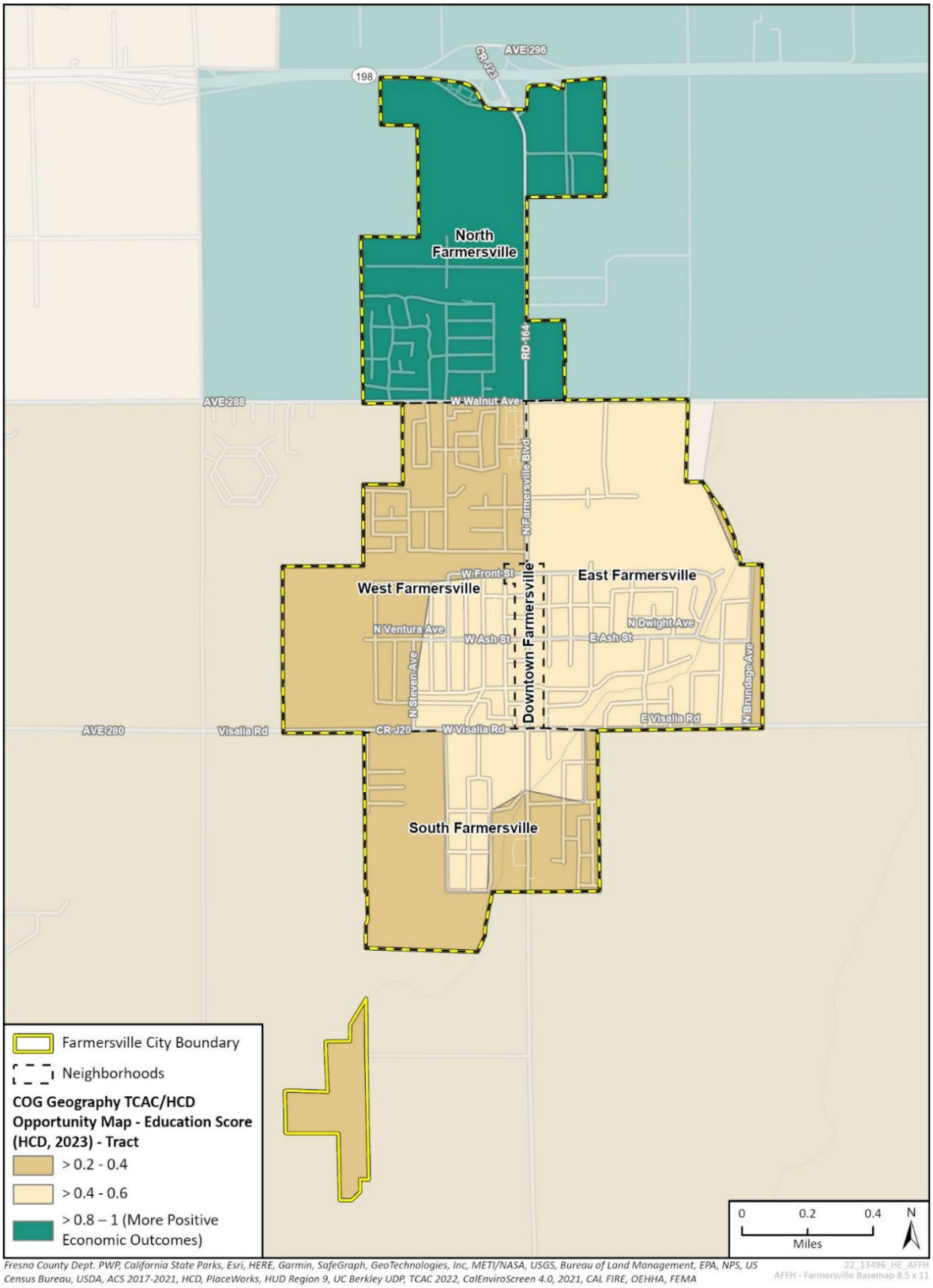
[4] Kidsdata.org. 2023. Dinuba Unified. https://www.kidsdata.org/region/1551/dinuba-unified/results#cat=18
[5] Ed-Data. 2023. Dinuba Unified. http://www.ed-data.org/district/Tulare/Dinuba-Unified
[6] California Department of Education. 2023. Overview of Migrant Education in California. https://www.cde.ca.gov/sp/me/mt/overview.asp

Figure C5-13 Walkability Index (City of Farmersville)



Source: National Walkability Index, 2023

Figure C5-14 TCAC Opportunity Areas – Education Outcomes (City of Farmersville)



Source: AFFH Data Viewer, 2023.

Economic Outcomes

TCAC economic opportunities, measured by census tract, considers poverty, adult education, employment, job proximity, and median home values. A higher economic index score reflects more positive economic outcomes. Economic outcomes in Farmersville are similar to other cities within the same COG, with a mix of more positive and less positive outcomes throughout the city. North Farmersville has the most positive economic outcomes compared to the rest of the city (Figure C5-15). East and Downtown Farmersville and parts of West and South Farmersville have the least positive economic outcomes in the city.

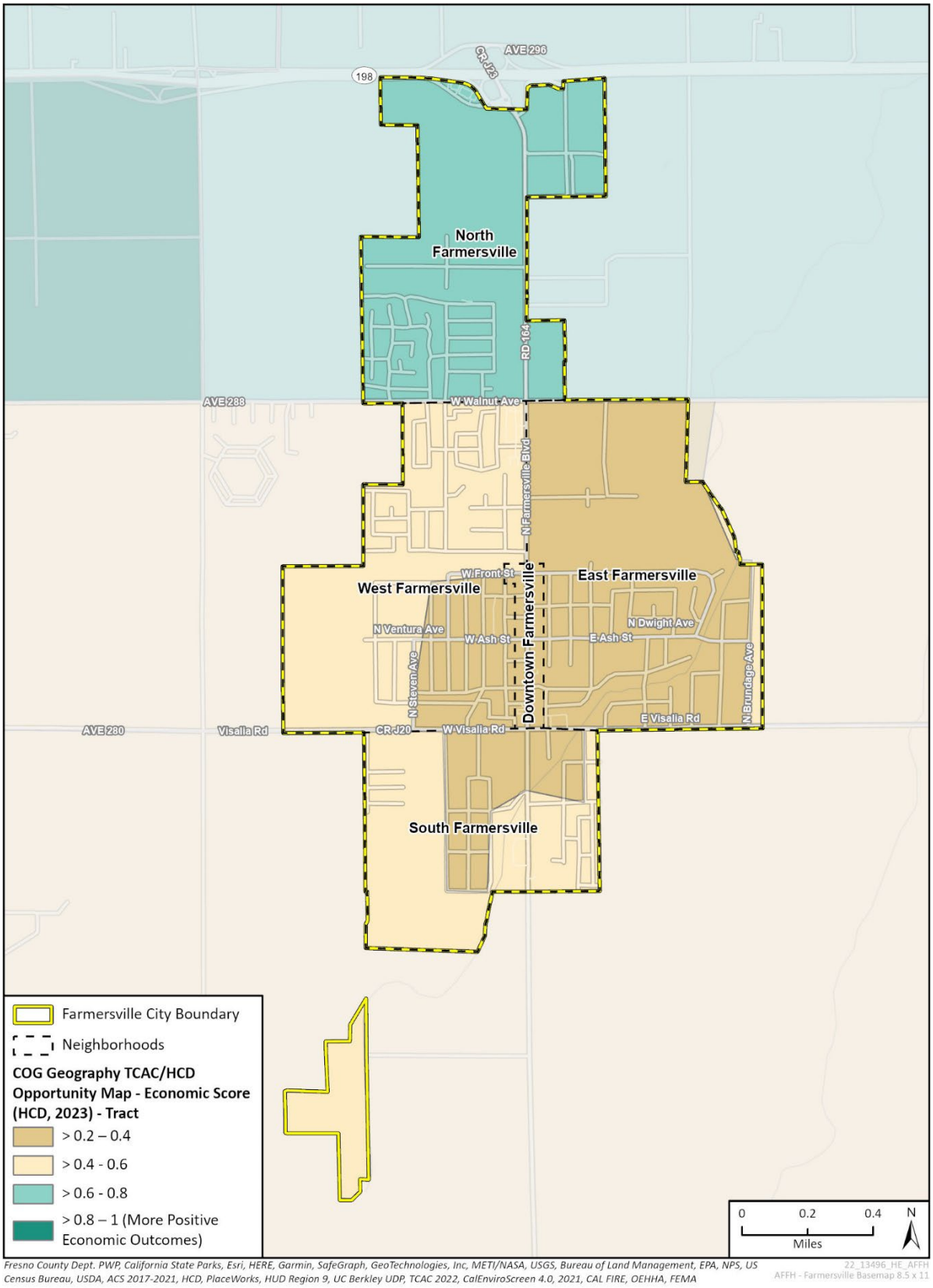
In 2021, Farmersville had a labor force participation rate of 63 percent of persons 16 years and older, slightly higher than the labor force participation rate for the county (61 percent) and tri-county area (60 percent). The largest industries in Farmersville are agriculture, forestry, fishing and hunting, and mining (19 percent of employed population), educational services, and health care and social assistance (17 percent of employed population), and arts, entertainment, recreation, and accommodation and food services (16 percent of employed population). The top two industries are also the largest in the county based on employment. According to the City's General Plan, some of the largest employers in the city include FUSD, Windows Plus, Artesia Ready-Mix, and the City of Farmersville.[7]

According to the General Plan Part II Community Profile the largest employers in Farmersville include the FUSD (81 employees), Windows Plus (30 employees), Artesia Ready-Mix (27 employees), City of Farmersville (26 employees), and Nickels Payless (25 employees).[8]

Commercial and industrial land uses and zoning that accommodate employment opportunities are concentrated in North Farmersville. Most Farmersville residents commute outside the city for work (94 percent). Approximately 23 percent of employed Farmersville residents work in Visalia, seven percent work in Exeter, and six percent work in the city of Fresno.[9]

[7] City of Farmersville. 2001. General Plan Part II Community Profile https://www.cityoffarmersville-ca.gov/DocumentCenter/View/388/Part-II-Community-Profile (accessed March 2023)
[8] City of Farmersville. 2001. General Plan Part II Community Profile. http://www.cityoffarmersville-ca.gov/DocumentCenter/View/388/Part-II-Community-Profile
[9] U.S. Census Bureau. 2023. OnTheMap Work Destination Analysis. https://onthemap.ces.census.gov/

Figure C5-15 TCAC Opportunity Areas - Economic (City of Famersville)



Source: AFFH Data Viewer, 2023.

Healthy and Safe Housing Environment

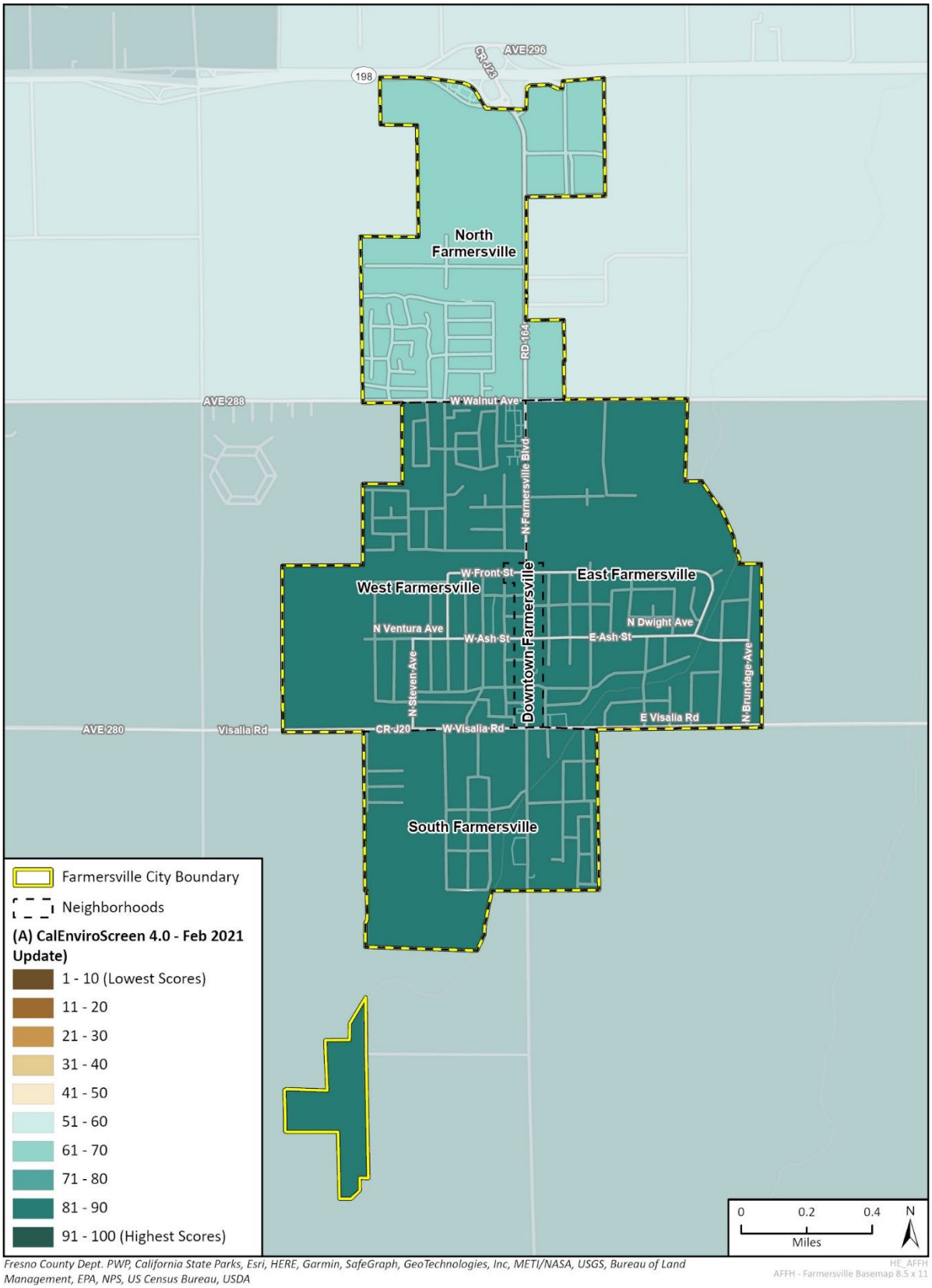
Pollution burden is high throughout Farmersville, particularly associated with ozone, particulate matter, and pesticide use. Additionally, population characteristics that make Farmersville residents more vulnerable to pollution include asthma, cardiovascular disease, low birth rate, low education attainment, linguistic isolation, and rates of high poverty.

Pollution burden in Farmersville is comparable to most of the western tri-county area, including the western urbanized area of Tulare County and Fresno County and the entirety of Kings County. The CalEnviroScreen map for the City of Farmersville identifies the degree to which communities are considered burdened by pollution by comparing the scores of each census tract to every other census tract in the state. CalEnviroScreen identified a high degree of pollution burden throughout most of the city but highest in East, West, Downtown, and South Farmersville (Figure C5-16). Pollution burden associated with ozone, particulate matter, and pesticide use are high throughout the entire city. Pollution burden associated with drinking water contaminants is high in North Farmersville and parts of East and South Farmersville, and pollution burden associated with solid waste sites are high in parts of East and South Farmersville.

The TCAC environmental opportunity map also identifies pollution burden, using CalEnviroScreen scores. However, unlike CalEnviroScreen, the TCAC map compares census tracts to other census tracts within the same COG to show differences in pollution burden within the region. According to the TCAC opportunity map, environmental outcome scores are highest in East, Downtown, and parts of West and South Farmersville (Figure C5-17). Environmental outcome scores are low throughout the rest of the city.

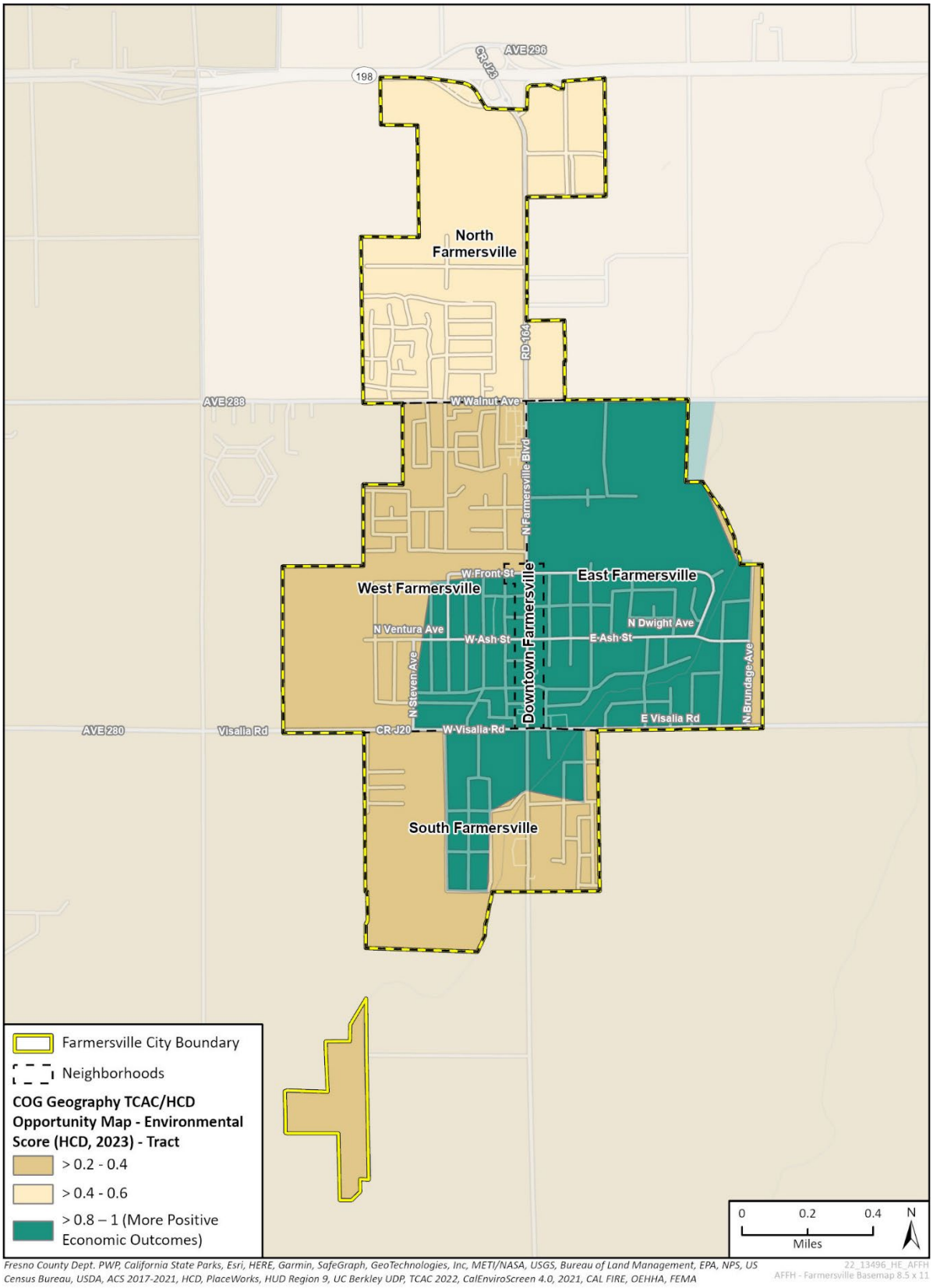
Senate Bill (SB) 535 tasks the California Environmental Protection Agency with identifying disadvantaged communities. Disadvantaged communities are low-income areas that are disproportionately affected by environmental pollution and other hazards. Under SB 535, a minimum of 25 percent of funds from the Greenhouse Gas Reduction Fund, funded by revenue from the State's cap-and-trade emissions program, goes to projects that benefit disadvantaged communities. Most of Farmersville is considered a disadvantaged community under SB 35 (Figure C5-18). Only North Farmersville is not considered a disadvantaged community. This area has a lower percentage of LMI residents and a slightly smaller non-white population compared to the rest of the city. However, based on the CalEnviroScreen map and TCAC environmental outcome scores, like the rest of the city, North Farmersville has a high degree of pollution burden.

Figure C5-16 CalEnviroScreen 4.0 Percentile Scores (City of Farmersville)



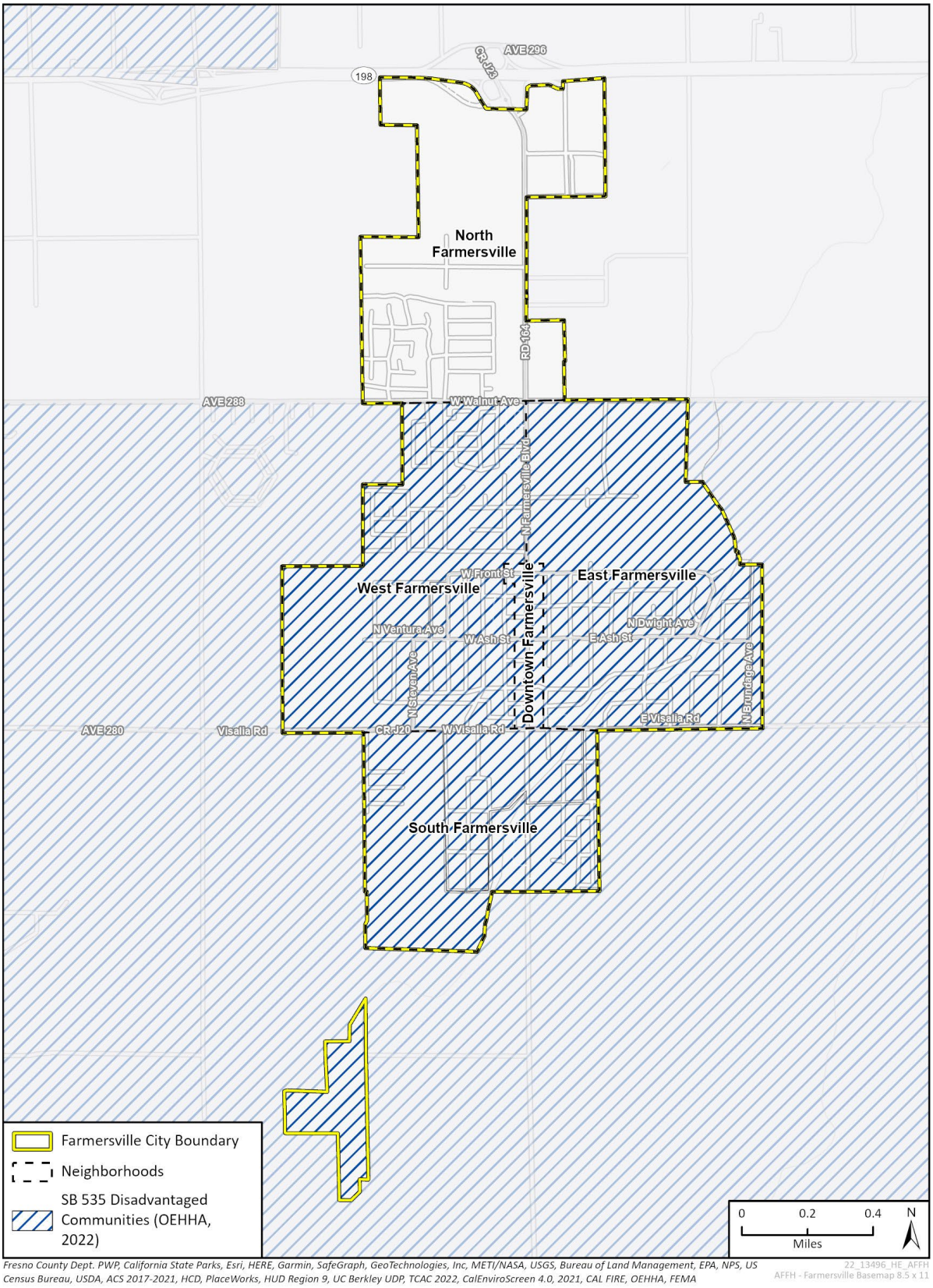
Source: AFFH Data Viewer, 2023.

Figure C5-17 TCAC Opportunity Areas – Environmental (City of Farmersville)



Source: AFFH Data Viewer, 2023.

Figure C5-18 SB 535 Disadvantaged Communities (City of Farmersville)



Source: AFFH Data Viewer, 2023.

C5.9 Disproportionate Housing Needs

Housing Problems

Housing problems, as defined by HUD, include overcrowding, cost burden, lack of complete kitchen facilities, and lack of plumbing facilities. Approximately 45 percent of households in Farmersville are experiencing housing problems and 30 percent of households are experiencing severe housing problems. This is slightly higher than the county and tri-county area, where 44 percent of are experiencing housing problems and 26 percent of households are experiencing severe housing problems in both the county and tri-county area.

Substandard Housing

HUD considers housing units to be "standard units" if they comply with local building codes, whereas housing units are considered "substandard" if they lack complete plumbing or kitchen facilities. According to ACS estimates there are no substandard housing units in Farmersville. However, as noted in Chapter C2, *Housing Needs Assessment*, the City's Code Enforcement Division estimates that approximately two percent of units (57 units) require major rehabilitation and fewer than one percent of units (28 units) citywide are beyond the point of repair. The percentage of substandard housing units in Farmersville is slightly lower than in Tulare County and other jurisdictions in the region.

Approximately 66 percent of the city's housing stock was constructed prior to 1990 and is more than 30 years old. Housing units older than 30 years have a higher likelihood of needing repair and modernization improvements. The areas of Farmersville with older housing or housing more likely in need of repair are East and Downtown Farmersville.

Housing Cost Burden

Housing cost burden is higher among renters than homeowners. Approximately 34 percent of renters and 15 percent of homeowners are cost burdened in Farmersville.

The rate of cost burden (spending more than 30 percent of household income on housing costs) among Farmersville residents is lower than the county and tri-county area. As discussed in Chapter C2, *Housing Needs Assessment*, housing cost burden is high among both homeowners and renters in Farmersville. Approximately 34 percent of all households are cost burdened in Farmersville and 15 percent are severely cost burdened slightly more than the county and tri-county averages. Housing cost burden is higher among renters than homeowners.

Twenty-seven percent of homeowners in Farmersville experience housing cost burden. Cost burden among homeowners is highest in East and Downtown Farmersville and parts of West and South Farmersville, where approximately 61 percent of homeowners are cost burdened (Figure C5-19). North Farmersville has the lowest percentage of cost burdened homeowners (24 percent). Throughout the rest of the city, approximately 53 percent of homeowners are cost burdened.

Fifty-three percent of renters experience housing cost burden in Farmersville. There is a high percentage of cost burdened renters throughout the entire city, between 40 and 60 percent. The percentage of renters experiencing cost burden is lowest in North Farmersville, where 43 percent of renters are cost

burdened (Figure C5-20). Throughout the rest of the city, 50 to 52 percent of renter households are cost burdened.

As household income increases, the likelihood of experiencing cost burden decreases (Table C5-3). Extremely low-income households have the highest percentage of cost burden, with 69 percent of homeowners and 97 percent of renters experiencing cost burden in Farmersville. Among low-income households, 32 percent of homeowners are cost burdened and 51 percent of renters are cost burdened. Moderate- and above moderate-households have the lowest rates of cost burden among the different income levels. Among moderate- and above moderate-income households, six percent of owners and 20 percent of renters are cost burdened.

Table C5-3 Assistance Needs of Lower-Income Households (City of Farmersville)

Household by Tenure, Income, and Housing Problem	Renters		Owners		Total Household s	
	Total	Percent	Total	Percent	Total	Percent
Extremely low-income (0-30% AMI)	**305**		**290**		**595**	
With any housing problem	295	97%	200	69%	495	83%
With cost burden >30%	295	97%	200	69%	495	83%
With cost burden >50%	175	57%	175	60%	350	59%
Very low-income (31-50% AMI)	**235**		**350**		**585**	
With any housing problem	195	83%	255	73%	450	77%
With cost burden >30%	135	57%	190	54%	325	56%
With cost burden >50%	30	13%	65	19%	95	16%
Low-income (51-80% AMI)	**215**		**520**		**735**	
With any housing problem	110	51%	165	32%	275	37%
With cost burden >30%	40	19%	125	24%	165	22%
With cost burden >50%	0	0%	0	0%	0	0%
Moderate & Above Income (>80% AMI)	**280**		**720**		**1,000**	
With any housing problem	55	20%	40	6%	95	10%
With cost burden >30%	0	0%	0	0%	0	0%
With cost burden >50%	0	0%	0	0%	0	0%
Total Households	**1,035**		**1,880**		**2,915**	
With any housing problem	655	63%	660	35%	1,315	45%
With cost burden >30%	470	45%	515	27%	985	34%
With cost burden >50%	205	20%	240	13%	445	15%

Note: Housing Problems: There are four housing problems in the CHAS data: 1) housing unit lacks complete kitchen facilities; 2) housing unit lacks complete plumbing facilities; 3) household is overcrowded; and 4) household is cost burdened. A household is said to have a housing problem if they have any 1 or more of these 4 problems.

Cost burden: Monthly housing costs (including utilities) exceeding 30% of monthly income.

Severe cost burden: Monthly housing costs (including utilities) exceeding 50% of monthly income.

Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2015-2019 release

Overcrowding

As discussed in Chapter C2, *Housing Needs Assessment*, approximately 24 percent of all households in Farmersville, or 661 households, are considered large households (households with five or more people). This is slightly higher than the county (22 percent) and tri-county averages (19 percent). There is a higher percentage of owner households (27 percent) that are large households compared to renter households (18 percent) in Farmersville.

Approximately 12 percent of households in Farmersville are overcrowded and six percent are severely overcrowded, slightly higher than the county and tri-county averages. Renter households have higher rates of overcrowding than homeowner households, with 25 percent of renters and five percent of homeowners. Overcrowded housing is lowest in North Farmersville, where less than five percent of households are overcrowded (Figure C5-21). Throughout the rest of the city between five and 10 percent of households are overcrowded. Areas with higher rates of overcrowding in Farmersville have more land zoned Medium and High Density Residential compared to other areas of the city. Along with the higher rate of overcrowding among renters, this information indicates that overcrowded households are likely living in multifamily housing which often does not provide enough bedrooms for large households.

Persons Experiencing Homelessness

The Kings Tulare Homeless Alliance conducted a Point-In-Time (PIT) Count in 2023. Data from the PIT Count is reported for Porterville, Visalia, Tulare, and the balance of the county. Among those counted, there were a total of 1,053 people experiencing homelessness in Tulare County and 97 percent of this population lives in either Porterville, Tulare, or Visalia, while the remaining three percent (36 residents) live throughout all other jurisdictions including Farmersville. The City has a disproportionately lower percentage of the county's homeless population in comparison to the share of the county population. People experiencing homelessness are more likely to reside in nearby Visalia where there are more services.

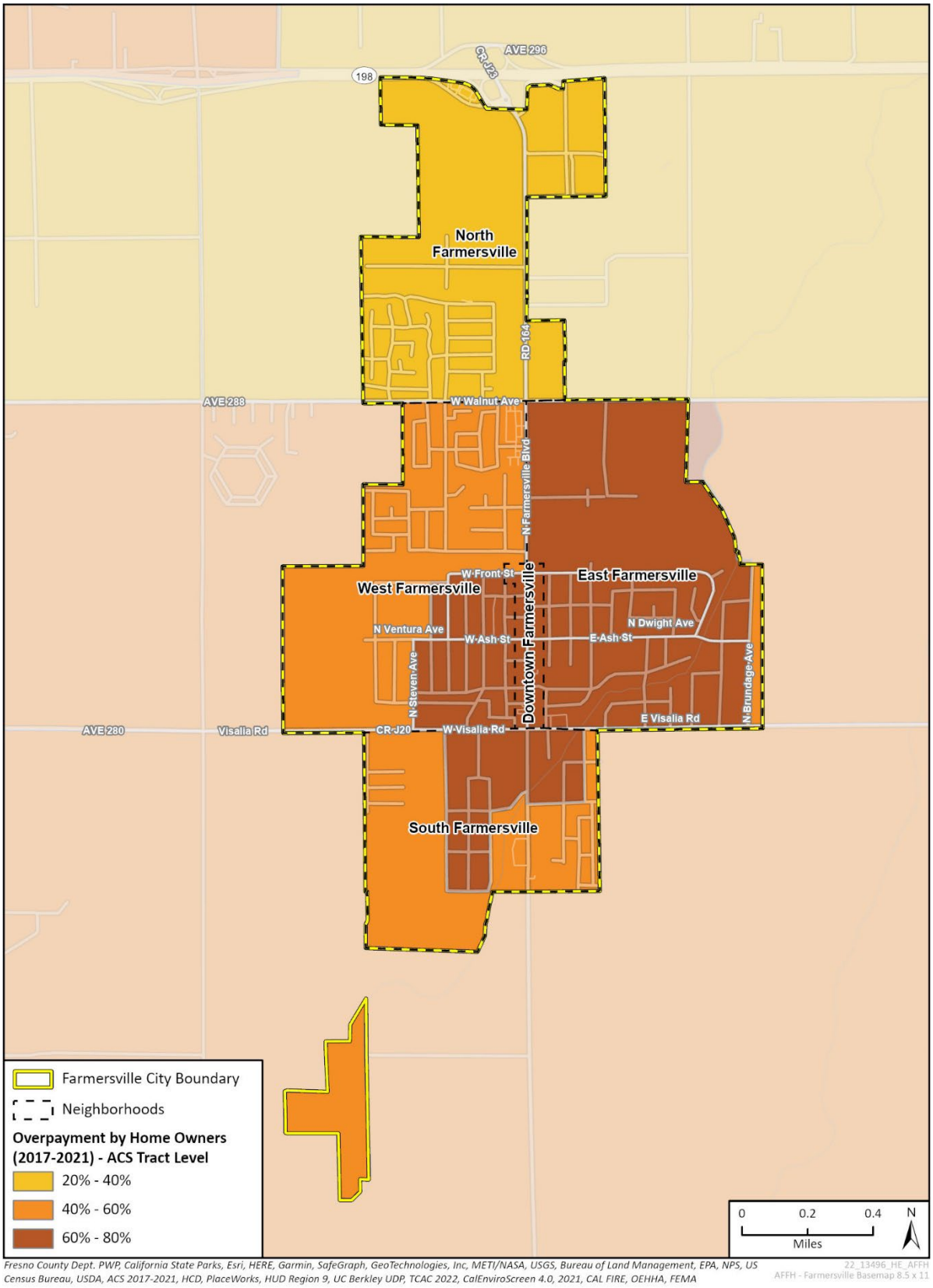
Displacement

Communities are designated sensitive if the share of very low-income residents is greater than 20 percent and have any of the two following characteristics:

- The share of renters is above 40 percent
- The share of people of color is above 50 percent
- The share of very low-income households that are severely rent burdened is above the county median
- The percent change in rent is above the county median for rent increases

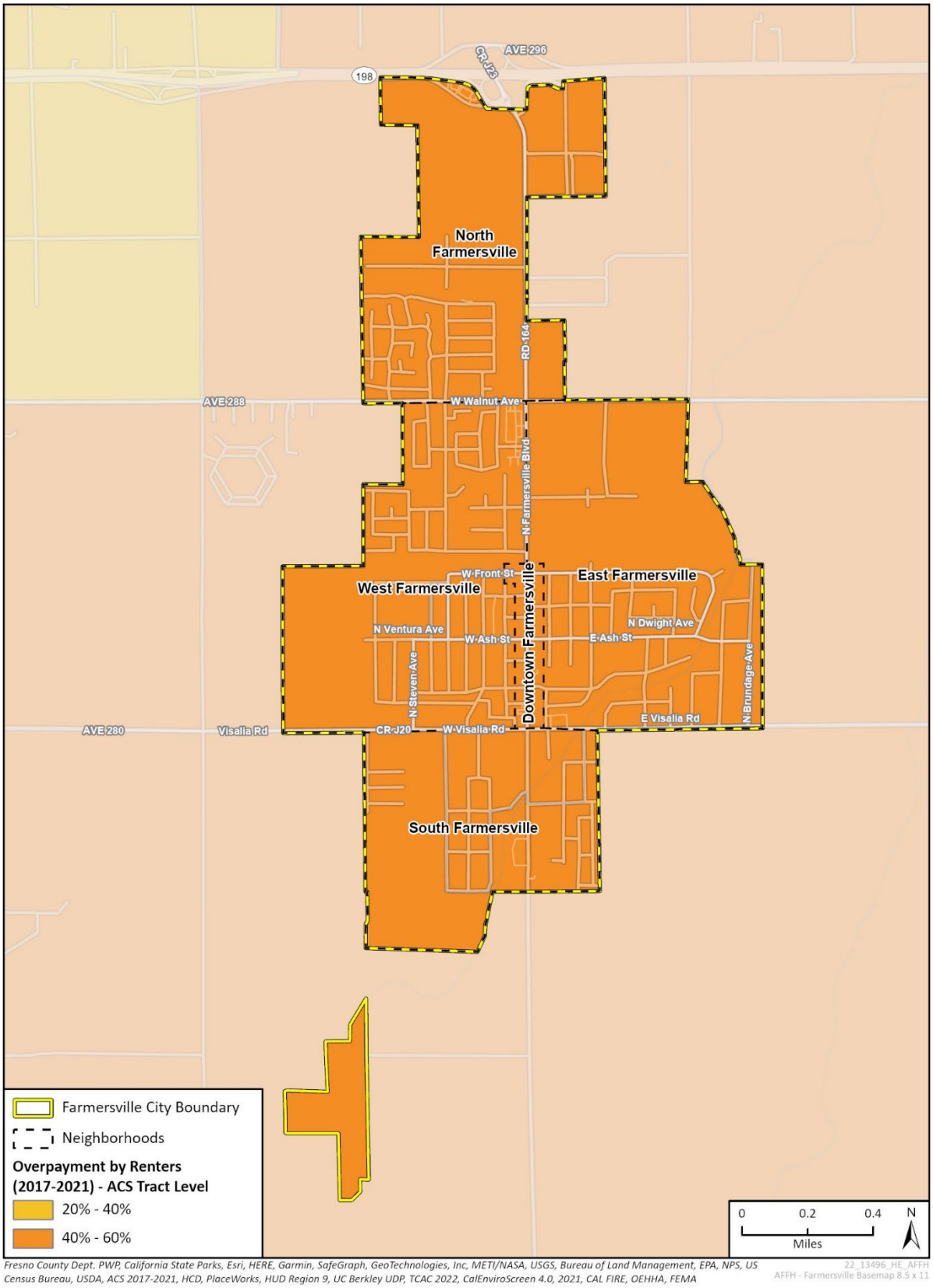
According to the UDP, low-income residents living in East and Downtown Farmersville and parts of West and South Farmersville are at risk of displacement (Figure C5-22).

Figure C5-19 Overpayment by Home Owners (City of Farmersville)



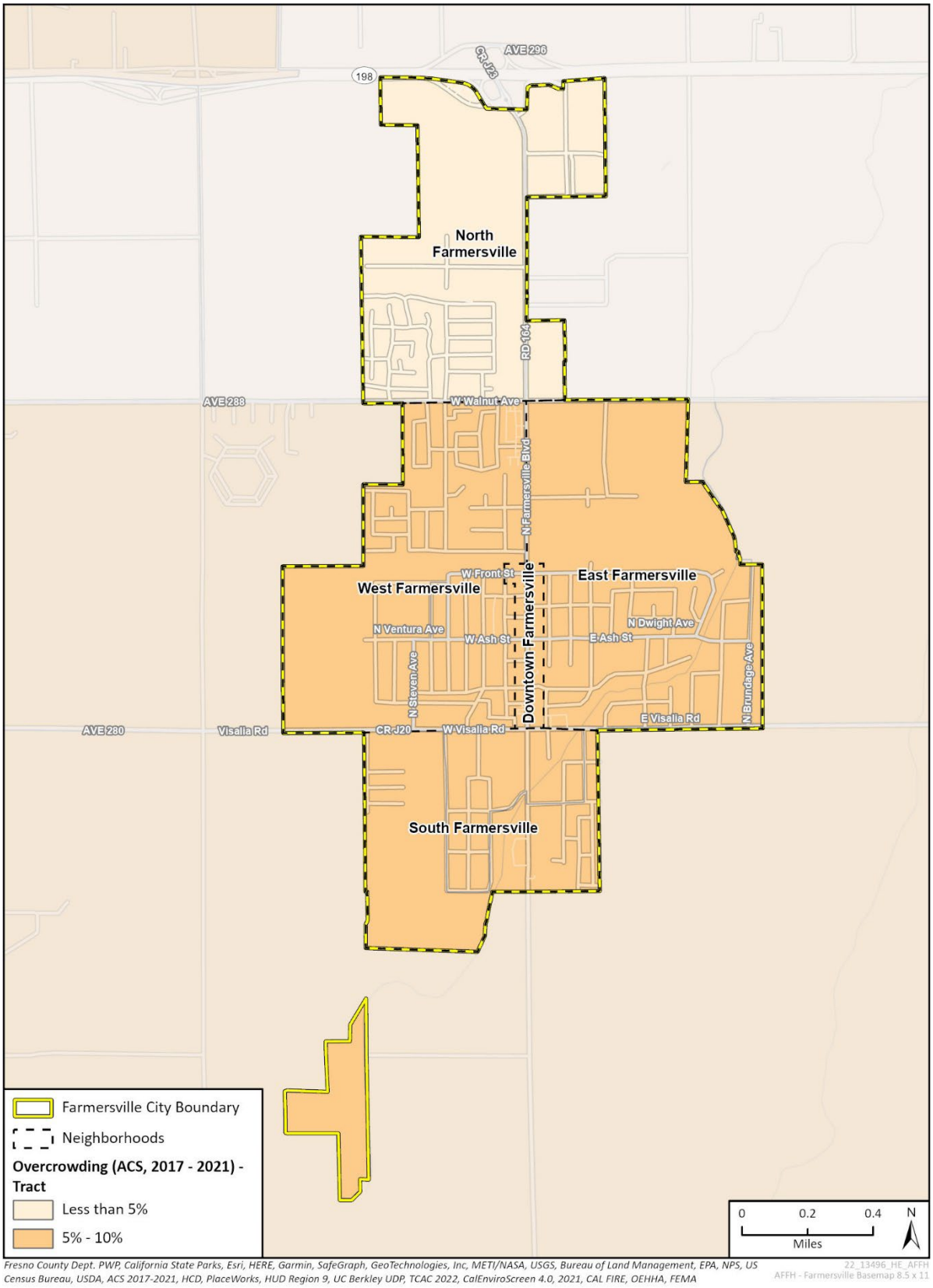
Source: AFFH Data Viewer 2.0, 2023.

Figure C5-20 Overpayment by Renters (City of Farmersville)



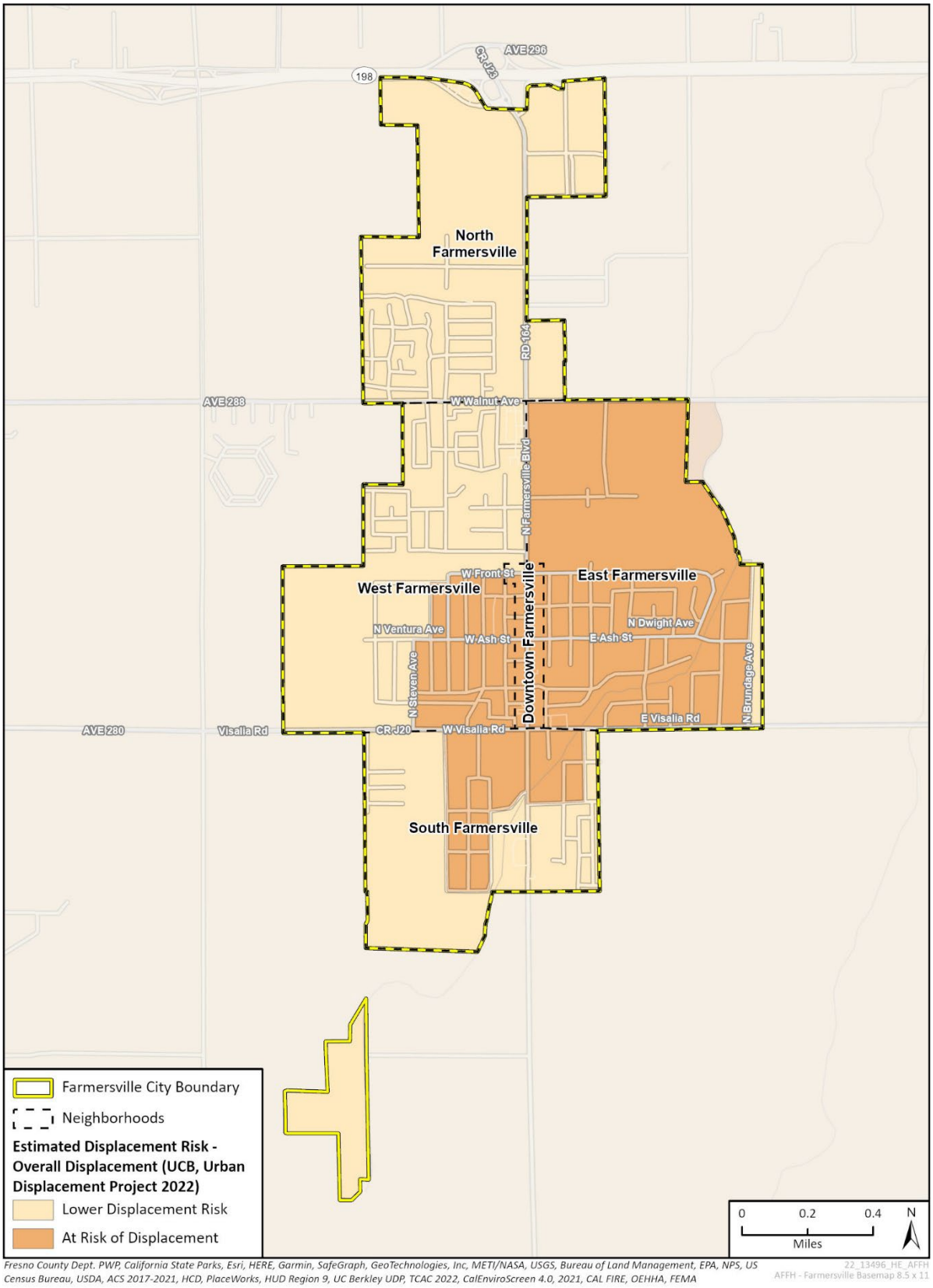
Source: AFFH Data Viewer, 2023.

Figure C5-21 Overcrowded Households (City of Farmersville)



Source: AFFH Data Viewer 2.0, 2023.

Figure C5-22 Displacement Risk (City of Farmersville)



Source: AFFH Data Viewer 2.0, 2023.

C5.10 Local Area Knowledge

Farmersville received its name when Thomas G. Brundage applied to the federal government during the 1860s to establish a post office in the newly establishing community. By the 1870s, Farmersville had several residences, a general store, post office, hotel, lumber yard, and several other businesses. African American settlers were frequently met with discrimination. In the 1870s, Wiley and Lucy Hinds, African American homesteaders in Farmersville, founded the Visalia Colored School in their barn for Black/African American, Native American, and Mexican children that were barred from attending local education institutions.[10][11] The town became a center for agricultural trade for the southern central part of Tulare County and continued to grow into the 20th Century.

During the Dust Bowl in the 1930s, thousands of people migrated to the Central Valley from across the United States to work in the growing agricultural industry. Many of these workers lived in migrant camps which generally fostered poor sanitary conditions. The Farmersville squatters camp was described by a Farm Security Administration economist as a "collection of dirty, torn tents and makeshift shacks in a sea of mud."[12]

The federal Farm Security Administration established labor camps intended to resolve poor sanitation and public health problems. In addition, these camps offered a safe place for migrants to embrace their culture and foster a sense of community, providing respite from discrimination.[13] The Linnell Camp, located near Farmersville, was a Farm Security Administration camp for migratory workers during the 1930s. The camp consisted of tin cabins that housed migratory farm workers. The Linnell Camp is still active today with 191 housing units for farmworker families.

The City has invested in infrastructure to spur economic development, including widening and upgrading Visalia Road through the southern portion of the city and upgrading the capacity of the wastewater treatment plant. These improvements allow for increased residential and other development within the city. Additionally, the City has obtained funding for ADA improvements to install sidewalks and curb ramps in older, lower-income residential neighborhoods, and repaved several streets alleyways to improve access to homes and businesses.

Stakeholder and Community Input

One community workshop on the Housing Element was held in Farmersville on May 25, 2023, however, no participants attended the workshop due to a technical issue. Following the community workshop, a recording of the workshop was posted on the Housing Element website for public viewing and residents were encouraged to watch the recording and comment. During the workshops held in each jurisdiction as part of the Tulare County Regional Housing Element planning effort, participants identified the most significant housing barriers, including rent affordability and rent increases, lack of housing with supportive services, and difficulty buying a home.

An online survey was available in both English and Spanish on the Tulare County Association of Governments Housing Element website from February 6 to March 16, 2023. Most respondents from Farmersville reported earning an annual household income below $25,000 per year, significantly lower

[10] Caroline Collins. 2022. When Do You Stop Arriving? The Project “We Are Not Strangers Here: African American Histories in Rural California.” https://online.ucpress.edu/ch/article/99/4/51/194144/When-Do-You-Stop-Arriving-The-Project-We-Are-Not
[11] ACLU of Northern California. 2019. A Fight for Equal Education. https://www.aclunc.org/sites/goldchains/explore/wysinger.html
[12] Federal Writers' Project. 1938. Monographs prepared for A Documentary history of migratory farm labor. https://oac.cdlib.org/view?docId=hb88700929;NAAN=13030&doc.view=frames&chunk.id=div00017&toc.id=0&brand=calcultures
[13] Library of Congress. 1998. Voices from the Dust Bowl: the Charles L. Todd and Robert Sonkin Migrant Worker Collection, 1940 to 1941. The Migrant Experience. https://www.loc.gov/collections/todd-and-sonkin-migrant-workers-from-1940-to-1941/articles-and-essays/the-migrant-experience/

than the city's median household income and within the range of extremely low-income households based on 2023 income limits for Tulare County. The survey asked participants about housing issues and the types and location of housing development they would like to see in their city. Respondents in Farmersville indicated the largest barriers to housing are the high cost of quality housing and lack of available housing that is rent-restricted. The most common urgent housing issue selected by Farmerville participants was the "affordability of desired housing." Respondents from Farmersville also reported the following housing needs: housing assistance for residents with special needs, supportive housing for individuals experiencing homelessness, housing for middle-income, "higher-end" housing, and non-low-income housing, and higher density zoning.

The City also participated in a series of stakeholder interviews with service providers, community organizations, and affordable and market-rate housing developers held between May 21 and April 4, 2023. Community organizations identified the need for housing near grocery stores, medical facilities, and public transportation. Additional housing needs include transitional and supportive housing, farmworker housing, and safe parking for homeless individuals living in their vehicle. Compared to larger cities in the region, smaller, rural areas have vastly fewer amenities and housing resources. According to market-rate housing developers, barriers to developing housing include high construction costs, parking requirements, State housing requirements, and the cost and time demanded by the environmental review process. Affordable housing developers described the need for more affordable housing and supportive housing for previously homeless residents and discrimination based on housing choice voucher (HCV) use. It was noted that the PIT Count likely underestimates the number of homeless individuals as it does not consider the many residents living on couches or in trailers. According to affordable housing developers, cities can address housing needs by fostering strong relationships with affordable housing providers and maintaining knowledgeable staff to pursue grant opportunities for affordable housing.

Other Relevant Factors

Other factors to fair housing issues in Farmersville that have not been previously discussed in this analysis include widespread social vulnerability of residents and lack of farmworker housing.

Land Use and Zoning

Most housing units in Farmersville are single-unit detached structures (78 percent). Only 20 percent of the city's housing stock consists of housing with two or more units. Zoning for medium and high-density residential uses is concentrated in South Farmersville and parts of East Farmersville, while zoning in North, West, and most of East Farmersville consists mostly of low density residential. Single-family homes in low density residential neighborhoods are generally more expensive than housing in multifamily developments. In addition, residents living in single-family housing generally own their home while multifamily housing residents tend to rent. Low-income households and people living on fixed incomes, such as seniors, often cannot afford to buy or live in single-family homes and therefore are limited to choosing more affordable housing options such as multifamily housing in South and parts of East Farmersville.

Social Vulnerability Index

The Center for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry created the Social Vulnerability Index (SVI) to identify communities that exhibit social conditions that would make them more vulnerable to hazardous events such as natural disasters. The SVI can also serve as an identifier of vulnerable communities that are underprivileged and underserved and are more

susceptible to experiencing housing issues and lack of housing opportunities. The SVI ranks census tracts based on 16 social factors grouped into four categories: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type and transportation.[14]

The SVI identifies most of Farmersville as having higher vulnerability than most of the state, based on a high level of vulnerability for each of the four categories. Census Tract 06107001601 in East, Downtown and parts of West and South Farmerville is ranked in the 95th percentile. Farmersville scored particularly high for socioeconomic status (based on social factors for poverty, unemployment, housing cost burden high school graduation, health insurance status) household characteristics (based on social factors for percentage of seniors, children, persons with a disability, single-parent households, and English language proficiency), and racial and ethnic minority status (based on social factors for percentage of racial/ethnic minorities).

Farmworker Housing Needs

Farmersville is surrounded by acres of farmland and the largest industry in the city is agriculture, forestry, fishing and hunting, and mining. Approximately 833 people in Farmersville are employed in the agriculture, forestry, fishing and hunting, and mining industry, equal to 19 percent of employed population of the city.

Farmworkers employed by nearby agricultural businesses may seek housing in Farmersville. However, the migratory and sometimes seasonal nature of farm work often makes it difficult for farmworkers to find affordable housing options. The HATC operates the Linnell Farm Labor Center just east of the Farmersville city limits. The Linnell Farm Labor Center has 191 apartments for agricultural workers and their families. The Housing Authority also operates 175 units for farmworkers at the Woodville Farm Labor Center, approximately 15 miles south of Farmersville near the unincorporated community of Woodville. The City will implement Housing Plan Program 6 to amend the City's Zoning Code to comply with the Employee Housing Act to allow employee housing with up to 36 beds in group quarters or 12 units designed for households as an agricultural use and to allow employee housing for up to six employees as a single-family residential use. In addition, through Housing Plan Program 6, the City will facilitate the development of affordable housing for farmworkers by offering expedited and streamlined project application review for farmworker housing and pursuing state and federal grant opportunities to support the development of special needs housing, including farmworker housing.

Language Barriers

Language can be a barrier to access to housing and housing resources. When outreach and services are limited to English, residents who are not comfortable communicating in English are excluded. A significant portion of Farmersville residents speak a language other than English. According to ACS estimates, 74 percent of Farmersville residents over the age of five speak a language other than English and 27 percent speak only English. Forty percent of residents over the age of five speak English less than very well. Almost all residents who speak a language other than English are Spanish speakers. The City will implement Housing Plan Program 14 to provide a translation feature on the City's website.

Home Loan Applications

As discussed in Appendix 7.B, *Housing Constraints*, there is a disparity in mortgage application approvals between racial/ethnic groups in Tulare County. Non-white mortgage loan applicants have lower rates of loan origination and higher rates of loan denial compared to white applicants. Home Mortgage

[14] Agency for Toxic Substances and Disease Registry. 2023. CDC SVI Documentation 2020. https://www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI_documentation_2020.html

Disclosure Act data from the Federal Financial Institutions Examination Council, indicates white home loan applicants had the highest rate of approval compared to other racial/ethnic groups, and "other" races and Native Hawaiian/Pacific Islander applicants had the lowest. These patterns indicate there may be racial/ethnic discrimination in mortgage lending. While there is no Home Mortgage Disclosure Act data for Farmersville, it is likely the City experiences similar patterns as Tulare County. Table C5-4 shows the loan actions taken by race/ethnicity percentage in Tulare County.

Table C5-4 Mortgage Loans (County of Tulare)

	Loan Action					
Race/Ethnicity	Loan Originated	Application Approved But Not Accepted	Application Denied	Application Withdrawn	Purchased Loan	Other
White	56.0%	2.7%	14.9%	17.9%	3.1%	5.3%
Hispanic/Latino	53.3%	2.5%	18.1%	17.7%	2.6%	5.9%
Black/African American	50.4%	1.7%	20.6%	22.7%	1.3%	3.4%
Native American/Alaska Native	44.3%	4.4%	23.6%	19.2%	0.5%	7.9%
Asian American	49.9%	3.0%	19.2%	18.2%	3.4%	6.3%
Native Hawaiian/Pacific Islander	39.4%	0.0%	18.2%	18.2%	0.0%	24.2%
Other Race	35.5%	1.9%	15.0%	12.6%	29.6%	5.4%
Two or More Races	52.4%	0.0%	28.6%	9.5%	4.8%	4.8%

Source: FFIEC Home Mortgage Disclosure Act. 2020 Dataset. https://ffiec.cfpb.gov/data-browser/data/2022?category=states .Accessed July 11, 2023.

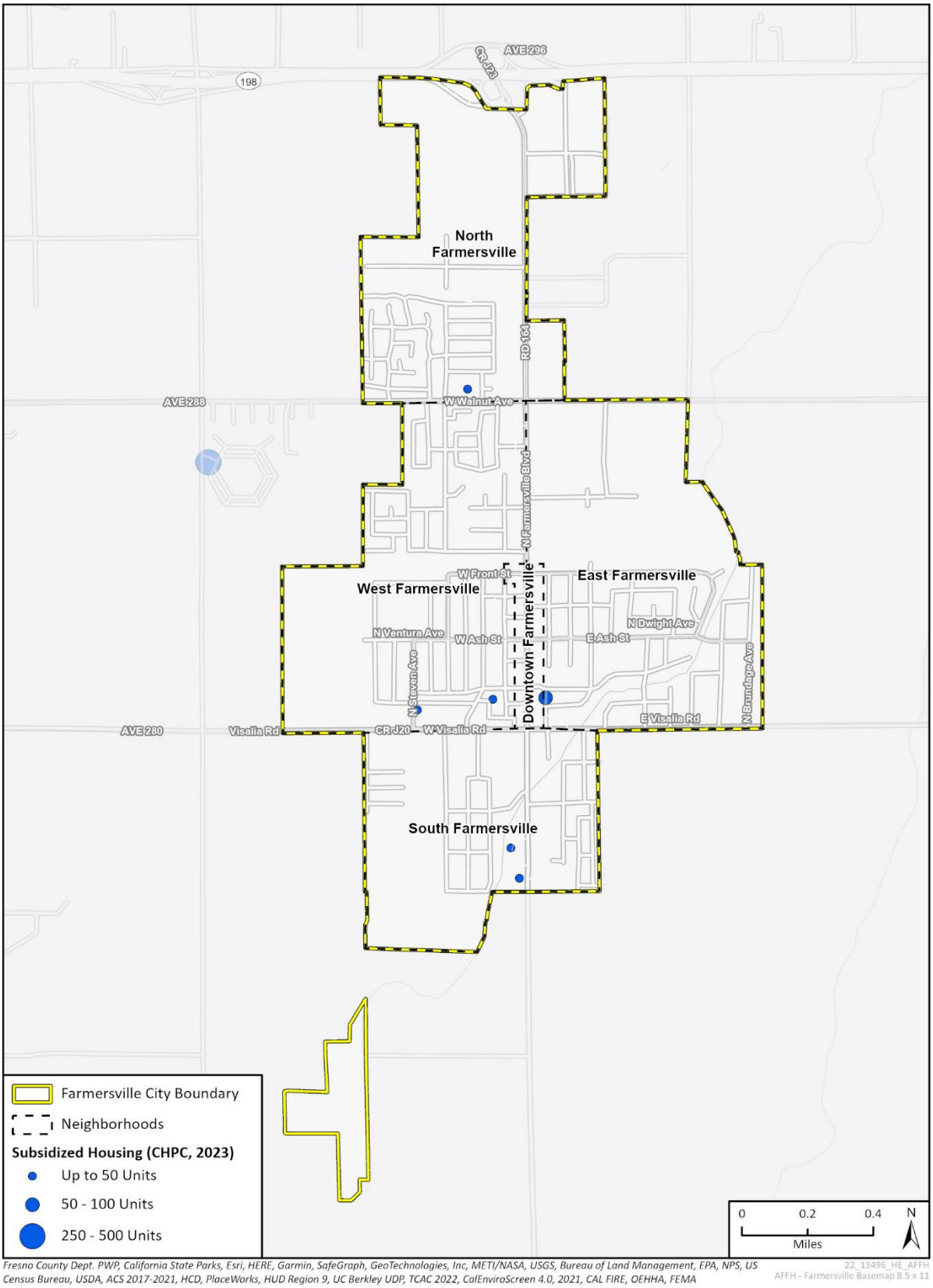
C5.11 Subsidized Housing

Subsidized housing consists of affordable rental units that are subsidized by federal and State agencies but are owned by private owners. Subsidies including HUD, the U.S. Department of Agriculture, the California Housing Finance Agency, HCD, and the Low-Income Housing Tax Credit program administered by TCAC. According to the AFFH Data Viewer, there are a total of 328 subsidized housing units in Farmersville. Subsidized housing units are concentrated in East and South Farmersville (Figure C5-23).

Public housing includes affordable rental units that are owned and operated by the government. In Farmersville the HATC manages public housing units which are available to low-income households, the elderly, and persons with disabilities. According to HUD's Public Housing Program, there are no public housing developments in Farmersville. However, the HATC owns and manages the Linnell Farm Labor Center, located just east of Farmersville. The Linnell Farm Labor Center includes 191 apartments for agricultural workers and their families. In addition, HATC also owns and operates the Gateway Village Apartments (16 housing units), Palomar Court Apartments (40 senior housing units), and Village Grove Apartments (48 senior housing units) in Farmersville.

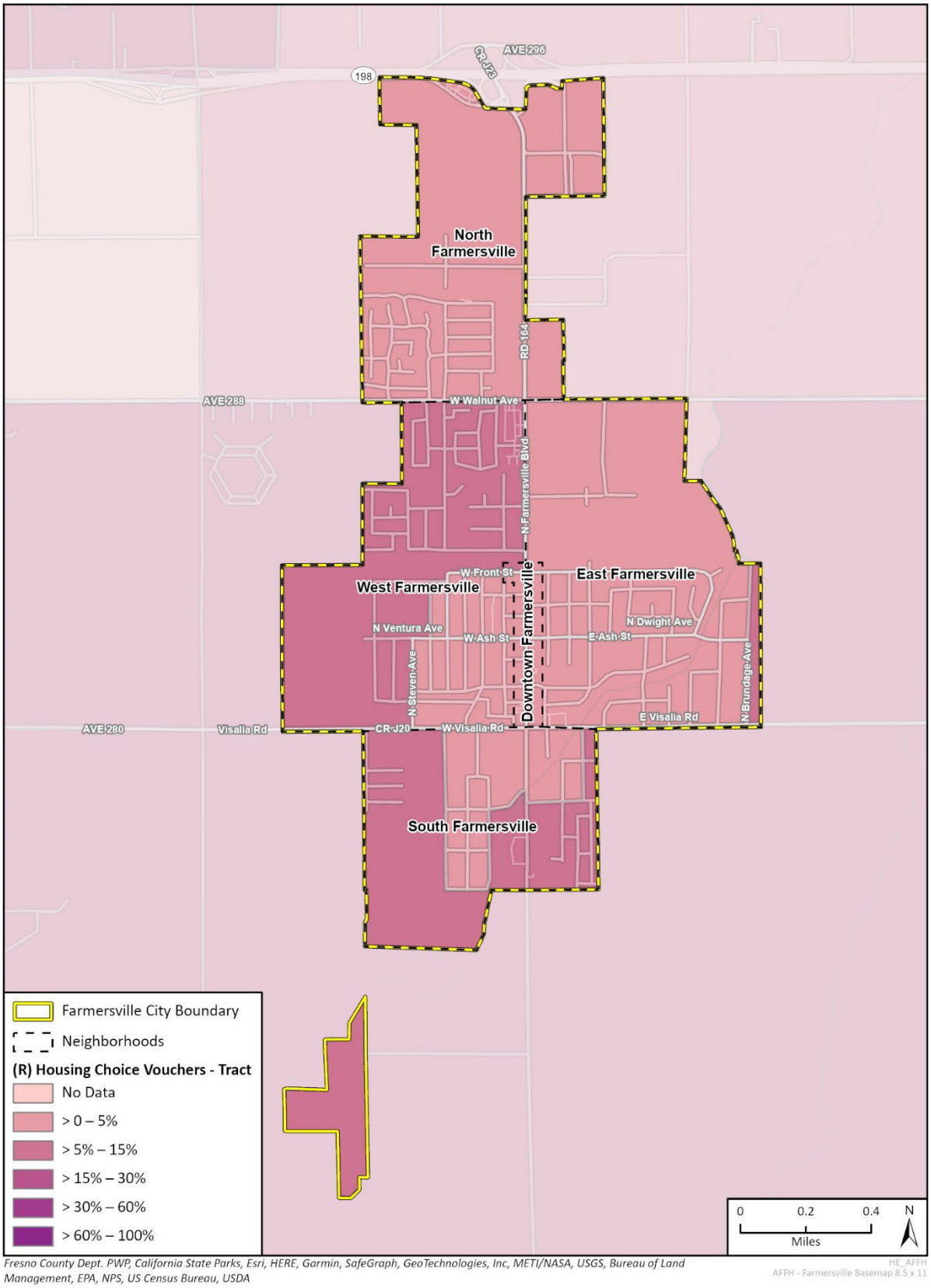
The HATC administers HCVs in the city of Farmersville. While HATC administers the HCV program in Farmersville, housing units themselves are owned by private landlords that accept HCVs on behalf of renters. According to HATC, as of 2023, there are 70 households receiving rental assistance through HCVs in the city. The use of HCVs is more common in parts of West and South Farmersville, where approximately seven percent of households are using HCVs (Figure C5-24).

Figure C5-23 Subsidized Housing (City of Farmersville)



Source: AFFH Data Viewer, 2023.

Figure C5-24 Housing Choice Vouchers (City of Farmersville)



Source: AFFH Data Viewer, 2023.

However, these areas are part of a large census tract that includes unincorporated areas of the county, including the Linnell Farm Labor Center. The City will implement Housing Plan Program 12 to collaborate with the HATC to continue and expand the HCV Program in Farmersville and foster relationships with landlords to expand housing options for HCV recipients.

C5.12 Housing Site Inventory Analysis

This portion of the AFFH analyzes the relation between the housing opportunity sites and AFFH-related issues. Government Code Section 65583(c)(10) requires the housing opportunity sites to be analyzed with respect to AFFH to ensure that sites designated for low-income households are dispersed equitably throughout the city rather than concentrated in areas of high segregation and poverty or low-resource areas that have historically been underserved, and conversely, that sites designated for above moderate-income households are not concentrated in areas of high resources. By comparing the sites inventory to the fair housing indicators in this assessment, this section analyzes whether the sites included in the Site Inventory improve or exacerbate fair housing conditions, patterns of segregation, and access to opportunity.

Housing Sites by TCAC Opportunity Area

For purposes of evaluating fair housing, resource levels designated by TCAC/HCD denote access to economic and educational opportunities such as low-cost transportation, jobs, and high-quality schools and the quality of environmental factors in the area such as proximity to hazards and air quality. TCAC has a composite opportunity score for each census tract. Farmersville has a mix of resource areas. North Farmersville is a high resource area, while Downtown, East, and portions of West and South Farmersville is an area of high segregation and poverty. The rest of the city consists of moderate resource areas.

The City's Site Inventory can accommodate 747 housing units on 15 sites. Figure C5-25 shows the housing opportunity sites by TCAC designated resource area. The housing opportunity sites are designated by income category – whether the sites could accommodate housing appropriate for low-, moderate-, or above moderate-income households. The "appropriateness" of sites for various affordability levels is dictated by State housing element law and HCD guidance and includes allowable density, size of site, realistic capacity, existing use(s), and other factors. More information about the sites and income designations is available in Chapter C4, *Housing Resources*.

Most of the housing opportunity sites are in moderate resource areas (68 percent of the proposed housing units), primarily in West Farmersville, in part due to the availability of large vacant and underutilized parcels in this neighborhood.

A portion of the City's RHNA will be satisfied by planned and approved projects (42 percent of the total housing units accommodated by planned and approved projects and housing opportunity sites). To understand the overall picture of housing development during the eight-year planning period, this analysis considers those units. Planned and approved projects will add 196 moderate-income units and 347 lower-income units. Three of the six planned and approved projects are located in moderate resource areas (411 housing units) and two of the five projects are located in high and highest resources areas (166 housing units). One project is located in an area of high segregation and poverty (107 housing units).

Total Units by Resource Area

Planned and approved projects and the housing opportunity sites accommodate 178 units planned in areas of high segregation and poverty and low resource: 44 percent of those units (79 units) will be lower-income units, 18 percent (32 units) will be moderate-income units, and 38 percent (67 units) will be above moderate-income units. In contrast, 569 units are planned in areas designated moderate resource: 23 percent of those units (130 units) will be lower-income units, one percent (5 units) will be moderate-income units, and 78 percent (434 units) will be above moderate-income units.

Table C5-5 shows the number of proposed housing units by income level in each resource area.

Table C5-5 Proposed Housing Units by Resource Area (Planned and Approved Projects and Housing Opportunity Sites)

Income Level	Lower-Income	Moderate-Income	Above-Moderate-Income	Total Units
Areas of High Segregation and Poverty	79 units (38% of lower-income units)	32 units (86% of moderate-income units)	67 units (13% of above moderate-income units)	178 units (24% of total units)
Low Resource Areas	0 units (0% of lower-income units)	0 units (0% of moderate-income units)	0 units (0% of above moderate-income units)	0 units (0% of total units)
Moderate Resource Areas	130 units (62% of lower-income units)	5 units (14% of moderate-income units)	434 units (87% of above moderate-income units)	569 units (76% of total units)
High/Highest Resource Areas	0 units (0% of lower-income units)	0 units (0% of moderate-income units)	0 units (0% of above moderate-income units)	0 units (0% of total units)

The planned and approved projects, together with the housing opportunity sites, will add a higher percentage of lower-income units in moderate resource areas (62 percent) than in areas of high segregation and poverty (38 percent). In areas of high segregation and poverty, the mix of lower-, moderate-, and above moderate-income units will provide housing opportunities households of varying income levels. Therefore, the proposed housing opportunity sites will not increase patterns of segregation and will increase integration by household income in terms of access to opportunity.

Furthermore, the City is preparing a Downtown Specific Plan, which aims to energize and revitalize Downtown Farmerville, designated as a low resource area. Although no housing opportunity sites included in this Housing Element are located within Downtown Farmerville, the Downtown Specific Plan proposes to designate areas for the development of high density, affordable multi-family housing. As Downtown Farmerville revitalizes, community benefits will likely extend beyond the Specific Plan's boundaries, providing increased economic opportunities and public and private investment in low resource areas in the vicinity of housing opportunity sites in East and South Farmersville.

Figure C5-25 Housing Opportunity Sites by TCAC Resource Area, Farmersville

Source: AFFH Data Viewer, 2023.

Sites by Income Population

Census tracts with more than 50 percent LMI households are located in Downtown, East, West, and South Farmersville. Figure C5-26 shows the housing opportunity sites by percentage of LMI populations. In most of the city, more than 50 percent of households are LMI. As such, most housing units included in the planned and approved projects and opportunity sites are located in these neighborhoods in addition to the availability of underutilized sites in these areas and the potential for mixed-use, transit-oriented development. Approximately 73 percent of the low-income units, 100 percent of the moderate-income units, and 96 percent of the above moderate-income units are located census tracts with greater than 50 percent LMI households. Of the planned and approved projects and opportunity sites in these areas, approximately 49 percent of proposed units are appropriate for above moderate-income households, 18 percent appropriate for moderate-income households, and 33 percent for low-income households. These areas of Farmersville will benefit from the mix of households of differing income levels. The Site Inventory will improve the mixture of housing opportunities by income level in the city and will not exacerbate segregation by income between neighborhoods.

Sites by Overcrowded Households

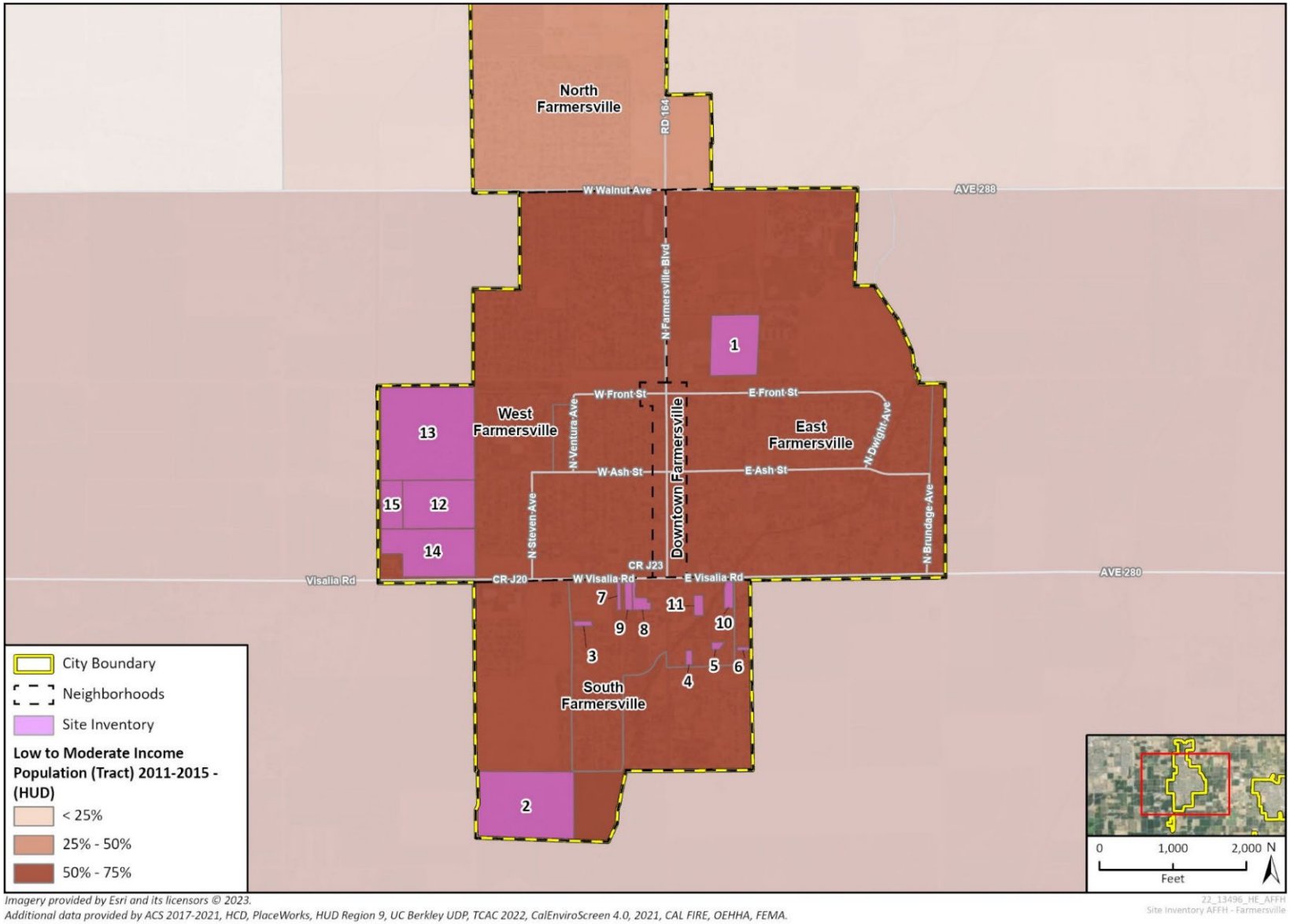
Throughout most of the city, between five and 10 percent of households are overcrowded with the lowest percentage of overcrowded households in North Farmersville. Downtown, East, West, and South Farmersville have a mixture of low- and medium-density residential development, alongside commercial land uses. Planned and approved projects and opportunity sites in Downtown, East, West, and South Farmersville could accommodate 1,265 housing units, of which 414 would be lower-income, equal to approximately 29 percent of the total housing units included in the Site Inventory and 74 percent of the total lower-income sites. These additional units will provide additional housing opportunities for overcrowded households in these neighborhoods. The Site Inventory will not exacerbate overcrowding conditions but will add new housing opportunities in areas that need them.

Sites by Overpayment by Renters

The percentage of renters experiencing overpayment is high throughout Farmersville. Figure C5-28 shows the housing opportunity sites by overpayment by renters. The planned and approved projects and housing opportunity sites will provide housing opportunities for a mix of income levels throughout the city, including 556 units appropriate for lower-income households, 233 units appropriate for moderate-income households, and 642 units appropriate for above moderate-income households. Most of these housing units will likely be rental units, based on trends in planning entitlements and developer interest.

According to the UDP, new market-rate construction in gentrifying areas neither worsens nor eases rates of people moving out of the area. It increases rates of people moving to an area across all socio-economic groups, particularly high-income residents. The UDP recommends subsidized housing construction and housing preservation to help existing residents stay in their neighborhood. The mix of lower, moderate, and above moderate-income housing units throughout Farmersville will provide affordable housing options for existing lower-income residents as well as encourage higher-income households to move into the area. The Site Inventory will not exacerbate overpayment by renters but will add new housing opportunities in areas that need them.

Figure C5-26 Housing Opportunity Sites by Income Population, Farmersville

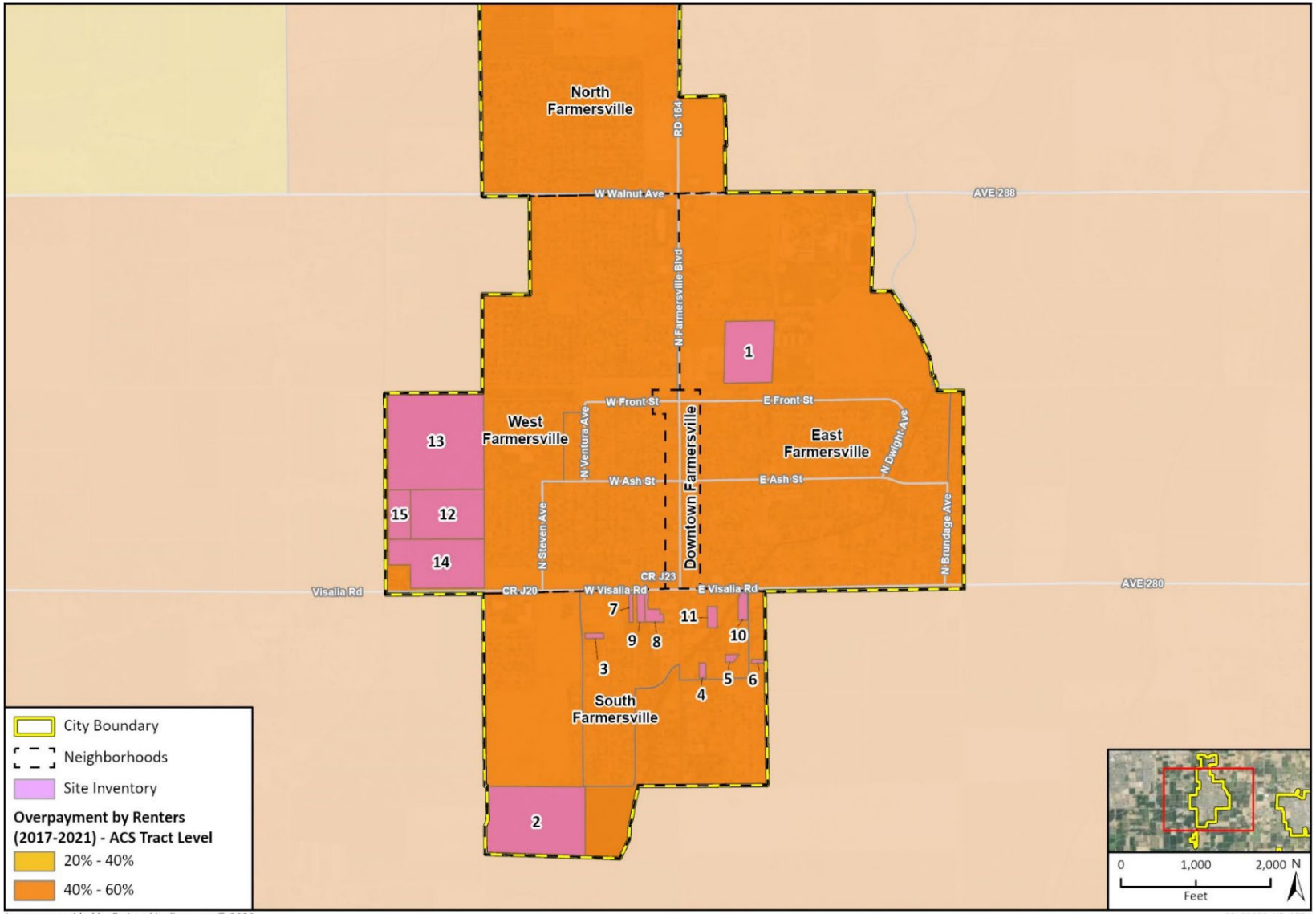


Source: AFFH Data Viewer, 2023.

Figure C5-27 Housing Opportunity Sites by Overcrowding, Farmersville

Source: AFFH Data Viewer, 2023.

Figure C5-28 Housing Opportunity Sites by Overpayment by Renters, Farmersville



Source: AFFH Data Viewer, 2023.

Sites by Areas of Integration and Segregation

There is one census tract of high poverty and segregation in Farmersville, which consists of the entirety of Downtown and East Farmersville and portions of West and South Farmersville. This census tract, along with the rest of Farmersville is predominantly Hispanic/Latino and has a high percentage of non-white residents. Housing opportunity sites in Downtown and East Farmersville accommodate a mix of income levels in areas that already have a diverse mix of ethnic and racial groups. Figure C5-29 shows the housing opportunity sites by percent non-white residents. The Site Inventory will not contribute to segregation based on race/ethnicity or income level.

As discussed in Chapter C2, *Housing Needs Assessment*, approximately 11 percent of the population has one or more disabilities. For persons with disabilities who live independently or with other family members, independent living can be supported with special housing features, financial support, and in-home supportive services. The location of housing is also an important factor for people with mobility restrictions who rely on public transportation for travel. There are no areas with a concentration of residents with a disability. Housing opportunity sites in Farmersville would add housing units appropriate for a mix of income levels throughout the city, with a total of 556 units appropriate for lower-income households, 233 units appropriate for moderate-income households, and 642 units appropriate for above-moderate-income households.

Sites by Communities Vulnerable to Displacement

Downtown and East Farmersville and portions of West and South Farmersville are considered to be vulnerable to displacement by the UDP and are considered sensitive communities. All the proposed housing units in East Farmersville and 52 percent of the housing units South Farmersville are in areas considered to be vulnerable to displacement. There are no housing opportunity sites in Downtown Farmersville. Figure C5-30 shows the housing opportunity sites in relation to the location of sensitive communities The planned and approved projects and opportunity sites include capacity for 186 units appropriate for lower-income households in areas where low-income residents are at risk of displacement in East and South Farmersville, approximately 33 percent of the total number of the proposed lower-income units accommodated by the opportunity sites. These lower-income units will provide affordable housing options for existing very low and low-income residents that are at risk of displacement.

Sites by CalEnviroScreen Score

Farmersville has high CalEnviroScreen scores throughout the entire city, with scores ranging from the 56th to 82nd percentile. The lowest CalEnviroScreen scores are in North Farmersville and the highest CalEnviroScreen scores are in portions of West and South Farmersville. Neighborhoods with census tracts with a CalEnviroScreen score 75 and greater (indicating higher rates of pollution burden) are located in Downtown, East, South, and West Farmersville. Figure C5-31 shows the housing opportunity sites by CalEnviroScreen score. Planned and approved projects and housing opportunity sites in census tracts with CalEnviroScreen scores higher than 75 can accommodate 228 units appropriate for lower-income households, equal to approximately 41 percent of the total number of lower-income units. Therefore, the Site Inventory would not concentrate lower-income units in areas of higher pollution burden.

Sites Analysis Summary Data

Table C5-6 summarizes the Site Inventory by development priority area, sites, number of units by income level, and census tract characteristics.

Figure C5-29 Housing Opportunity Sites by Total Non-White Population, Farmersville

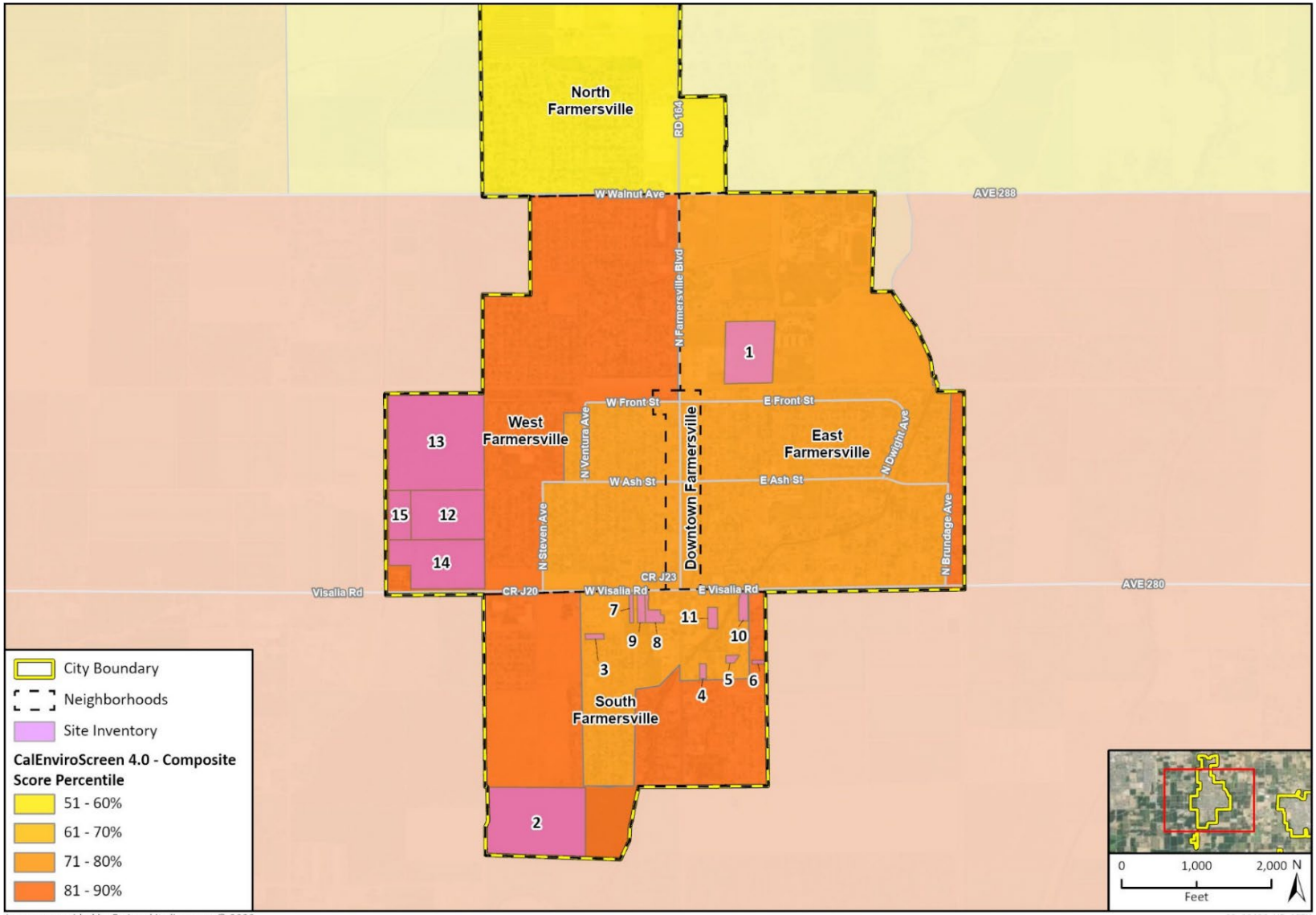
Source: AFFH Data Viewer, 2023.

Figure C5-30 Housing Opportunity Sites by Displacement Risk, Farmersville

Imagery provided by Esri and its licensors © 2023.
Additional data provided by ACS 2017-2021, HCD, PlaceWorks, HUD Region 9, UC Berkley UDP, TCAC 2022, CalEnviroScreen 4.0, 2021, CAL FIRE, OEHHA, FEMA.

Source: AFFH Data Viewer, 2023.

Figure C5-31 Housing Opportunity Sites by CalEnviroScreen Percentile Score, Farmersville



Source: AFFH Data Viewer, 2023.

Table C5-6 Site Inventory by Census Tract Characteristics

			Site Inventory Capacity (Units)			AFFH Indicators							
Neighborhood	Census Tract Number	Number of Existing Households	Low-Income	Moderate-Income	Above Moderate- Income	Percent None-White	Median Household Income	Percent LMI Households	TCAC Opportunity Area	Percent Overpayment by Renters	Percent Overcrowded Households	Displacement Sensitivity	CalEnviroScreen Percentile Score
East													
	06107001601	1,398	0	0	67	88%	$38,858	59%	High Segregation & Poverty	53%	10%	At Risk of Displacement	40%
South													
	06107001601	1,398	79	32	0	88%	$38,858	59%	High Segregation & Poverty	53%	10%	At Risk of Displacement	40%
	06107001602	1,529	0	5	153	80%	$42,388	64%	Moderate Resource	50%	8%	Lower Displacement Risk	83%
West													
	06107001602	1,529	130	0	281	80%	$42,388	64%	Moderate Resource	50%	8%	Lower Displacement Risk	83%
Total			**209**	**37**	**501**								

Source: California Tax Credit Allocation Committee (TCAC)/California Housing and Community Development (HCD), Opportunity Maps (2020); U.S. Census Bureau, American Community Survey 5-Year Data (2017-2021)

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C5.13 Contributing Factors and Meaningful Actions

This section lists contributing factors that create, perpetuate, or increase the severity of one or more fair housing issues that were identified in community outreach and the analysis in this document.

Enforcement and Outreach

The City's website has does not provide information on fair housing rights and resources. There are no links to the HATC or FHCCC websites. In addition, the City relies on local fair housing non-profit organizations to provide fair housing assistance to residents and defers fair housing complaints and issues to these organizations.

Contributing factors to enforcement and outreach in Farmersville include:

- Lack of City collaboration with fair housing agencies and organizations to provide assistance to tenants and landlords: The City does not directly contract with any fair housing providers to distribute information or resources for fair housing.
- Lack of participation in fair housing outreach: No community members participated in the Housing Element workshop.
- Lack of sufficient distribution of fair housing information: The City's website does not have information on fair housing rights and resources and does not provide links to fair housing providers or information on filing fair housing complaints. The City also relies on fair housing providers to distribute fair housing information and publishes limited outreach of their own.
- Lack of fair housing testing: The City does not perform fair housing testing.
- Lack of updated data and analysis of fair housing complaints: The City does not publish data or analysis of fair housing complaints.
- Language Barriers: Seventy-four percent of residents speak a language other than English and 40 percent of residents speak English less than very well.

Segregation and Integration Patterns and Trends

East, Downtown, and West Farmersville have a higher concentration of non-white residents, LMI residents, residents living below the poverty line, and lower median household incomes than other areas of the city. In contrast, North and parts of South Farmersville have lower percentages of non-white residents and slightly higher median household incomes than other areas of the city.

Contributing factors to segregation and integration patterns and trends in Farmersville include:

- Location and limited availability of affordable housing: Affordable housing is concentrated in East and South Farmersville. In addition, there are no public housing units in the city and no subsidized housing units in North Farmersville.
- Land use and zoning patterns: Zoning for medium and high-density residential uses is concentrated in South Farmersville and parts of East Farmersville, while zoning in North, West, and most of East Farmersville consists mostly of low-density residential.
- Displacement of residents due to economic pressures: High rates of cost burden and rising housing costs are placing low-income residents at risk of displacement. According to Zillow, median home value has increased 55 percent in the last five years (from $178,876 in 2018 to $277,717 in 2023).

Racially and Ethnically Concentrated Areas of Poverty

East and Downtown and parts of West and South Farmersville have a higher percentage of non-white residents and lower median household incomes.

Contributing factors to racially and ethnically concentrated areas of poverty in Farmersville include:

- Land use and zoning patterns: Zoning for medium and high-density residential uses is concentrated in South Farmersville and parts of East Farmersville, while zoning in North, West, and most of East Farmersville consists mostly of low-density residential.
- Location of affordable housing: Subsidized housing is concentrated in areas zoned medium density resident in West and South Farmersville. There are no subsidized housing units in North Farmersville, which has the highest median household income of all Farmersville neighborhoods.

Disproportionate Housing Needs

Housing problems are a widespread issue throughout the city. Approximately 45 percent of all households in Farmersville, especially extremely low-, very low-, and low-income households, are experiencing housing problems. Renter households in Farmersville have high rates of cost burden and overcrowding, higher than the county and many other cities in the county. Low-income residents are also at risk of displacement throughout East, Downtown, and parts of East and South Farmersville. Contributing factors to disproportionate housing needs in Farmersville include:

- Lack of sufficient affordable housing to accommodate households in need: Approximately 66 percent of households (1,915 households) are lower-income, however there are only 328 subsidized housing units and 70 households receiving HCVs in Farmersville.
- Lack of availability of affordable units in a range of sizes: Approximately 24 percent of households are large households and 12 percent of households are overcrowded, indicating there is a need for more housing to accommodate larger households.
- Displacement of residents due to economic pressures: According to Zillow, median home value has increased 55 percent in the last five years (from $178,876 in 2018 to $277,717 in 2023). In addition, 34 percent of all households and 45 percent of renter households are cost burdened.

Disparities in Access to Opportunities

A large part of the city is considered an area of high segregation and poverty. Only North Farmersville is considered a high resource area. In addition, large areas of the city have low education, economic, and environmental opportunity scores. The entire city has a high pollution burden from ozone, particulate matter, and pesticide use. Only North Farmersville is considered a high resource area. In addition, transit access and walkability are lower in Farmersville than in larger cities in the region.

Contributing factors to disparities in access to opportunities in Farmersville include:

- The availability, type, frequency, and reliability of public transportation: Transit access is limited in Farmersville. There are few bus stops in Farmersville and transit routes do not operate at frequent intervals (mostly one-hour intervals).
- Lack of walkability: According to the National Walkability Index, walkability is low throughout the entire city.
- Lack of employment opportunities: Farmersville does not have a large number of employment opportunities. Approximately 94 percent of residents commute outside of the city for work.

- Lack of access to high paying jobs: The largest industries in Farmersville are agriculture, forestry, fishing and hunting, and mining (19 percent of employed population), educational services, and health care and social assistance (17 percent of employed population), and arts, entertainment, recreation, and accommodation and food services (16 percent of employed population). These industries primarily provide lower paying job opportunities.
- Location of environmental health hazards: Pollution burden is high throughout the city. Pollution burden associated with drinking water contaminants is high in North Farmersville and parts of East and South Farmersville and pollution burden associated with solid waste sites are high in parts of East and South Farmersville.
- Widespread social vulnerability: Farmersville residents have higher social vulnerability than most of the state, with high rates of poverty, unemployment, housing cost burden, high percentage of seniors, children, persons with a disability, and single-parent households, high percentage of racial and ethnic minority residents. These factors indicate Farmersville has a high percentage of residents that are underprivileged and underserved and are more susceptible to experiencing housing issues and lack of housing opportunities.

C5.13.1 Meaningful Actions to Address Fair Housing Issues

Based on the analysis conducted in this AFFH document highlights the prominent fair housing issues and contributing factors that impede access to safe, affordable, and vibrant housing in Farmersville. Furthermore, the findings of this analysis were used to develop meaningful actions, metrics and milestones that promote inclusive communities, increase housing opportunities, and address racial/ethnic and economic disparities in the city. The contributing factors were prioritized to better formulate policies and programs and carry out meaningful actions to further fair housing. Meaningful actions to address fair housing issues are included in the housing programs located in Chapter C7, *Housing Plan*.

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C6 Review of Past Accomplishments

To develop appropriate programs to address the housing issues identified in the 2023-2031 Housing Element, the City of Farmersville reviewed the housing programs adopted in the 2015-2023 Housing Element and evaluated the effectiveness of these programs in delivering housing services and assistance. Table C6-1 and Table C6-2 summarizes the City's construction, rehabilitation, and preservation goals and accomplishments during the 5th cycle planning period and Table C6-3 provides a detailed program-level assessment of housing accomplishments over the last planning period.

C6.1 Overview of Accomplishments

During the 5th cycle Housing Element, the City implemented programs to support infill development, market-rate and affordable housing production, lot consolidation, homeownership, and preservation of existing housing stock. Most notably, the City implemented the following:

- **3.A. Infill Development Program.** In 2019, the City approved a 108-unit affordable multifamily development (Los Arroyos) on an infill site near the southeast corner of Walnut and Farmersville Boulevard.
- **4.C. New Single Family Residential Zone.** The City updated the Farmersville Zoning Ordinance to include a new single family residential zone with a larger minimum lot size than the current R-1 zone.
- **1.A. First Time Homebuyer Program.** The City (working with Self Help Enterprises) packages first time homebuyer loans for qualified households. Two loans were completed during 2021.
- **2.D. Community Development Block Grant Funding Program.** Two home rehabilitation jobs were completed in 2021. Both are funded with 2018 HOME grant funds. One household was "Low Income," and the other was "Very Low Income."

C6.2 Effectiveness in Addressing Special Needs

Special needs communities are demographic or occupational groups that call for specific program responses to address unique housing needs. State law specifically requires analysis of the special housing needs of people who are elderly or disabled (including developmental disabilities), female-headed households, large families, farmworkers, and people experiencing homelessness. These special-needs groups often spend a disproportionate amount of their income to secure safe and decent housing and are sometimes subject to discrimination based on their specific needs or circumstances.

During the 5th cycle, the City took the following actions to address special needs housing:

- In late 2019, the City approved a 108-unit multifamily residential project (Los Arroyos) that will include up to 38 units for farmworkers (and 20 units for homeless individuals).
- The City continues to work with the Housing Authority to assist with their rental programs. The City also supports the Housing Authority's ongoing operation of the Linnel Farm Labor camp, which features 191 dwelling units on the western edge of Farmersville.
- The City commits to supporting special needs populations through programs in the 6th housing cycle, as described in Chapter C7, *Housing Plan*.

C6.3 Quantified Objectives

Table C6-1 summarizes the City's progress toward meeting the 5th cycle Housing Element objectives to rehabilitate and conserve/preserve existing housing stock.

Table C6-1 Quantified Housing Objective and Achieved Accomplishments (2015-2023)

	Rehabilitation		Conservation/Preservation	
Income Levels[1]	**Objectives**	**Actual**	**Objectives**	**Actual**
Very Low Income (<50% AMI)	60	6	55	
Low Income (50-80% AMI)	–	4	–	–
Moderate Income (80-120% AMI)	–	–	–	–
Above Moderate (>120% AMI)	–	–	–	–
Total	**60**	**10**	**55**	**0**

[1] Income levels are based on Area Median Income (AMI).

As shown in Table C6-2, the City did not reach its 5th cycle RHNA goals for any income category due to limited staff resources and low interest from housing developers. The City commits to actions to support housing development for all income levels as described in Chapter C7, *Housing Plan*.

Table C6-2 RHNA Progress (2015-2023)

Income Levels[1]	5th Cycle RHNA	Permits Issued	Percent RHNA Progress with Permits Issued
Very Low Income (<50% AMI)	74	8	11%
Low Income (50-80% AMI)	65	13	20%
Moderate Income (80-120% AMI)	68	17	25%
Above Moderate (>120% AMI)	259	5	2%
Total	**466**	**43**	**9%**

[1] Income levels are based on Area Median Income (AMI).

C6.4 Review of Past Accomplishments

Table C6-3 provides a detailed program-level assessment of housing accomplishments during the 5th cycle Housing Element planning period.

Table C6-3 Review of Past Accomplishments

Program		Description and Objectives	Progress and Continued Appropriateness
Goal A: Provisions for extremely low-, very low-, low., and moderate-income housing. To develop through public and private channels, sufficient new housing to ensure the availability of affordable housing for all households in Farmersville			
1.A	Home Funding	Farmersville will encourage and work with a qualified housing entity to submit an application for funds under the HOME Program on behalf of the City. The City will in turn provide funds to first-time homebuyers, either as down-payment assistance and/or to pay development impact fees. This program provides financial assistance to low- to moderate- income families for the purchase of newly constructed homes or existing homes. Other groups that could be assisted with rental housing include Extremely Low Income and disabled residents. The City Planner and City Manager will work with a qualified nonprofit housing entity to identify appropriate building sites.	The City (working with Self Help Enterprises) packages first time homebuyer loans for qualified households. The City has facilitated 55 first time homebuyer loans during the fifth Housing Element cycle. Due to the continued effectiveness of this program, it will be carried over as Housing Plan Program 12.
3.A	In-Fill Development	Farmersville will work with a qualified developer to construct single family homes that are affordable to low- and moderate-income households. These homes could be constructed on in-fill residential lots some of which may have originally contained dilapidated homes that have been demolished. The City Planner and Code Enforcement officer will identify appropriate lots for this program.	No infill projects were processed during 2023. However, in 2019 the City approved a 108-unit affordable multifamily development (Los Arroyos) on an infill site near the southeast corner of Walnut and Farmersville Boulevard. The first phase has been completed and the second phase is under construction. Prior to that the City approved a 20-lot single family residential subdivision on the south side of Petunia Avenue west of Farmersville Boulevard and this project has received final map approval. Development of this subdivision is expected soon. The City does maintain a map for interested parties showing available sites for housing projects. Due to limited staffing and resources, this program will not be carried over into the into the 6th cycle.
4.A	Planned Development Zone	The City of Farmersville will encourage private developers who are proposing residential development to seek a P-D (Planned Development) zone district. These districts allow for greater flexibility in residential design and better utilization of land. These opportunities allow the developer to potentially provide a more affordable housing product. The City will prepare an informational brochure that explains the standards and procedures for this zone.	No projects were proposed during 5th cycle planning period that utilized the P-D zone. However, two large scale PD projects are expected to be submitted in 2023 (Eagle Meadows and Cameron Creek). This program will be revised and carried over into Housing Plan Program 6 to reduce constraints to housing development.

Program		Description and Objectives	Progress and Continued Appropriateness
5.A	Density Bonus	The City of Farmersville will encourage developers to apply for a density bonus for qualified projects. The City adopted its own density bonus ordinance in 2015 but prior to that processed density bonus applications through the State's density bonus law. The ordinance provides that a density bonus may be granted for projects that agree to limit residency to qualified households, including low-income and the elderly. In addition to granting a density bonus of up to 35 percent, the City must also grant at least one additional development standard concession – such as reduced building setbacks, for instance. The City will continue to monitor amendments to the State's density bonus laws and incorporate those into local code as appropriate.	No projects expressed interest in the density bonus ordinance during 2021. However as noted elsewhere, the City approved the Los Arroyos (formerly Farmersville Village) 108-unit low income project in 2019 without need for a density bonus. Due to the continued appropriateness of this program, it will be carried over into Housing Plan Program 9 to facilitate affordable housing development.
6.A	Housing Authority	The City of Farmersville will assist the Tulare County Housing Authority's implementation of the conventional Public Housing Rental Program and the Section 8 Existing Program, which provides rent subsidies directly to participating landlords, and will support that Agency's attempts to secure additional funding for expanded programs. The City Planner will assist the Housing Authority on an ongoing annual basis in identifying additional rental housing stock that can be used for the Section 8 Program.	The City continues to support the Tulare County Housing Authority and its Section 8 program. Information provided by the Housing Authority on recent voucher usage in Farmersville is as follows: Current (February, 2023): 74 As of 12/31/2022: 74 As of 12/31/2021: 72 As of 12/31/2020: 84 As of 12/31/2019: 100 As of 12/31/2018: 101 As of 12/31/2017: 104 As of 12/31/2016: 102 Due to the ongoing nature of this program, it will be carried over into Housing Plan Program 12 to provide assistance to lower-income households.
7.A	Farmworker Housing	The City will identify a development partner for a farmworker housing project to develop affordable housing for farmworkers. The City will support the project by expediting approval and consideration of impact fee reductions, waivers or deferrals will be given. The City will seek to develop 50 units in this fashion during the Housing Element planning period.	In late 2019, the City approved a 108-unit multifamily residential project (Los Arroyos) that will include up to 38 units for farmworkers (and 20 units for homeless individuals). The City also supports the Tulare County Housing Authority's operation of the Linnel Farm Labor Center immediately west of the city limits. This facility provides 191 units for households involved in agricultural occupations and is the largest-such development in the San Joaquin Valley. Due to the continued appropriateness of this program, it will be refined and carried over into Housing Plan Program 9 to facilitate and fund farmworker housing.

Program		Description and Objectives	Progress and Continued Appropriateness
8.A	Assist in Development	The City will proactively contact developers of housing affordable to lower income households, including extremely low income and special needs groups such as persons with disabilities. The City will seek opportunities for partnership and assist development, including: ▪ Assistance with site identification ▪ Facilitate entitlement (e.g., priority processing) ▪ Grant incentives and concessions to promote feasibility of housing for lower income households ▪ Fee deferral or reduction as appropriate ▪ Explore and pursue or assist in application to various funding sources, such as State and Federal funds.	The Los Arroyos project provides 108 units reserved for Very Low- and Low-Income households, including units reserved for farmworkers and the homeless. Also, all ground-floor units are handicap-accessible. This program will be incorporated into Housing Plan Program 9 and 12 to provide affordable housing and housing for special needs populations.
Goal B – Mitigation of Governmental Constraints; Minimize governmental constraints Farmersville that would jeopardize the development of affordable housing.			
1.B	Infill Projects	The City shall take action to promote development of qualified affordable housing projects on properly zoned small/odd shaped lots. Financial assistance could be made available to assemble parcels, reduce, defer or eliminate impact fees, reduce building/planning permit fees or assist in the installation of off-site improvements, such as curb/gutter or infrastructure, or for the demolition of existing substandard units. The City will establish a program to facilitate this action plan, including creation of a map identifying potential infill sites and a brochure to market the program to potential developers. These materials will be completed by the first quarter of 2017. The City will endeavor to facilitate the development of 20 units during the planning period of the Housing Element.	While no infill projects were approved during the 5th Cycle planning period, the City previously approved a 20-lot subdivision that is nearing development. Also, the City approved a 108-unit very low income multi-family residential complex in 2019 on an infill location. That project is currently seeking financing. The City does maintain a map for interested parties showing available sites for housing projects. Due to limited staffing and resources, this program will not be carried over into the into the 6th cycle.
2.B	Transitional and Supportive Housing	Add Transitional and Supportive Housing as permitted uses in all residential zones. Farmersville currently allows transitional and supportive housing in the RM zone but state law requires that it be allowed in all residential zones, only subject to zoning standards that apply to other residential uses in that zone. Accordingly, the City will need to amend the zoning ordinance to allow transitional and supportive housing in the R-1 zone. The City will incorporate these amendments into the comprehensive zoning ordinance update that is currently under way.	The uses “Transitional Housing” and “Supportive Housing” were adopted in August of 2016. Due to this program being achieved in 2016 it is recommended that this program be eliminated.

Program		Description and Objectives	Progress and Continued Appropriateness
3.B	Ensure General Plan Consistency	Whenever a General Plan element is being amended (to add new policies or new land use designations, for example) the Planning Department shall include an analysis of whether the amendment is consistent with policies of the Housing Element.	Though no instances have arisen during 2023, the City continues to ensure that any General Plan amendments are consistent with the Housing Element. Due to this program being a regular function of the Housing Division staff, it is recommended that this program be eliminated.
4.B	Water Supply	The City shall pursue funding to install additional capacity in the municipal water system, to ensure that water supply does not become a constraint to the production of housing. The City shall annually explore and pursue funding opportunities, as appropriate, to expand and improve water (and other utilities as needed) to accommodate housing needs.	The Water Master Plan update is programmed on the City's Five-Year Capital Improvements Program. The City released an RFP to update the comprehensive Water Master Plan in early 2024, and work is expected to begin in late 2024. This will allow the City to more effectively plan for and accommodate future housing development. Due to the continued appropriateness of this program, it will be carried over into Housing Plan Program 13 to improve public facilities and infrastructure.
5.B	Minimum Density for the RM-2.5 Zone	The City shall amend the Zoning Ordinance to specify a minimum density of 20 units per acre for the RM-2.5 zone on lots that are large enough to accommodate at least sixteen dwellings.	The Zoning Ordinance for the RM-2.5 zone was amended. This program has been completed and will be eliminated from future housing elements.
Goal C: Moderate Income Housing Opportunities – To develop a market for middle-income housing.			
1.C	Planned Development Zones	Farmersville will encourage private developers who are proposing residential development to seek a P-D (Planned Development) overlay district. Planned Development standards allow for greater flexibility in residential design and more efficient utilization of land. These opportunities allow the developer to potentially provide a more affordable housing product. Within the past five years the City has successfully facilitated the approval of over 450 lots within P-D zoned subdivisions.	No Planned Development projects were proposed in the 5th housing cycle. However, two large scale PD projects are expected to be submitted in 2023 (Eagle Meadows and Cameron Creek). Due to the continued appropriateness of this program, it will be carried over into Housing Plan Program 9 to facilitate affordable housing development.
2.C	HOME Program Funding	The City of Farmersville will continue to implement the first time home buyer program with HOME funds. This program serves those households who are otherwise excluded from the market-rate purchase of a home within the community (households earning less than 80% of the area median income). Buyers will be first-time home buyers (not having owned a home for the previous three years). Financial participation in these programs will include assistance with down payment costs, closing costs and other secondary financing mechanisms. The City will market this program utilizing English and Spanish language brochures and will endeavor to assist seven households per year with this program.	The City (working with Self Help Enterprises) offers HOME-funded first-time homebuyer loans to qualified lower income households, and two such loans were completed during 2020. Due to the ongoing nature of this program, it will be carried over into Housing Plan Program 12 to provide homebuyer assistance and support low- and moderate-income homeownership.

Program		Description and Objectives	Progress and Continued Appropriateness
3.C	2025 General Plan Implementation	The City shall implement policies in the 2002 General Plan that will lead to diversification of Farmersville's economy – thereby creating more opportunities for the establishment of moderate and above moderate-income housing	The City has been implementing a number of action plans in the General Plan, including pursuit of several grants to fund economic development activities. Major city-sponsored activities have included the widening of Visalia Road and the widening of Farmersville Boulevard (currently underway), and upgrading the capacity of the City's wastewater treatment plant, completed during 2021. The City also adopted an economic incentive program to offer sales tax rebates to commercial and industrial developers. Farmersville was also one of the few cities in Tulare County to allow cannabis businesses. Two retailers opened during 2020 with a third approved and nearing construction. This program is revised and carried over into Housing Plan Program 7 to update the Land Use Element in the City's General Plan to remove constraints to housing development.
4.C	New Single Family Residential Zone	The City will explore establishing a single-family residential zone with a larger minimum lot size than the current R-1 zone, which has a minimum lot size of 6,000 square feet. A minimum lot size of 7,500 square feet (or similar) could be considered, in an effort to attract more upscale housing to Farmersville. This would require an amendment to the policies of the Land Use Element of the Farmersville General Plan and an amendment to the Farmersville Zoning Ordinance.	The City obtained SB2 funding in 2016 to complete a comprehensive update of the Farmersville Zoning Ordinance, which included a new single family residential zone. Due to limited staffing and resources, this program will not be carried over into the into the 6th cycle.
Goal D; Conserve and improve existing affordable housing stock – To manage housing and community development in a manner that will promote the long-term integrity and value of each new housing and the environment in which it is located			
1.D	Project Review	The City of Farmersville shall facilitate residential development that is well-designed and maintained, attractive, and affordable. Affordable housing units will be accomplished through increased unit densities; attractive design through architectural review through the city's site review process and proper maintenance, through conditions such as maintenance agreements and landscaping and lighting districts.	This action plan is implemented with each development project that is submitted to the City. Due to the ongoing nature of this program, it will be revised and carried over into Housing Plan Program 9 to facilitate affordable housing development.
2.D	Community Development Block Grant Funding	Farmersville will continue to annually apply for CDBG funds for rehabilitation of housing in Farmersville. The City will aim to process ten housing rehabilitations per year under this funding.	Two home rehabilitation projects were completed in 2023. Both are funded with 2018 HOME grant funds. One household was "Low Income", and the other was "Very Low Income". Due to the continued appropriateness of this program, it will be carried over into Housing Plan Program 11 to implement the Rehabilitation Program.

Program		Description and Objectives	Progress and Continued Appropriateness
3.D	Removal of Substandard Units	The City will continue to identify dilapidated units in Farmersville that require demolition. The City will notify the property owner of this requirement. Once the lot is vacant, the City will work with the property owner to facilitate the construction of a new unit on the lot.	One existing dilapidated dwelling was removed as a result of code-enforcement action during 2020. This program is revised and carried over into Housing Plan Program 4 to require replacement housing.
Goal E: Provision of Adequate sites and infrastructure for housing development – Provide adequate housing sites for a range of housing types within the Farmersville planning area			
1.E	Monitor Land Supply	Pursue funding through the HUD Section 202 and 811 programs, and through State and federal low-income housing tax credit programs, for the construction of additional housing for seniors and persons with disabilities.	All ground floor units in the Los Arroyos affordable multi-family residential project are designed to accommodate disabled individuals. There was no dedicated senior housing developed in Farmersville during the 5th cycle; the most recent such project was the 40-unit Farmersville Senior Housing complex developed in 2009. This program is revised and carried over into Housing Plan Program 12 to provide special needs housing.
2.E	Lot Consolidation	The City will establish a special lot consolidation program to facilitate the combination of small parcels that are zoned for High Density Multi-Family Residential to larger sizes that will increase the feasibility of affordable income housing projects by providing for larger-scale projects. As part of this program, the City will waive the fee for a lot merger. To promote this program the City will prepare a brochure and other promotional materials and forward this information to affordable housing developers in the area.	The City administers this program in an ongoing fashion. The City processed a lot line adjustment for the Los Arroyos (108-units multi-family residential project) in 2020. Due to limited staffing and resources, this program will not be carried over into the into the 6th cycle.
3.E	Utility Priority	The City will give priority for water and sewer service to qualified affordable housing projects, consistent with SB 1087. The City will adopt a written procedure, pursuant to California Government Code Section 65589.7.	No written process has been established (other than the policy as it is written in the Housing Element. Due to the continued effectiveness of this program, this program is revised and carried over into Housing Plan Program 2 to ensure adequate development sites.
Goal F: Energy Conservation Opportunities – To promote energy conservation activities in all residential neighborhoods			
1.F	2025 General Plan Implementation	Implement policies of the 2002 General Plan update and amend sections of the Farmersville Zoning and Subdivision Ordinances to promote energy conservation. Specifically, amend sections of the ordinances that refer to solar orientation, planting of street trees, width of streets, and minimizing the use of cul-de-sac streets.	The City continues to implement energy-conservation policies of the General Plan with each new development project, primarily through planting of shade trees and orientation of buildings to facilitate active and passive solar energy. The Farmersville Village project will install solar panels on buildings and carports. This is a regular function of Planning staff. Therefore, this program will not be continued into the 6th cycle Housing Element.

Program		Description and Objectives	Progress and Continued Appropriateness
2.F	Weatherization Program	Continue implementing weatherization programs for senior and low-income households. The rehabilitation of housing units using CDBG funds will include energy conservation improvements, including dual paned windows, wall insulation, weather stripping, etc.	Two home rehabilitations occurred during 2021 with weatherization components. Due to the continued effectiveness of this program, this program will be carried over into Housing Plan Program 11.
3.F	Fees for Solar Systems	The City shall consider adopting reduced building permit fees for the installation of residential solar power systems.	Other priorities and funding constraints have delayed adoption of this program. Due to the incompleteness of this program, it will not be continued into the 6th cycle Housing Element.
4.F	Overall Rehabilitation	The rehabilitation of housing units by a qualified nonprofit housing entity using CDBG funds will include energy conservation improvements, including dual-paned windows, wall insulation, weather stripping, etc.	Utilizing the services of Self-Help Enterprises, the City has participated in the rehabilitation of nine units during the 5th cycle for low-income households. This program will be revised and carried over as Housing Plan Program 11 to implement the Rehabilitation Program.
Goal G: Equal Housing Opportunities and Public Participation – To promote equal access to safe and decent housing for all economic groups			
1.G	Rental Assistance	Farmersville will encourage rental assistance for extra low-, very low- and low- income households through programs provided by the Tulare County Housing Authority.	The City continues to work with the Housing Authority to assist with their rental programs. The City also supports the Housing Authority's ongoing operation of the Linnel Farm Labor camp, which features 191 dwelling units on the western edge of Farmersville. Due to the continued appropriateness of this program, it will be carried over into Housing Plan Program 12 to provide housing assistance to low-income and special needs households.
2.G	Housing Information	Farmersville continues to prepare a newsletter and brochure detailing equal housing opportunity programs. Consideration will be given to including these brochures in monthly utility bills. This information will also be added to the City's website and made available at various locations such as City Hall, the Post Office, Library, Community Center, Senior Citizen's center and other appropriate locations. Information shall be prepared in English and Spanish. Individuals with questions or complaints will be referred to the appropriate department as follows: ▪ Code Enforcement and building code issues: Farmersville Code Enforcement Department or Tulare County Building Department ▪ Planning and zoning issues: Farmersville Planning Department ▪ Landlord issues and complaints: California Department of Fair Employment & Housing ▪ Section 8 and Housing Authority Units: Tulare County Housing Authority	The City offers housing information and brochures, both at City Hall and on the City's website. Due to the continued appropriateness of this program, it will be carried over as Housing Plan Program 14 to provide fair housing information.

Program		Description and Objectives	Progress and Continued Appropriateness
3.G	Accessibility	Farmersville, through its review processes will require that all ground floor multi-family housing units meet accessibility requirements of state and federal housing requirements.	The City continues to work with developers to ensure that housing projects meet accessibility standards. The Los Arroyos very low-income multi-family residential project was approved in December 2019. The first 54 units are complete and the second phase under construction. All ground-level units are designed to be accessible to disabled residents. Due to compliance with state and federal requirements as a mandatory function of housing development, this program will be eliminated.
4.G	Public Participation	Implement a program of information and involvement to ensure that all segments of Farmersville's population has the opportunity to know and participate in housing programs. These strategies will include the following: a) Make the Housing Element available in electronic form on the City's website b) Prepare a written (and on-line) brochure that explains the City's housing programs and policies. The brochure will be made available in English and Spanish. c) Continue to publicize meetings and events concerning housing.	The City has made available brochures and other information on housing programs both at City Hall and on the City's website. The City contracts with Self Help Enterprises to provide its housing programs, including first-time homebuyers and housing rehabilitation programs for low-income households. This program will be revised and incorporated into Housing Plan Program 14 to support fair housing goals.
Goal H– Preserve at-risk assisted Projects; Preserve residential dwellings from becoming unaffordable due to conversion to market rate housing.			
1.H	Section 8 Housing Program	The City will consider seeking funds rehabilitation of rental units if the owner agrees to rent the units under the housing Authority Section 8 program	This program previously relied on funding from the Farmersville Redevelopment Agency. Redevelopment agencies across the state were dissolved as a result of State law. Due to the loss of the redevelopment agency, this program will be eliminated.
2.H	Conversion Monitoring	The City will closely monitor notices of the potential conversion of existing affordable housing projects to market-rate rents, and will undertake actions (as feasible) to try to preserve the affordability of such units. The City will endeavor to notify residents and provide assistance if notification has not been provided by the property owner. The City will notify appropriate state and federal housing agencies that administer rent-restricted units in Farmersville that it wishes to receive notices of potential conversion of units to market-rate rents. Entities that have indicated interest in participating in affordability programs are listed in Table 5-5 of Chapter 5.	The City continues to monitor notices of conversion. No conversion notices appeared during the 5th housing cycle. This program will be continued and carried over into Housing Plan Program 10 to support affordable housing units at risk of converting to market rate.

C7 Housing Plan

This eight-year Housing Plan (2023-2031) sets forth a strategy, including goals, policies, and programs, to address housing issues identified in the City of Farmersville.

C7.1 Goals and Policies

Goal 1: Regional Collaboration	**Work collaboratively with jurisdictions in the county to efficiently address housing issues and find regional solutions.**

Policy 1.1 Proactively coordinate with cities, Tulare County, and other agencies and organizations to create effective policies and programs and respond to opportunities for achieving common housing goals.

Policy 1.2 Participate in, as appropriate, pursuit of state and federal housing funds to address regional housing issues.

Goal 2: Housing Development	**Provide an adequate supply and range of housing types to meet the diverse needs of residents.**

Policy 2.1 Provide adequate sites for new housing development to accommodate the regional housing needs allocation (RHNA) throughout the planning period.

Policy 2.2 Facilitate a range of housing development that will meet the needs of all income levels including extremely low, very-low, low-, moderate- and above moderate households.

Policy 2.3 Encourage a range of housing types and sizes in large-scale development and annexations.

Policy 2.4 Promote infill development on vacant and underutilized sites within developed areas.

Policy 2.5 Encourage higher density and mixed use residential development along major transportation and transit corridors and/or near existing or planned community facilities and services.

Policy 2.6 Enact programs that facilitate well-designed, energy efficient development and flexible standards to encourage high quality projects.

Goal 3: Affordable Housing Options	**Facilitate the development of affordable housing and protect the existing supply of affordable housing to extremely low, very low-, low- and moderate-income households.**

Policy 3.1 Provide a range of incentives and tools to encourage affordable housing for all lower-income levels, including extremely low-income.

Policy 3.2 Support the Tulare County Housing Authority (TCHA) by promoting Housing Choice Voucher (HCV) opportunities.

Policy 3.3 Ensure permit processing procedures to ensure streamlining is available for affordable housing development projects (Senate Bill (SB) 35).

Policy 3.4 Support the development of Accessory Dwelling Units (ADUs) as an affordable housing option.

Policy 3.5 Promote home ownership for lower- and moderate-income households by pursuing grant funding for downpayment assistance and other homeownership loan programs.

Policy 3.6 Monitor existing affordable housing developments and pursue preservation strategies to maintain their affordability.

Goal 4: Housing and Neighborhood Preservation	**Maintain and improve the city's existing housing stock.**

Policy 4.1 Preserve existing residential neighborhoods by promoting balanced design and architecture.

Policy 4.2 Support code enforcement efforts to work with property owners with repairs and rehabilitation of housing to preserve existing housing stock.

Policy 4.3 Utilize Capital Improvement Programs for repairs and improvements of public infrastructure and facilities in existing neighborhoods.

Goal 5: Housing for Persons with Special Needs	**Support and provide housing and services for people with special needs in the community. People with special needs include, but are not limited to, seniors, families with children, people with disabilities, single-parent families, farmworkers, and people who are experiencing homelessness or at risk of becoming homeless.**

Policy 5.1 Assist in local and regional efforts that address the housing needs of special needs residents.

Policy 5.2 Provide reasonable accommodation for individuals with disabilities to access housing opportunities.

Policy 5.3 Support the development of affordable housing units for farmworkers and farmworker families by encouraging the use of federal, state, and local resources.

Policy 5.4 Coordinate with regional agencies and local non-profit/private developers on housing options and services for people who are experiencing homelessness or at risk of becoming homeless.

Policy 5.5 Proactively apply for and utilize available resources to provide and maintain housing for special needs groups.

Goal 6: Resource Conservation and Sustainable Development	**Utilize energy conservation and sustainable measures for new and rehabilitated housing.**

Policy 6.1 Support and, as appropriate, incentivize the use of green building techniques for new housing and rehabilitation.

Policy 6.2 Promote energy conservation and efficiency in residential developments.

Goal 7: Affirmatively Furthering Fair Housing	**Promote housing opportunities and access for residents regardless of age, race, religion, sex, marital status, ancestry, national origin, color, disability, or economic level in compliance with local, state, and federal fair housing laws.**

Policy 7.1 Promote meaningful and informed participation of residents, community groups, and governmental agencies in all local housing and community development activities.

Policy 7.2 Comply with federal, state, and local fair housing anti-discrimination laws ensuring equal access to housing regardless of circumstances as protected by fair housing laws.

Policy 7.3 Provide fair housing services to city residents and ensure that residents are aware of their fair housing rights.

Policy 7.4 Provide residents with housing mobility options by facilitating the development of a variety of housing types and expanding access to housing services.

Policy 7.5 Protect tenants from discriminatory housing practices and displacement.

Policy 7.6 Promote the integration of affordable and special needs housing in existing and planned neighborhoods.

C7.2 Implementing Programs

Program 1: Regional Collaboration

Collaborate with other jurisdictions in the region on housing efforts, including funding opportunities, best practices, and other efforts to address housing, transit, economic development, and homeless issues in Tulare County.

Regional collaboration efforts can include, but are not limited to:

- Affordable housing development opportunities
- Regional housing programs and outreach efforts
- Economic development opportunities
- Creation of a regional Housing Trust Fund
- Coordination on funding applications and administration
- Identification of transit opportunities and access near new and established residential areas
- Development of environmental mitigation that can improve the quality of life for residents
- Efforts for the development of emergency shelters, low barrier navigation centers, transitional and supportive housing as well as support services for persons experiencing homelessness or at risk of becoming homeless in the county, including participation in the Kings/Tulare Homeless Alliance

Specific Actions, Objectives and Timelines	▪ Participate in regional meetings related to housing and homeless issues to pursue funding and coordination opportunities. Annually pursue funding opportunities for regional housing issues. ▪ Partner with the Kings/Tulare Homeless Alliance to proactively address shelter, housing and support services for people experiencing homelessness. ▪ Collaborate with Tulare County Regional Transit Agency (TCRTA), Tulare County Area Transit (TCaT), and/or TCAG to prepare a study on transit and active transportation needs for Farmersville residents and identify actions to address those needs, focusing on connecting residents to job centers. Complete a transit needs study by January 2026 to identify potential actions. Implement at least one of those actions by the end of 2028. ▪ Hold at least one community workshop in East, South, and West Farmersville by December 2026 to identify active transportation needs and apply for funding to implement projects by December 2027. Implement at least one active transportation projects in East, South, and West Farmersville by the end of the planning period.
Primary Responsible Departments	Planning Department
Funding Sources	General Fund; federal, state, and local grant funds
Relevant Policies	1.1, 1.2
AFFH Themes	▪ Outreach and Education ▪ Housing Mobility ▪ New Housing Opportunities in Areas of Higher Resources ▪ Anti-Displacement and Tenant Protection
AFFH Geographic Targeting	Citywide, with a focus on East, South, and West Farmersville (areas of high segregation and poverty)
AFFH Outcomes	▪ Increase the percentage of residents commuting by public transit by 5 percent by December 2031 with 2020 data as baseline.

Program 2: Adequate Sites for RHNA and Monitoring of No Net Loss

For the 6th cycle Housing Element, Farmersville has been assigned a RHNA of 654 units, including:

- Very Low-Income: 135 units
- Low-Income: 83 units
- Moderate-Income: 121 units
- Above Moderate-Income: 315 units

The City is committed to ensuring that adequate sites at appropriate densities remain available during the planning period, as required by law. As of May 2024, the City has 543 units through projects under construction and units approved or permitted that will be available during the RHNA projection period. Accounting for these units, the City has exceeded the lower- and moderate-income RHNA, but has a remaining RHNA of 315 above moderate units that the City must identify adequate sites for potential development.

The Site Inventory identifies 209 lower-income units, 37 moderate-income units, and 501 above moderate-income units on 15 sites for a total of 747 units based on existing zoning. No sites smaller than 0.5-acre in size are used to accommodate lower-income housing. These sites can accommodate remaining RHNA of 315 above moderate-income RHNA units. Detailed analysis of the Site Inventory can be found in Chapter C4, *Housing Resources*, with sites shown on Figure C4.2.

Of the identified sites, nine are vacant and six are located on land currently used for agriculture. All sites are in a residential zone and would not require rezoning to allow for housing development.

To ensure that the City complies with SB 166 (No Net Loss), staff will monitor the consumption of residential and mixed-use acreage to ensure an adequate inventory is available to meet RHNA obligations. To ensure sufficient residential capacity is maintained to accommodate the RHNA, the City will develop and implement a formal ongoing (project-by-project) evaluation procedure pursuant to Government Code Section 65863. Should an approval of development result in a reduction in capacity below the residential capacity needed to accommodate the remaining need for lower and moderate-income households, the City will identify and if necessary, rezone sufficient sites to accommodate the shortfall and ensure "no net loss" in capacity to accommodate the RHNA.

The City of Farmersville is the provider of water and sewer services within city limits. The City confirms that adequate water and sewer services are available to fully accommodate the RHNA.

Pursuant to SB 1087, as the City's water and sewer service provider, the City has adopted a policy to prioritize the allocation of water/sewer services to affordable housing projects.

Specific Actions, Objectives and Timelines	▪ Facilitate the development of 654 units over 8 years (135 very low-income, 83 low-income, 121 moderate-income, and 315 above moderate-income units). ▪ Maintain an inventory of available vacant and prospective sites that can accommodate new housing; update annually. Make this inventory available to the public and interested developers on the City website. ▪ Annually meet with property owners and interested developers to pursue housing development in the city. ▪ By December 31, 2024, develop a formal procedure to monitor no net loss in capacity pursuant to SB 166. ▪ By 2026, complete update to water and sewer master plans.
Primary Responsible Departments	Planning Department
Funding Sources	General Fund
Relevant Policies	2.1, 2.2, 2.4, 3.1
AFFH Themes	▪ Housing Mobility ▪ New Housing Opportunities in Areas of Higher Resources
Geographic Targeting	N/A
AFFH Outcomes	N/A

Program 3: By-Right Approval

Pursuant to Government Code Section 65583.2, reusing the following types of sites in the City's site inventory for lower-income RHNA are subject to by-right approval exempt from CEQA and subject only to design review based on objective standards when a project includes 20 percent of the units affordable to lower-income households and no subdivision is proposed:

Reuse Sites (No Rezoning Required):

- Vacant sites that were identified in the City's 4th and 5th cycles Housing Element as sites for lower-income RHNA; and
- Nonvacant sites that were identified in the City's 5th cycle Housing Element as sites for lower-income RHNA.

The by-right approval requirement of reuse sites is effective December 31, 2023. Of the sites identified, two sites are reuse sites.

Currently, the Site Inventory does not include any sites that require rezoning. Rezoning of sites past the statutory deadline of the Housing Element to meet the lower-income RHNA are subject to the by-right approval requirement. The by-right approval requirement of rezone sites is triggered by the rezoning. By-right shall mean the local government's review shall not require:

- A conditional-use permit
- A planned unit development permit
- Other discretionary, local-government review or approval that would constitute a "project" as defined in Section 21100 of the Public Resources Code.

This provision does not preclude local planning agencies from imposing design review standards. However, the review and approval process must remain ministerial, and the design review must not constitute a "project" as defined in the Section 21100 of the Public Resources Code.

Parcels that are subject to by-right approval pursuant to state law are identified in Table C4.7 in Chapter C4, *Housing Resources*.

Specific Actions, Objectives and Timelines	By December 31, 2024, concurrent with the Development Code update to provide adequate sites for the RHNA (see Program 2), update the Development Code to address the by-right approval requirements. The zoning code will be amended to address the by-right approval requirements for lower-income sites included in the site inventory with a proposed zoning change, as well as vacant sites identified in two previous housing elements and non-vacant sites identified in the previous housing element and annexation sites, in compliance with Government Code Section 65583.2(h) and (i), to permit owner-occupied and rental multifamily uses by-right (without discretionary approval) for developments in which 20 percent or more of the units are affordable to lower-income households.
Primary Responsible Departments	Planning Department
Funding Sources	General Fund
Relevant Policies	2.1, 2.2, 3.1
AFFH Themes	▪ Housing Mobility ▪ New Housing Opportunities in Areas of Higher Resources
Geographic Targeting	N/A
AFFH Outcomes	N/A

Program 4: Replacement Housing

Development on non-vacant sites with existing residential units is subject to replacement requirements, pursuant to Assembly Bill (AB) 1397. Specifically, AB 1397 requires sites with a residential use within the last five years the replacement of units affordable to the same or lower-income level as a condition of any development on a non-vacant site consistent with those requirements set forth in state Density Bonus Law.

Specific Actions, Objectives and Timelines	By December 31, 2024, amend the Zoning Code to address the replacement housing requirements.
Primary Responsible Departments	Planning Department
Funding Sources	General Fund
Relevant Policies	2.2, 3.6
AFFH Themes	▪ Housing Mobility ▪ New Housing Opportunities in Areas of Higher Resources ▪ Anti-Displacement and Tenant Protection
Geographic Targeting	Citywide
AFFH Outcomes	N/A

Program 5: Accessory Dwelling Units

ADUs provide an important affordable housing option in the city. The City's Second Dwelling Ordinance does not presently comply with all current provisions of housing legislation. Farmersville will amend the Zoning Code in compliance with state laws.

The City will continue to encourage the production of ADUs and work to provide affordable units for lower-income households.

Specific Actions, Objectives and Timelines	▪ Amend the Zoning Code in compliance with state law by December 31, 2024. ▪ By December 31, 2024, facilitate the production of ADUs through efforts including, but not limited to: ▫ Updating ADU webpage to include available resources for ADU production, such as grants for pre-development costs available to lower-income homeowners through California Finance Agency (CalHFA). ▫ Offering expedited reviews for ADU applications. ▪ Promote the development of ADUs, prioritizing North Farmersville. ▫ Conduct three educational workshops, campaigns, or outreach events to promote ADU development in the city to residents, with at least two events targeted to residents and developers in North Farmersville, by the end of the planning period. ▪ Implement strategies to streamline the ADU permitting process. ▫ Develop an ADU application checklist and publish the checklist on the City's website by January 2025. ▫ Add information on the ADU permitting process, as well as available resources and incentives, on the City's website by January 2025. ▫ Adopt pre-approved ADU plans, potentially using SJV REAP's Template ADU Program and SJV REAP Tool: Pre-Reviewed Plan Set, by January 2026, and publish on the City's website.

	▪ Determine and implement strategy to promote ADUs for moderate- and lower-income households by the end of 2028. ▪ Collaborate with neighboring jurisdictions to develop strategies to incentivize the development of ADUs by the end of 2028. Potential strategies may include options such as: ▫ Developing pre-approved ADU plans. ▫ Developing outreach and education materials on the use of housing choice Housing Choice Vouchers on ADUs. ▫ Promoting California Housing Finance Agency (CalHFA) ADU pre-development grants of up to $40,000 to homeowners. ▫ Reducing plan check or permit fees.
Primary Responsible Departments	Planning Department
Funding Sources	General Fund
Relevant Policies	2.2, 2.3, 3.1, 3.4
AFFH Themes	▪ Outreach and Education ▪ Housing Mobility ▪ New Housing Opportunities in Areas of Higher Resources
Geographic Targeting	North Farmersville
AFFH Outcomes	▪ Support the development of at least five ADUs in North Farmersville during the planning period.

Program 6: Zoning Code Amendments

In order to facilitate a variety of housing types, especially housing for lower-income households and those with special needs, the City will remove constraints to housing development by amending the Zoning Code.

Specific Actions, Objectives and Timelines	▪ Include the following Zoning Code Amendments by December 31, 2024: ▫ **Development Standards:** Increase the maximum allowable height in the RM-2.5 zone to accommodate the maximum allowable density. ▫ **Parking Standards:** Revise parking requirements related to studios and one-bedroom multifamily units to require no more than one space per unit. ▫ **Density Bonus:** Amend the Zoning Code to refer to State Density Bonus Law. ▫ **ADUs:** The City of Farmersville does not allow multiple ADUs on residential parcels and does not allow ADUs in multifamily and mixed-use zones, as required by state law. Revise the Zoning Code for compliance with state law. ▫ **Multifamily:** Amend the Zoning Code provisions for RM districts to prohibit single-family uses. ▫ **Residential Care Facilities:** Revise the Zoning Code to allow care facilities of seven or more residents in all zones that permit residential uses, approved with objectivity and certainty, and subject only to the requirements of residential uses of similar type and form. ▫ **Emergency Shelter:** Revise parking requirements for emergency shelters to comply with AB 2339. ▫ **Low Barrier Navigation Centers:** AB 101 requires a Low Barrier Navigation Center be permitted by-right in areas zoned for mixed uses and nonresidential zones permitting multifamily uses if it meets specified requirements. The City will need to amend its Zoning Code to explicitly allow development of Low-Barrier Navigation Centers,

	by-right, in mixed-use zones, as well as nonresidential zones permitting multifamily uses. ▫ **SB 35 and SB 330 Procedures:** Establish written procedures for the processing of SB 35 and SB 330 projects pursuant to state law. ▫ **Single-Room Occupancy (SRO) Housing:** Revise the Zoning Code to allow for the development of SROs in zones allowing hotel or motel uses. ▫ **Supportive Housing (AB 2162):** Amend the Zoning Code to comply with AB 2162, whereby certain supportive housing meeting specific criteria are to be permitted by-right in all zones where multifamily housing is also permitted (including nonresidential zones). For such supportive housing locating within half-mile from transit, no minimum parking can be required. ▫ **Farmworker Housing:** Review and revise the Zoning Code to ensure compliance with the Employee Housing Act (H&S Code Section 17021.6), which requires that any farmworker housing consisting of no more than 36 beds in a group quarters or 12 units or spaces designed for use by a single family or household shall be deemed an agricultural land use for the purposes of this section. For the purpose of all local ordinances, farmworker housing shall not be deemed a use that implies that the farmworker housing is an activity that differs in any other way from an agricultural use. No conditional use permit, zoning variance, or other zoning clearance shall be required of this farmworker housing that is not required of any other agricultural activity in the same zone. The permitted occupancy in farmworker housing in a zone allowing agricultural uses shall include agricultural employees who do not work on the property where the farmworker housing is located. ▫ **Employee Housing:** Review and revise the Zoning Code to ensure compliance with the Employee Housing Act (H&S Code Section 17021.5), which requires that housing provided by an employer for up to six employees is considered a residential use, subject to the same standards as single-family residences. ▫ **Permit Findings:** Revise findings for discretionary permits to be objective.
Primary Responsible Departments	Planning Department
Funding Sources	General Fund
Relevant Policies	2.2, 3.1, 3.4, 5.2, 5.3, 7.4
AFFH Themes	▪ Housing Mobility ▪ New Housing Opportunities in Areas of Higher Resources ▪ Anti-Displacement and Tenant Protection
Geographic Targeting	Citywide
AFFH Outcomes	▪ Facilitate the development of 10 units for special needs populations during the planning period.

Program 7: General Plan Consistency

The General Plan includes residential land use designations with a density range from one to 29 dwelling units per acre. The density ranges are sufficiently high to allow the development of affordable housing for all income levels. However, the standard for persons per acre could be a constraint to development.

Specific Actions, Objectives and Timelines	Revise the Land Use Element to remove the standard for persons per acre for residential land use designations.
Primary Responsible Departments	Planning & Development Department
Funding Sources	General Fund
Relevant Policies	2.1; 2.2
AFFH Themes	▪ Housing Mobility ▪ New Housing Opportunities in Areas of High Resources
AFFH Geographic Targeting	N/A
AFFH Outcomes	N/A

Program 8: Transparency in the Development Process

The City charges various fees and assessments to cover the cost of processing permits and providing certain services and utilities. Fees for a site plan review, variance, zone change, lot line adjustment, or annexation are higher than most other similarly sized jurisdictions in Tulare County, such as Exeter, Woodlake, and Dinuba.

While the City's website provides information on permit processing, application checklists, zoning, and staff contacts, this information can be difficult to locate and is not easily accessible.

Specific Actions, Objectives and Timelines	▪ By December 2025, the City will evaluate its compliance with the new transparency requirements per Government Code Section 65940.1(a)(1) make changes as necessary. ▪ By December 2025, Review planning and development fees and revise fees to be competitive with other cities in the county. ▪ By January 2025, update the City's website to provide clear links to planning and building resources, applications, and checklists. ▪ By January 2025, provide a link to its Reasonable Accommodations policy on the Housing page of the city website with contact information for city staff who manage the application process.
Primary Responsible Departments	Planning & Development Department
Funding Sources	General Fund
Relevant Policies	2.2; 2.4; 2.6
AFFH Themes	Outreach and Education
AFFH Geographic Targeting	N/A
AFFH Outcomes	N/A

Program 9: Facilitating Affordable Housing Development

The City is committed to expanding affordable housing options for households of all income levels using development tools such as density bonus provisions, waiving development fees and streamlining the application process. The City will contact local non-profit and private developers to facilitate the production of this housing as well as pursue funding opportunities available at the local, regional, state and federal levels.

On a case-by-case basis, the City will facilitate the development of affordable housing by public, private and non-profit groups by coordinating off-site improvements and physical infrastructure as Capital Improvement Projects. Assistance provided by the City may include traffic, street and sewer upgrades as well as other pedestrian and mobility improvements.

As part of Program 6, the City will amend its code to refer to State Density Bonus Law.

Specific Actions, Objectives and Timelines	▪ Annually pursue funding at the local, regional, state, and federal levels such as State CDBG, CalHome, PLHA, and Project Homekey funds. ▪ Work with other jurisdictions in Tulare County to create a regional list of affordable housing developers by 2026. Annually conduct outreach to these developers with information on potential sites, available regulatory concessions and incentives, and potential funding opportunities. ▪ By December 31, 2024, revise the Density Bonus Ordinance in compliance with state law (Government Code Section 65915) to equally provide for density bonuses in all zoning districts where residential uses are permitted and to include provisions relative to density bonuses, incentives, and concessions as required by state law. ▪ Facilitate the development of affordable housing through the provision of the following regulatory concessions and incentives: ▫ Density increases under the City's Density Bonus Ordinance. ▫ Expedited and streamlined project application review involving any of the following housing categories: very low-income households; large families; persons with disabilities or developmental disabilities; and farmworkers. ▫ Potential fee waivers/reductions/deferrals. ▪ Develop a web-based Housing Development Toolkit that outlines a step-by-step process for residential development, including identifying steps in the entitlement and building permit process, detailed information on development incentives, and funding programs and resources for affordable housing development. Publish the Housing Development Toolkit on the City's website by December 2025. ▪ Review the General Plan, applicable Specific Plans, and Zoning Code and Zoning Map to evaluate opportunities for removing barriers to housing production, adding housing capacity, and accommodating a greater mix of dwelling types and sizes households (e.g., duplexes, triplexes, fourplexes, townhouses, courtyard buildings), prioritizing opportunities and sites in North Farmersville. Review General Plan, Specific Plans, and Zoning Code and Zoning Map by January 2026 and implement any changes by January 2027 (see Program 6). ▪ Acquire funds from the state and federal grant opportunities, including the HCD Infill Infrastructure Grant Program, to support the development of affordable housing, housing for special needs, and support service projects. Leverage City funding to partner with affordable housing developer on new affordable housing developments in the city. Prioritize subsidies for financing for rental housing units affordable to extremely low-income households, senior households, farmworkers, persons with

	disabilities, veterans, large households, and other households with special needs. ▪ Apply for state and federal funds by January 2025 and annually thereafter to facilitate the development of affordable housing, including housing for extremely low-income households and those with special housing needs. Partner with nonprofit housing developers to support the entitlement of at least 100 subsidized housing units affordable to extremely low-, very low-, and low-income households in the city during the planning period, including at least 30 percent of units outside of areas of high segregation and poverty or near public transit and services.
Primary Responsible Departments	Planning Department
Funding Sources	Local, state and federal resources, General Fund, CDBG
Relevant Policies	2.1, 2.2, 2.3, 3.1, 4.1, 4.3, 7.4
AFFH Themes	▪ Housing Mobility ▪ New Housing Opportunities in Areas of Higher Resources
Geographic Targeting	Citywide with emphasis on moderate resource census tracts.
AFFH Outcomes	▪ Entitlement of at least 100 subsidized housing units affordable to extremely low-, very low-, and low-income households in the city during the planning period, including at least 30 percent of units outside of areas of high segregation and poverty or near public transit and services. ▪ Increase the percent of the city's housing stock that is multifamily from 7 percent to 10 percent by December 2030, using 2020 Census data as a baseline. ▪ Eliminate disparity between census tracts in northern Farmersville and the rest of the city based on median income level and percent of households in poverty.

Program 10: Preservation of At-Risk Housing

The City has 321 housing units that are deed restricted as affordable housing for lower-income households. Of these units, 19 are at risk of converting to market-rate housing over the next 10 years. The City will work to preserve these at-risk units and will proactively monitor all other units to encourage continued affordability beyond existing covenants and work proactively with owners of affordable units to assist in rehabilitation needs.

Specific Actions, Objectives and Timelines	▪ Preserve 321 affordable units, including 19 at-risk units. ▪ Monitor affordable units during the planning period. ▪ Ensure tenants are properly noticed by the property owners should a Notice of Intent to opt out of low-income use is filed. Notices must be filed three years, one year and six months in advance of conversion. ▪ Maintain annual contact with property owners of affordable housing regarding any change in status/intent or need for assistance, such as rehabilitation assistance. ▪ Maintain the AB 987 database to include detailed information on all subsidized units, including those that have affordability covenants. Update annually.
Primary Responsible Departments	Planning Department
Funding Sources	General Fund
Relevant Policies	3.6, 5.5
AFFH Themes	Anti-Displacement and Tenant Protection
Geographic Targeting	Citywide
AFFH Outcomes	▪ Preserve all 321 affordable housing units.

Program 11: Housing Preservation and Rehabilitation

About 62 percent of the City's housing stock was built before 1990 and is over 30 years old and may be in need of rehabilitation. The City's Code Enforcement Division estimates that approximately two percent of units (57 units) require major rehabilitation and less than one percent of units (28 units) citywide are beyond the point of repair. Concentrated areas of substandard housing in the city are primarily in the southern part of the city. Enforcement staff regularly distribute information about the City's home rehabilitation program to property owners undergoing enforcement.

Farmersville has established and will continue implementation of its Rehabilitation Program and Weatherization Program with Self Help Enterprises to rehabilitate owner housing units using CDBG funds. Self-Help Enterprises is a community development organization that offers a variety of programs for low-income families in the region. This includes deferred payment loans available to qualified homeowners for essential health and safety repairs such as roofing, plumbing, electrical, heating/cooling, foundation, windows, and handicap accessible modifications. The loan is due and payable upon sale, change of title or change of use.

The City's weatherization program for senior and low-income households provides CDBG funds for rehabilitation activities such as energy conservation improvements, including dual paned windows, wall insulation, weather stripping, etc.

Specific Actions, Objectives and Timelines	▪ Coordinate with Self-Help Enterprises to fund rehabilitation efforts in the City. Annually research funding opportunities, such as CHAFA, for rehabilitation grants. ▪ Expand awareness and connect residents to Self-Help Enterprises' Housing Rehabilitation Program. ▪ Publish resources on homeowner rehabilitation assistance on the City's website by January 2025. ▫ Connect qualified property owners with code violations to Self-Help Enterprises to receive financial assistance through the Housing Rehabilitation Program. Refer at least five property owners with housing units in need of repair to Self-Help Enterprises annually. ▪ Ensure that Code Enforcement has the information when addressing enforcement cases. ▪ Expand the City's Rehabilitation Program. ▫ Apply for additional funding for the home repair program by 2025 to serve at least 12 households by the end of the planning period, prioritizing East and Downtown Farmersville. ▪ Amend the Municipal Code to adopt the most recent version of the California Building Code by December 31, 2024. ▪ Pursue/provide rehabilitation assistance that includes energy conservation and weatherization improvements as eligible activities.
Primary Responsible Departments	Planning Department, Code Enforcement
Funding Sources	General Fund
Relevant Policies	3.6, 4.1, 4.2, 4.3, 5.5
AFFH Themes	▪ Outreach and Education ▪ Place-Based Strategy for Neighborhood Improvements
Geographic Targeting	East and Downtown Farmersville
AFFH Outcomes	▪ Assist with at least 12 rehabilitation projects over 8 years.

Program 12: Lower-Income and Special Needs Housing

To assist in the development of housing to meet the needs of extremely low, very low- and low-income households, the Housing Authority of Tulare County (HATC) offers the following programs:

Housing Choice Vouchers (HCVs): Offers affordable, decent and safe housing in open market rentals selected by Voucher holders. Under the Moving to Work program, you receive a fixed subsidy, which the Housing Authority pays directly to the landlord, and you pay the rest of the rent for your unit. There is a five-year time limit to this type of rental assistance in most cases because the fixed subsidy helps families to stabilize their housing costs as they work to achieve self-sufficiency and save for other housing opportunities. Furthermore, in 2020, the State passed SB 222 and SB 329 that identify public assistance as a legitimate source of income for housing payments. Landlords are no longer permitted to reject HCV recipients.

Public Housing: Provides rental assistance to low -income families and individuals. The HATC owns and manages all rental units offered under this program, which are located in communities throughout Tulare County.

The City will continue to work with the HATC to obtain HCVs and provide the community information about HATCs other available programs. Additionally, Self-Help Enterprises is a community development organization that offers a variety of programs for low-income families in the region. This includes a Downpayment Assistance program and Home Ownership Education programs.

Specific Actions, Objectives and Timelines	▪ Assist 65 Farmersville households through HCVs
	▪ Work with HATC and Self-Help Enterprises to continue providing assistance in the community.
	  ▫ Contract with Self-Help Enterprises to provide financial assistance programs to low-income households, including the Homebuyer Assistance Program. Expand program awareness and participation to low-income households throughout the city (see Program 14).
	▪ Over the 8-year planning period, subsequent to each Point-in-Time Count, conduct workshops for the Planning Commission and City Council to share the data from the count. Invite the Kings/Tulare Homeless Alliance to attend.
	▪ Identify potential programs to aid moderate-income homeownership opportunities and develop a list of resources by December 2024. Apply for feasible funding opportunities by December 2025.
	▪ Develop an inventory of affordable housing, with contact information and the number of affordable units, and publish the inventory on the City's website by January 2025.
	▪ Connect low-income residents with housing assistance resources, including the HCV program.
	  ▫ Add information on the HCV Program and Self-Help Enterprises' financial assistance programs to the City's website by January 2025.
	  ▫ Promote the availability of assistance programs through all City's social media pages.
	  ▫ Attend at least two community events to spread awareness and distribute fact sheets on available financial assistance programs.
	▪ In collaboration with the Housing Authority, provide education to property owners and managers to expand awareness of the HCV program to increase acceptance of tenant-based HCVs and to facilitate mobility and provide choices for lower-income households throughout the city.

	Identify and address challenges that property owners/managers have with existing or prospective HCV holders. ▫ In collaboration with HATC, annually conduct one workshop for landlords on the HCV program, for a total of seven workshops during the planning period, targeting property owners/managers in North Farmersville. ▪ Support awareness of moderate-income homeownership, such as Homes for Heroes and other moderate-income loan opportunities. Identify potential programs to aid moderate-income homeownership opportunities and develop a list of resources by December 2024. Advertise programs on the City's website by July 2025.
Primary Responsible Departments	Planning Department
Funding Sources	HUD, Self-Help Enterprise funding sources
Relevant Policies	3.2, 5.1, 5.4, 5.5, 7.4
AFFH Themes	▪ Outreach and Education ▪ Housing Mobility ▪ New Housing Opportunities in Areas of High Resources ▪ Anti-Displacement and Tenant Protection
Geographic Targeting	Citywide; North Farmersville
AFFH Outcomes	▪ Assist with at least 12 rehabilitation projects over 8 years. ▪ Assist 5 households through the First Time Homebuyer Program ▪ Promote with the goal of expanding the use of HCVs in the city by 10 percent by December 2030, using 2023 data as baseline.

Program 13: Community and Economic Development

Well-maintained infrastructure creates a safe and accessible urban environment, fostering a sense of community and belonging. Moreover, investing in such improvements attracts businesses and investments, contributing to economic growth and ensuring equal access to essential services. The City will implement the following actions to expand community and economic development citywide.

The City has implemented several action plans directed by the General Plan, including pursuit of several grants to fund economic development activities. Major city-sponsored activities have included the widening of Visalia Road and Farmersville Boulevard (recently completed) and upgrading the capacity of the City's wastewater treatment plant, completed during 2021. The City also adopted an economic incentive program to offer sales tax rebates to commercial and industrial developers. Farmersville is also one of the few cities in Tulare County to allow cannabis businesses. Two retailers opened during 2020 with a third approved and nearing construction.

The City has a Comprehensive Infrastructure Master Plan (CIMP) that guides improvements to greenfield areas as well as utility master plans that cover all areas within the General Plan planning area that are expected to see development. In addition, developers of projects in greenfield areas are expected to install required improvements, including parks, trails and bike lanes. Upon adoption, the City of Farmersville will provide the Housing Element to all water and sewer service districts and notify all districts of the requirement to prioritize water and sewer service allocation for new affordable housing development (Government Code Section 65589.7).

Specific Actions, Objectives and Timelines	▪ Partner with the local employment organizations to connect Farmersville residents with job opportunities and workforce training program opportunities. ▫ Partner with the Tulare County Workforce Investment Board and Employment Connection to host an annual job fair and workforce training event in Farmersville. ▫ Work with Visalia Transit to provide free bus passes to residents attending job fairs and interviews. ▪ Coordinate with the Public Works Department to review the City's Capital Improvement Projects (CIP) to ensure public facilities and infrastructure are supportive of the needs of underserved communities. ▫ As part of the annual CIP program updates, evaluate public improvement needs in Downtown Farmersville Specific Plan area, and East, West, and South Farmersville, and prioritize improvements on sites that accommodate the City's lower-income RHNA. ▪ Coordinate with Tulare County and the San Joaquin Valley Air Pollution Control District to develop and implement a plan to reduce pollution burden throughout the city, targeting air quality, water quality, and pesticide use. Assess pollution burden in East, West, and South Farmersville and create an action plan to reduce pollution burden in these neighborhoods, as well as addressing proper remediation plans for cleanup sites and hazardous waste sites. ▫ Regularly assess and monitor pollution burden in each census tract, using tools such as CalEnviroScreen and identify major sources of pollution. Develop a pollution burden reduction strategy for the city and for East, West, and South Farmersville by 2026 with metrics and timelines.
Primary Responsible Departments	Planning Department
Funding Sources	General Funds
Relevant Policies	3.1, 4.4
AFFH Themes	Place-based Strategies for Neighborhood Improvement
Geographic Targeting	East, South, and West Farmersville (areas of high segregation and poverty)
AFFH Outcomes	▪ Complete 5 CIP projects during the planning period.

Program 14: Fair Housing Outreach and Enforcement

The City of Farmersville works with HATC to provide fair housing information and resources to residents and housing providers. Farmersville works with HATC to provide a local Fair Housing Information Program which includes distribution of educational materials to property owners, apartment managers, and tenants, and responding to complaints of discrimination (i.e., in-taking, investigation of complaints, and resolution) by referring the affected party to the appropriate agencies.

The City refers fair housing issues and complaints to Fair Housing Council of Central California (FHCCC) and the State Department of Fair Employment and Housing. The Department of Fair Employment and Housing (DFEH) maintains a record of housing discrimination complaints filed in local jurisdictions.

HATC refers fair housing issues and complaints to the U.S. Department of Housing and Urban Development (HUD). HUD's Office of Fair Housing and Equal Opportunity (FHEO).

Specific Actions, Objectives and Timelines	▪ Coordinate with FHCC/other fair housing nonprofit organizations to provide fair housing and tenant/landlord services, including investigation of discrimination complaints, fair housing counseling and education, fair housing testing, and tenant/landlord counseling and mediation. ▪ Coordinate with non-profit organizations, local community groups, and service organizations to increase awareness of and access to housing resources and fair housing assistance. Starting in 2025: ▫ Hold at least three fair housing workshops or pop-up events during the planning period for residents about housing rights and resources, materials in English and Spanish. ▫ Release program about housing rights and resources annually, in English and Spanish. The program will include, but not limited to, social media, print media, newspaper, radio, and/or television media outlets. ▪ Update the City's website to include fair housing rights and responsibilities for landlords and lenders. Add a language translation feature to the City's website. Complete updates by January 2025. ▪ Coordinate with TCAG to offer outreach on housing services and opportunities in conjunction with other regional planning efforts. Organize one workshop in Farmersville to provide information on housing services and programs in 2025. ▪ Develop a Fair Housing factsheet to be included with the ADU application packet to inform property owners of their responsibility with state and federal fair housing laws. Publish fair housing guide with ADU applications on or before January 2025. ▪ Beginning in 2025, provide annual trainings for City staff on how to refer residents for fair housing complaints. ▪ Beginning in 2025, provide annual trainings to the City's Police Department staff on how to engage with the city's homeless population and how to connect them with resources. ▪ Annually, conduct outreach and education on water conservation measure through a social media campaign.
Primary Responsible Departments	Planning Department
Funding Sources	General Fund
Relevant Policies	3.1, 4.4
AFFH Themes	Enforcement and Outreach
Geographic Targeting	East, South, and West Farmersville
AFFH Outcomes	▪ Assist at least 15 residents and landlords with fair housing services annually, throughout planning period.

C7.3 AFFH Actions Summary

Government Code Section 8899.50 requires "meaningful actions" well beyond combating discrimination to overcome patterns of segregation and foster inclusive communities. Actions to affirmatively further fair housing include:

- Enhancing housing mobility strategies
- Encouraging development of new affordable housing in high resource areas
- Increasing fair housing enforcement and fair housing outreach capacity
- Improving place-based strategies to encourage community conservation and revitalization, including preservation of existing affordable housing
- Protecting existing residents from displacement

Actions to affirmatively furthering fair housing are summarized below.

Affirmatively Furthering Fair Housing Action Matrix

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
Fair Housing Enforcement and Outreach				
Program 14: Fair Housing Outreach and Enforcement	▪ Coordinate with FHCCC/other fair housing nonprofit organizations to provide fair housing and tenant/landlord services, including investigation of discrimination complaints, fair housing counseling and education, fair housing testing, and tenant/landlord counseling and mediation. ▪ Coordinate with non-profit organizations, local community groups, and service organizations to increase awareness of and access to housing resources and fair housing assistance. Starting in 2025: ▫ Hold at least three fair housing workshops or pop-up events during the planning period for residents about housing rights and resources, materials in English and Spanish, starting in 2025. ▫ Release program about housing rights and resources annually, in English and Spanish. The program will include, but not limited to, social media, print media, newspaper, radio, and/or television media outlets. ▪ Update the City's website to include fair housing rights and responsibilities for landlords and lenders. Add a language translation feature to the City's website. Complete updates by January 2025. ▪ Coordinate with TCAG to offer outreach on housing services and opportunities in conjunction with other regional planning efforts. Organize one workshop in Farmersville to provide information on housing services and programs in 2025. ▪ Develop a Fair Housing factsheet to be included with the ADU application packet to inform property owners of their responsibility with state and federal fair housing laws. Publish fair housing guide with ADU applications on or before January 2025. ▪ Beginning in 2025, provide annual trainings for City staff on how to refer residents for fair housing complaints.	Starting 2025,then update as necessary	East, South, and West Farmersville	Assist at least 15 residents and landlords with fair housing services annually, throughout planning period.

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
	▪ Beginning in 2025, provide annual trainings to the City's Police Department staff on how to engage with the city's homeless population and how to connect them with resources. ▪ Annually, conduct outreach and education on water conservation measure through a social media campaign			
Housing Mobility				
Program 1: Regional Collaboration	▪ Participate in regional meetings related to housing and homeless issues to pursue funding and coordination opportunities. ▪ Collaborate with TCaT and Visalia Transit to prepare a study on transit and active transportation needs for Farmersville residents and identify actions to address those needs, focusing on connecting residents to job centers. Complete a transit needs study by January 2026 to identify potential actions. Implement at least one of those actions by the end of 2028.	Annually Study by 2026, implementation by 2028	N/A	Annually pursue funding opportunities for regional housing issues. Complete a transit needs study by January 2026 to identify potential actions. Implement at least one of those actions by the end of 2028. Increase the percentage of residents commuting by public transit by 5 percent by December 2031 with 2020 data as baseline.
Program 5: Accessory Dwelling Units	▪ Amend the Zoning Code in compliance with state law by December 31, 2024. ▪ By December 31, 2024, facilitate the production of ADUs through efforts including, but not limited to: ▫ Updating ADU webpage to include available resources for ADU production, such as grants for pre-development costs available to lower-income homeowners through California Finance Agency (CalHFA). ▫ Offering expedited reviews for ADU applications. ▪ Promote the development of ADUs, prioritizing North Farmersville. ▫ Conduct three educational workshops, campaigns, or outreach events to promote ADU development in the city to residents, with at least two events targeted to residents and developers in North Farmersville, by the end of the planning period.	By December 31, 2024 Through 2031	North Farmersville	Support the development of at least five ADUs in North Farmersville during the planning period.

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
	▪ Implement strategies to streamline the ADU permitting process. ▫ Develop an ADU application checklist and publish the checklist on the City's website by January 2025. ▫ Add information on the ADU permitting process, as well as available resources and incentives, on the City's website by January 2025. ▫ Adopt pre-approved ADU plans, potentially using SJV REAP's Template ADU Program and SJV REAP Tool: Pre-Reviewed Plan Set, by January 2026, and publish on the City's website. ▪ Determine and implement strategy to promote ADUs for moderate- and lower-income households by the end of 2028. ▪ Collaborate with neighboring jurisdictions to develop strategies to incentivize the development of ADUs by the end of 2028. Potential strategies may include options such as: ▫ Developing pre-approved ADU plans. ▫ Developing outreach and education materials on the use of housing choice Housing Choice Vouchers on ADUs. ▫ Promoting California Housing Finance Agency (CalHFA) ADU pre-development grants of up to $40,000 to homeowners. ▫ Reducing plan check or permit fees.	By January 2025 By January 2026 By the end of 2028		
Program 12: Lower-Income and Special Needs Housing	▪ Work with HATC and Self-Help Enterprises to continue providing assistance in the community. ▫ Contract with Self-Help Enterprises to provide financial assistance programs to low-income households, including the Homebuyer Assistance Program. Expand program awareness and participation to low-income households throughout the city. See Program 14. ▪ Over the 8-year planning period, subsequent to each Point-in-Time Count, conduct workshops for the Planning Commission and City Council to share the data from the count. Invite the Kings/Tulare Homeless Alliance to attend.	Annually Through 2031	Citywide, with a focus on North Farmersville	Assist 65 Farmersville households through HCVs. Assist with at least 12 rehabilitation projects over a period of eight years. Assist five households through the First Time Homebuyer Program Promote with the goal of expanding the use of HCVs in the city by 10 percent by December 2030, using 2023 data as baseline.

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
	▪ Identify potential programs to aid moderate-income homeownership opportunities and develop a list of resources by December 2024. Apply for feasible funding opportunities by December 2025.	December 2024/ December 2025		
	▪ Develop an inventory of affordable housing, with contact information and the number of affordable units, and publish the inventory on the City's website by January 2025.	By January 2025		
	▪ Connect low-income residents with housing assistance resources, including the HCV program. ▫ Add information on the HCV Program and Self-Help Enterprises' financial assistance programs to the City's website by January 2025. ▫ Promote the availability of assistance programs through all City's social media pages. ▫ Attend at least two community events to spread awareness and distribute fact sheets on available financial assistance programs.	By January 2025 then ongoing		
	▪ In collaboration with the Housing Authority, provide education to property owners and managers to expand awareness of the HCV program to increase acceptance of tenant-based HCVs and to facilitate mobility and provide choices for lower-income households throughout the city. Identify and address challenges that property owners/managers have with existing or prospective HCV holders. ▫ In collaboration with the Tulare Housing Authority, annually conduct one workshop for landlords on the HCV program, for a total of seven workshops during the planning period, targeting property owners/managers in North Farmersville.	Annually		
	▪ Support moderate-income homeownership, such as Homes for Heroes and other moderate-income loan opportunities. Identify potential programs to aid moderate-income homeownership opportunities and develop a list of resources by December 2024. Apply for feasible funding opportunities by December 2025.	December 2024/ December 2025		

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
New Housing Opportunities in Higher Opportunity Areas				
Program 2: Adequate Sites for RHNA	▪ Maintain an inventory of available vacant and prospective sites that can accommodate new housing; update annually. Make this inventory available to the public and interested developers on the City website. ▪ Annually meet with property owners and interested developers to pursue housing development in the city. ▪ By December 31, 2024, develop a formal procedure to monitor no net loss in capacity pursuant to SB 166. ▪ By 2026, complete update to water and sewer master plans.	Annually December 31, 2024	Citywide	Facilitate the development of 654 units over 8 years (135 very low-income, 83 low-income, 121 moderate-income, and 315 above moderate-income units).
Program 3: By-Right Approval	▪ By December 31, 2024, concurrent with the Development Code update to provide adequate sites for the RHNA (see Program 2), update the Development Code to address the by-right approval requirements. Lower-income sites included in the site inventory with a proposed zoning change, as well as vacant sites identified in two previous housing elements and non-vacant sites identified in the previous housing element, will be rezoned, in compliance with Government Code Section 65583.2(h) and (i), to permit owner-occupied and rental multifamily uses by-right (without discretionary approval) for developments in which 20 percent of the units affordable to lower-income households.	December 31, 2024	Citywide	Facilitate the development of 654 units over 8 years (135 very low-income, 83 low-income, 121 moderate-income, and 315 above moderate-income units).
Program 6: Zoning Code Amendments	▪ Complete Zoning Code Amendments outlined in Program 6 to facilitate the development and remove constraints to the development of housing for special needs populations.	December 31, 2024	Citywide	Facilitate the development of 10 units for special needs populations during the planning period.
Program 8: Transparency in Government	▪ By December 2025, the City will evaluate its compliance with the new transparency requirements per Government Code Section 65940.1(a)(1) make changes as necessary. ▪ By December 2025, Review planning and development fees and revise fees to be competitive with other cities in the county. ▪ By January 2025, update the City's website to provide clear links to planning and building resources, applications, and checklists.	December 2025 By January 2025	Citywide	Facilitate the development of 654 units over 8 years (135 very low-income, 83 low-income, 121 moderate-income, and 315 above moderate-income units).

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
	▪ By January 2025, provide a link to its Reasonable Accommodations policy on the Housing page of the city website with contact information for city staff who manage the application process.			
Program 9: Facilitating Affordable Housing Development	▪ Annually pursue funding at the local, regional, state, and federal levels such as State CDBG, CalHome, PLHA, and Project Homekey funds. ▪ Work with other jurisdictions in Tulare County to create a regional list of affordable housing developers. Annually conduct outreach to these developers with information on potential sites, available regulatory concessions and incentives, and potential funding opportunities. ▪ By December 31, 2024, revise the Density Bonus Ordinance in compliance with state law (Government Code Section 65915) to equally provide for density bonuses in all zoning districts where residential uses are permitted and to include provisions relative to density bonuses, incentives, and concessions as required by state law. ▪ Facilitate the development of affordable housing through the provision of the following regulatory concessions and incentives: ▫ Density increases under the City's Density Bonus Ordinance. ▫ Expedited and streamlined project application review involving any of the following housing categories: very low-income households; large families; persons with disabilities or developmental disabilities; and farmworkers. ▫ Potential fee waivers/reductions/deferrals. ▪ Develop a web-based Housing Development Toolkit that outlines a step-by-step process for residential development, including identifying steps in the entitlement and building permit process, detailed information on development incentives, and funding programs and resources for affordable housing development. Publish the Housing Development Toolkit on the City's website by December 2025.	Annually December 31, 2024 Through 2031 By December 2025	Citywide with emphasis on moderate and high resource census tracts.	Increase the percent of the city's housing stock that is multifamily from 7 percent to 10 percent by December 2030, using 2020 Census data as a baseline. Eliminate disparity between census tracts in northern Farmersville and the rest of the city based on median income level and percent of households in poverty. Entitlement of at least 100 subsidized housing units affordable to extremely low-, very low-, and low-income households in the city during the planning period, including at least 30 percent of units outside of areas of high segregation and poverty or near public transit and services

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
	▪ Review the General Plan, applicable Specific Plans, and Zoning Code and Zoning Map to evaluate opportunities for removing barriers to housing production, adding housing capacity, and accommodating a greater mix of dwelling types and sizes households (e.g., duplexes, triplexes, fourplexes, townhouses, courtyard buildings), prioritizing opportunities and sites in North Farmersville. Review General Plan, Specific Plans, and Zoning Code and Zoning Map by January 2026 and implement any changes by January 2027 (see Program 6).	January 2026/ January 2027		
	▪ Acquire funds from the state and federal grant opportunities, including the HCD Infill Infrastructure Grant Program, to support the development of affordable housing, housing for special needs, and support service projects. Leverage City funding to partner with affordable housing developer on new affordable housing developments in the city. Prioritize subsidies for financing for rental housing units affordable to extremely low-income households, senior households, farmworkers, persons with disabilities, veterans, large households, and other households with special needs. ▫ Apply for state and federal funds by January 2025 and annually thereafter to facilitate the development of affordable housing, including housing for extremely low-income households and those with special housing needs. Partner with nonprofit housing developers to support the entitlement of at least 100 subsidized housing units affordable to extremely low-, very low-, and low-income households in the city during the planning period, including at least 30 percent of units outside of areas of high segregation and poverty or near public transit and services.	January 2025, then as funding becomes available		

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
Place-based Strategies for Neighborhood Revitalization				
Program 1: Regional Collaboration	▪ Hold at least one community workshop in East, South, and West Farmersville by December 2026 to identify active transportation needs and apply for funding to implement projects by December 2027.	December 2026/ December 2027	Citywide, with a focus on East, South, and West Farmersville (areas of high segregation and poverty)	Implement at least one active transportation projects in East, South, and West Farmersville (areas of high segregation and poverty) by the end of the planning period. Increase the percentage of residents commuting by public transit by 5 percent by December 2031 with 2020 data as baseline.
Program 11: Housing Preservation and Rehabilitation	▪ Coordinate with Self-Help Enterprises to fund rehabilitation efforts in the city. Annually research funding opportunities, such as CHAFA, for rehabilitation grants. ▪ Expand awareness and connect residents to Self-Help Enterprises' Housing Rehabilitation Program. ▪ Publish resources on homeowner rehabilitation assistance on the City's website by January 2025. ▫ Connect qualified property owners with code violations to Self-Help Enterprises to receive financial assistance through the Housing Rehabilitation Program. Refer at least five property owners with housing units in need of repair to Self-Help Enterprises annually. ▪ Ensure that Code Enforcement has the information when addressing enforcement cases. ▪ Expand the City's Housing Rehabilitation Program. ▫ Apply for additional funding for the home repair program by 2025 to serve at least 12 households by the end of the planning period, prioritizing East and Downtown Farmersville. ▪ Amend the Municipal Code to adopt the most recent version of the California Building Code by December 31, 2024.	Annually By January 2025, then ongoing By 2025, then ongoing	East and Downtown Farmersville	Assist with at least 12 rehabilitation projects over eight years.

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
	▪ Pursue/provide rehabilitation assistance that includes energy conservation and weatherization improvements as eligible activities.			
Program 13: Community and Economic Development	▪ Partner with the local employment organizations to connect Farmersville residents with job opportunities and workforce training program opportunities. ▫ Partner with the Tulare County Workforce Investment Board and Employment Connection to host an annual job fair and workforce training event in Farmersville. ▫ Work with Visalia Transit to provide free bus passes to residents attending job fairs and interviews.	Annually	East, West, and South Farmersville	Complete 5 CIP projects during the planning period.
	▪ Coordinate with the Public Works Department to review the City's Capital Improvement Projects (CIP) to ensure public facilities and infrastructure are supportive of the needs of underserved communities. ▫ As part of the annual CIP program updates, evaluate public improvement needs in Downtown Farmersville Specific Plan area, and East, West, and South Farmersville, and prioritize improvements on sites that accommodate the City's lower-income RHNA.	Annually		
	▪ Coordinate with Tulare County and the San Joaquin Valley Air Pollution Control District to develop and implement a plan to reduce pollution burden throughout the city, targeting air quality, water quality, and pesticide use. Assess pollution burden in East, West, and South Farmersville and create an action plan to reduce pollution burden in these neighborhoods, as well as addressing proper remediation plans for cleanup sites and hazardous waste sites. ▫ Regularly assess and monitor pollution burden in each census tract, using tools such as CalEnviroScreen and identify major sources of pollution. Develop a pollution burden reduction strategy for the city and for East, West, and South Farmersville by 2026 with metrics and timelines.	By 2026		

Program	Specific Commitment	Timeline	Geographic Targeting	Eight-Year Metrics
Tenant Protection and Anti-displacement				
Program 1: Regional Collaboration	▪ Partner with the Kings/Tulare Homeless Alliance to proactively address shelter, housing and support services for people experiencing homelessness.	Annually	Citywide	Annually coordinate meetings with the Kings/Tulare Homeless Alliance to address need in Farmersville.
Program 4: Replacement Housing	▪ Amend the Zoning Code to address the replacement housing requirements.	December 31, 2024	N/A	Replace all units as required pursuant to AB 1397.
Program 10: Preservation of At-Risk Housing	▪ Monitor affordable units during the planning period. ▪ Ensure tenants are properly noticed by the property owners should a Notice of Intent to opt out of low-income use is filed. Notices must be filed three years, one year and six months in advance of conversion. ▪ Maintain annual contact with property owners of affordable housing regarding any change in status/intent or need for assistance, such as rehabilitation assistance. ▪ Maintain the AB 987 database to include detailed information on all subsidized units, including those that have affordability covenants. Update annually.	Annually	Citywide	Preserve 321 affordable units, including 19 at-risk units.

C7.4 Quantified Objectives

Farmersville has established quantified objectives for housing production and rehabilitation for the Housing Element. These objectives are based upon expected availability of resources to address the City's housing needs, expectations regarding future housing development, as well as prior objectives established in earlier housing plans. Table C7-1 below summarizes the City's quantified objectives for implementing its various programs and actions outlined above.

Table C7-1 Quantified Objectives 2023-2031

Target Income and Affordability Level	New Construction	Rehabilitation	Conservation
Extremely Low	68	3	
Very Low	67	3	
Low	83	3	
Moderate	121	3	
Above Moderate	315		
Total	**654**	**12**	**625 (none at risk)**

CITY OF FARMERSVILLE

COMPREHENSIVE INFRASTRUCTURE MASTER PLAN

November 2012

Quad Knopf

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CHAPTER ONE

INTRODUCTION

CHAPTER ONE INTRODUCTION

1.1 Background

The City of Farmersville is located in Tulare County in the southeastern portion of the San Joaquin Valley (see Exhibit A-1 for a general location map). Farmersville is located south of State Route 198, approximately 11 miles east of State Route 99, and is bisected by County Road 164 (Farmersville Boulevard). The level topography of the City slopes from the northeast at an elevation of 365 feet above sea level towards the southwest to an elevation of 345 feet above sea level. In 2010, the population of Farmersville was recorded at 10,588, which is an annual increase of approximately 3% since 1993. The population is expected to reach 13,320 by 2014.

The City has received a Sustainable Communities Planning grant to develop a Comprehensive Infrastructure Master Plan (CIMP). This master plan will include circulation improvements and the addition of bike lanes, sidewalks, and water, wastewater, and storm drainage facilities.

On the heels of significant growth that occurred in the past 20 years and strategically planning for even more development in the next 20, the timing is ripe for Farmersville to address its infrastructure, planning for the expansions necessary to accommodate future growth and development, especially for the land uses required to provide a sustainable community for the residents of Farmersville.

1.2 Authorization

The City Council of the City of Farmersville authorized the preparation of the CIMP in August 2011. The CIMP will provide a roadmap for infill development within the Farmersville Urban Area Boundary (UAB), while limiting the pressure for development on the valuable farm land outside of the UAB.

1.3 Scope

The CIMP will include circulation, water, wastewater, and storm drainage within the Urban Area Boundary (see exhibit A-2 for the study area boundary). The plan is intended to enable smart growth concepts to be implemented as part of the City's future development, improve public health, and promote self-sustaining economic development. Each portion of the CIMP will have a specific scope, but generally they will include:

- Compiling existing data
- Identifying existing problems
- Summarizing new development needs
- Specifying areas needing service
- Identifying future expansion areas
- Summarizing needed improvements

The CIMP is intended to comply with policies of the City of Farmersville's General Plan. Exhibit A-3 depicts the current General Plan land use designations and the current city boundaries.

The proposed sizes and locations of facilities developed in this report are considered to be only preliminary. The final design and locations of the facilities can only be determined after performing more detailed field surveys and engineering design.

This CIMP will update and revise the following plans:

- 1983 Sanitary Sewer Master Plan
- 1989 Storm Drainage Master Plan
- 1998 Community Infrastructure Study
- 2000 Water System Study
- 2003 Highway 198 Corridor Specific Study

1.4 Comprehensive System Reviews

The City's current master plans have been completed at various times since 1983. This CIMP will consolidate the various studies and plans into one report and update the information where appropriate. As each section of the CIMP was developed, other sections were referenced to avoid conflicts between sections. Infrastructure needs were considered together, to allow the City to take advantage of multiple benefits of co-locating future facilities and any potential conjunctive relationships that would be potentially more cost-effective and more supportive of a sustainable community.

The Circulation section identifies locations of the collector and arterial roadways. The water, sewer, and storm drain sections were developed so that the proposed master plan infrastructure will align with the proposed arterials and collectors.

The CIMP proposes improvements to serve the Farmersville UAB. Since the current General Plan does not designate land uses beyond the existing Urban Development Boundary (UDB), additional assumptions were needed for the area between the UDB and the UAB. For example, a majority of the land within the two limit lines will be residential except for lesser areas of industrial, institutional, and commercial uses. Exhibit A-4 depicts these assumed non-residential areas. The remainder of the undesignated area is assumed to be residential. These assumptions are only intended to be used to aid in determining the estimated size and capacity of future infrastructure needs for planning purposes. These assumptions do not supersede the City of Farmersville's General Plan Land Use Element, nor do they state a formal disposition towards future land uses for land lying between the UDB and UAB.

1.5 Public Outreach

The draft report was sent out to the following agencies for review and comment:
Farmersville Chamber of Commerce
Farmersville Chamber of Commerce
Tulare County Board of Supervisors
Kaweah Delta Water Conservation
Consolidated People's Ditch Company
San Joaquin Valley Air Pollution Control District
Farmersville Unified School District
Tulare County Association of Governments
Tulare County Health Services
Proyecto Campesino

Two comment letters were received (Kaweah Delta Water Conservation and San Joaquin Valley Air Pollution Control District). The first letter had no comments. The second letter, from the Air Pollution Control District, stated the CIMP would have no impacts on air quality; however future projects within the scope of the CIMP would need to abide by the district rules.

Two public outreach meetings were held on November 7, 2012. The first meeting was held in Spanish and the second meeting was held in English. Written comments were received at both meetings. The comment forms are included in Appendix F. The comment cards issues are addressed in comment boxes added to each comment form.

CHAPTER TWO

DEMOGRAPHICS AND LAND USE

CHAPTER TWO DEMOGRAPHICS AND LAND USE

The City of Farmersville's city limits currently contains 1,385 acres. The area between the City limits and the UAB currently contains 1,572 acres. The City's UAB including the area within the City limits contains a total of 2,957 acres. The urbanized area in the City of Farmersville is surrounded on all sides by agriculture. Forty percent of the UAB is identified as agricultural uses. One fifth of the UAB is devoted to residential uses (single family and multi-family). Undeveloped land in the UAB has approximately 290 acres that could be utilized for future development without relying upon additional land outside the UAB to meet the City's projected growth. Exhibit A-1 shows the general location of the study area. Exhibit A-2 identifies the study area boundaries.

2.1 Population

The General Plan, which was completed in 2002, contained the following population projections:

Table 2-1
City Developed Population Projections

Year	Population (2.9% growth rate)	Population (3.4% growth rate)
2005	10,079	10,327
2006	10,372	10,678
2007	10,672	11,040
2008	10,982	11,416
2009	11,300	11,804
2010	11,628	12,206
2011	11,965	12,620
2012	12,312	13,050
2013	12,670	13,494
2014	13,037	13,952
2015	13,415	14,427
2016	13,804	14,917
2017	14,204	15,424
2018	14,616	15,949
2019	15,040	16,491
2020	15,476	17,052
2025	17,854	20,839

The actual population in 2011 was 10,824[1] indicating that the actual growth rate for the City was significantly below the projections for the period reported. The declining economy may have been a significant factor for the lower growth rates; however, the pace of growth should not invalidate the other assumptions and policies within the General Plan.

[1] "New Report: California Added More than a Quarter Million in 2011; Total State Population nearly 37.7 Million". State of California Department of Finance. May 1, 2012.

2.2 Land Use

The Land Use Element of the City's General Plan depicts the UDB Line and the UAB Line for the community (see Exhibit A-3), for the General Plan land use designations.

According to the General Plan Land Use Element:

- Approximately 1,572 acres is located between the UAB and the current City limit line
- 417 residential acres are needed to meet the 2025 population projections
- 24 acres of Commercial/Office space are needed to serve the 2025 projected population

Even though the City's UAB has more than enough land for future development, the actual location of future development is unknown. The CIMP includes the UAB to ensure the area that develops has a appropriate plan for infrastructure for the point in time when the General Plan is updated to allow future development. In most cases, the timing to actually install this infrastructure would not occur until after the General Plan is updated, unless the infrastructure is needed to serve other areas that are situated within the UDB.

2.3 Future Service Area

The City of Farmersville's city limits currently contains 1,385 acres (160 acres have been annexed since the 2002 General Plan update) of which approximately 290 acres are currently undeveloped. The City's UAB contains 2,957 acres as shown in Exhibit A-2. Table 2-2 shows the existing land use as identified in the 2002 General Plan update.

Table 2-2
Land Use (per 2002 General Plan Update)

	City Limits (Acres)	Urban Area Boundary* (Acres)	Total (Acres)
Residential (Single Family)	416	111	527
Residential (Multi-Family)	21.8	64.6	86
Commercial (General)	27.5	2.3	30
Commercial (Service)	16.1	1.8	18
Industrial	32.4	41.8	74
Agricultural	193.5	981	1174
Parks	14.4	0	14
Parks (Quasi-Public)	62.5	66.9	129
Schools	76.9	5.2	82
Waterways	7.4	16.4	24
Vacant	185.8	28.7	215
Right of Way	151	433	584
TOTAL	**1,205**	**1,752**	**2,957**

* Urban Area beyond City Limits

In the General Plan, land uses were assigned to all areas within the UAB. For this study, the current General Plan was used as a guide to assign land uses as shown in Exhibit A-3. Table 2-3 shows the acreage for each future land use planned beyond the existing City Limits, but within the UAB.

Table 2-3
Future Land Uses

	Existing (Acres)	Urban Area Boundary* (Acres)	Total (Acres)
Residential	613	685	1298
Commercial	48	127	175
Industrial	74	354	428
Institutional	834	222	1056
TOTAL	**1,569**	**1,388**	**2,957**

* Urban Area beyond City Limits

Exhibit A-4 depicts the assumptions made for future land use areas listed above for Commercial, Industrial, and Institutional.

2.4 Sustainable Communities Land Use Objectives

2.4.1 SHOPPING AND JOBS

A significant deficit of commercial and retail development exists in Farmersville. Residents must travel 6 to 15 miles each way to obtain basic goods and services or to go to work. The City recently changed the zoning on two large parcels strategically located near the northern gateway to Farmersville at State Route 198 for a shopping center and an industrial park. However, currently the City is not well positioned to attract developers without necessary infrastructure improvements. Farmersville needs these types of plans in place to pursue economic development and improve the lives of its residents. The CIMP is necessary to plan for expanded transportation, water, wastewater, and storm drain improvements to make the economic development of these two areas viable. These new developments will make it possible for Farmersville residents to shop and work in their own City, supporting the local revenue and job base and eliminating numerous vehicle trips outside the City to purchase basic necessities.

2.4.2 HOUSING

The City's General Plan Housing Element notes that 2,244 dwelling units are planned for the long-term within the UAB. These planned future housing units will add significantly to the existing 2,972 units. One of the primary strategies of the CIMP will be to enable development to take place on vacant or underutilized parcels inside the UAB, meeting one of the City's General Plan policies to manage growth by avoiding "urban sprawl" and by developing infrastructure plans that promote infill, compact development, and affordable housing. By identifying targeted growth areas within the City's UAB, this CIMP will ensure that Farmersville's vision for a sustainable city is implemented through thoughtful master planning. Future shopping, jobs, parks, and housing are

hinging on plans for adequate roads, sidewalks, bike lanes, water supplies, wastewater disposal, and storm drainage systems. The strategy to achieve this infrastructure objective will be to maintain and improve existing infrastructure (50 year old systems in parts of the City) and plan for expansions to accommodate future growth and development. The following chapters will address the plans to bring necessary infrastructure to serve undeveloped parcels.

2.4.3 PARKS

In addition to providing opportunities for a shopping center and industrial park by constructing necessary infrastructure improvements, the CIMP will also support the development of parks and recreation opportunities. Currently, the community is served by only 1.7 acres of park space for every 1,000 residents. The standard ratio of park acreage for residents (per State of California Quimby Act) is 3.0 acres per 1,000 people. The CIMP will also create safe paths for walking or bicycling (most existing roads in Farmersville are not pedestrian or bicycle friendly) that will provide access to new parks and recreation facilities.

CHAPTER THREE

CIRCULATION

CHAPTER THREE CIRCULATION

3.1 Introduction

Farmersville's circulation system directly affects the quality of life, physical character, and economic vitality of the community. The CIMP proposes a circulation system that will promote critical development for retail and industrial properties within the Farmersville UAB, while protecting the valuable farm land outside the UAB. The CIMP is also designed to promote an interconnected transportation network for all modes of transportation. Decreased number of vehicle trips within the urban area will be achieved through circulation improvements such as shaded "green streets" and the addition of bike lanes and sidewalks to make alternative modes of transportation safer and more feasible in Farmersville. Plans for new roadways will allow for greater access to transit and will reduce the number of vehicle miles traveled by local residents by providing access to shopping and new job opportunities within the City limits.

The City's existing circulation network is based on a typical grid pattern with a limited number of curvilinear streets that roughly parallel Deep Creek and other drainage ways throughout the City. The circulation system consists of a State highway, arterials, collectors, local roadways, alleys, bikeways, sidewalks, a railroad, and public transit. The CIMP policies for improved circulation include the following list of strategies and guidelines.

3.1.1 CIRCULATION STRATEGIES

- Provide efficient and safe circulation access to all parts of Farmersville.
- Decrease the number of vehicle trips within the urban area by providing circulation that encourages alternative modes of transportation, including pedestrian, bicycles, and transit.
- Decrease the number of vehicle trips outside the urban area by providing circulation projects that will facilitate economic development projects creating new jobs and retail shopping opportunities.
- Provide additional north-south collectors at railroad crossings in the City to promote connectivity and relieve existing and future traffic congestion on Farmersville Boulevard.
- Provide neighborhood connectivity to shopping, jobs, schools, and parks.
- Provide a truck route system that facilitates the movement of truck traffic through and around Farmersville.
- Provide "green streets" that include native tree planting on new and existing streets to create shaded sidewalks and paths that will encourage walking and biking.

3.1.2 CIRCULATION DESIGN GUIDELINES

- The CIMP's layout of streets should be consistent with the City's adopted General Plan Circulation Element.
- Bikeway facilities within the CIMP should be consistent with the City's adopted Bicycle Transportation Plan.

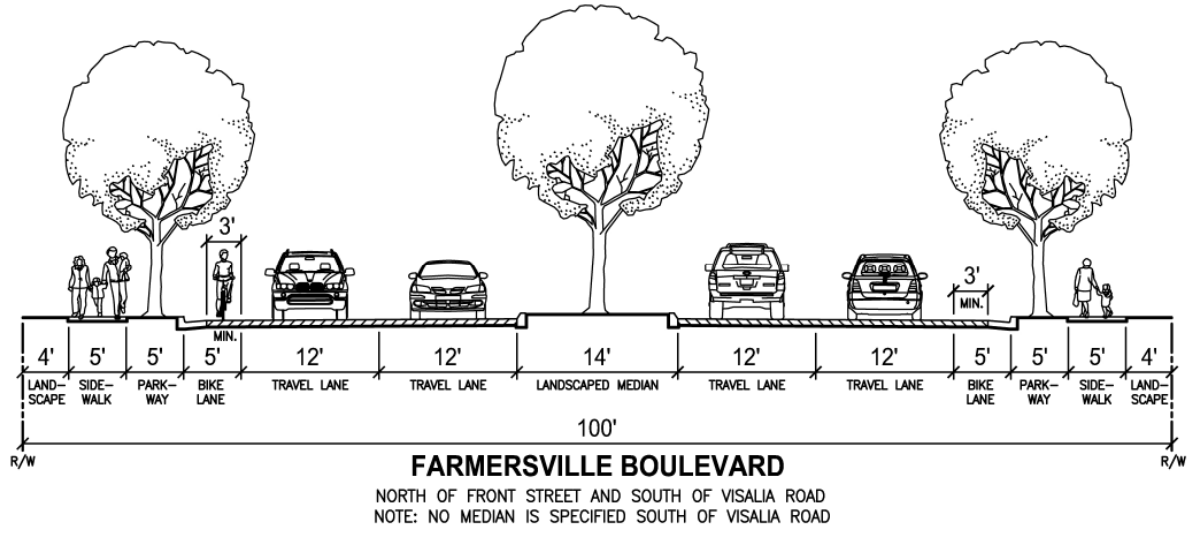
- Pathways within the CIMP should be consistent with the City's adopted Waterway Trails Master Plan.
- Compliance with the City of Farmersville's Improvement Standards for items not covered in this CIMP should be required.

3.2 Street Types

3.2.1 ARTERIAL

An arterial is a higher capacity, urban thoroughfare that moves traffic from collectors to highways or between urban activity centers. In many Central Valley cities, arterials are typically spaced every mile with intersecting collectors or other streets in between. Per the City's Circulation Element, the City shall "establish an arterial road system that conveys traffic in an efficient and safe manner" and "arterials should be visually pleasing, and designed to accommodate other modes of transportation, such as bicycles and pedestrians."[1] Currently, Farmersville Boulevard and Visalia Road are the only two designated arterials in the City.

Per the City's current Circulation Element, Farmersville Boulevard north of Front Street and south of Visalia Road includes two travel lanes, bicycle lanes, parkway, sidewalk, and landscape strip in each direction. The Circulation Element depicts a four-foot (4') bicycle lane that doesn't meet the current standards of the *Highway Design Manual*. The cross section noted below, with five-foot (5') bicycle lanes, is proposed for Farmersville Boulevard. A reduction in the landscape strip from five feet (5') to four feet (4') is being proposed to accommodate the bicycle lane widths. This proposed cross section meets the criteria of "green streets", including landscaped medians and tree lined parkways, as recommended in the City's current Circulation Element.

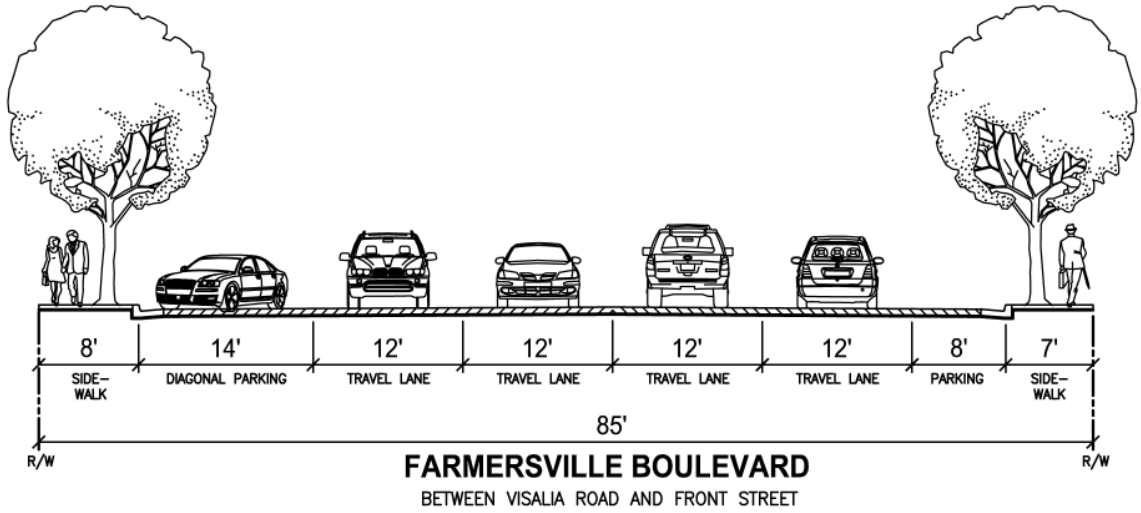


FARMERSVILLE BOULEVARD

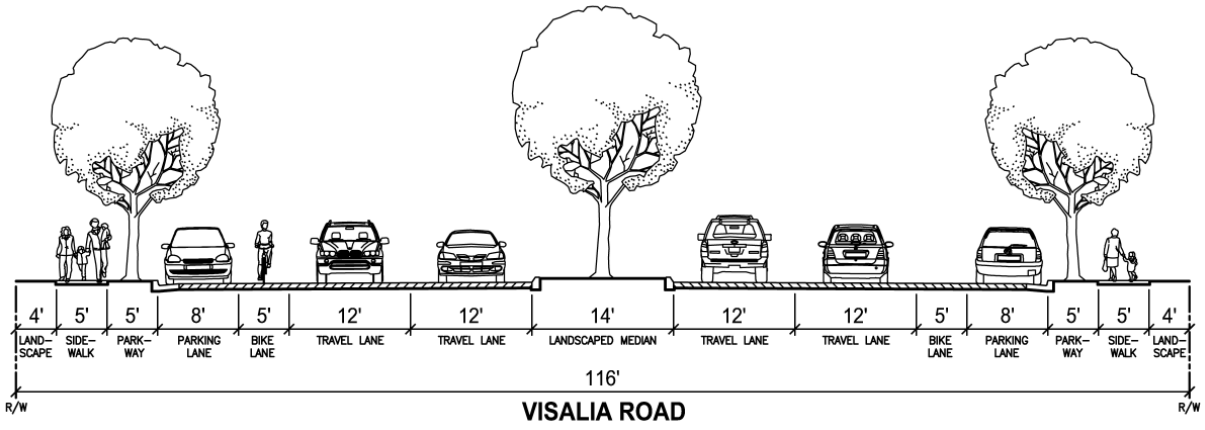
NORTH OF FRONT STREET AND SOUTH OF VISALIA ROAD
NOTE: NO MEDIAN IS SPECIFIED SOUTH OF VISALIA ROAD

[1] City of Farmersville, Farmersville General Plan Update (Collins & Schoettler Planning Consultants, 2002) 3-11.

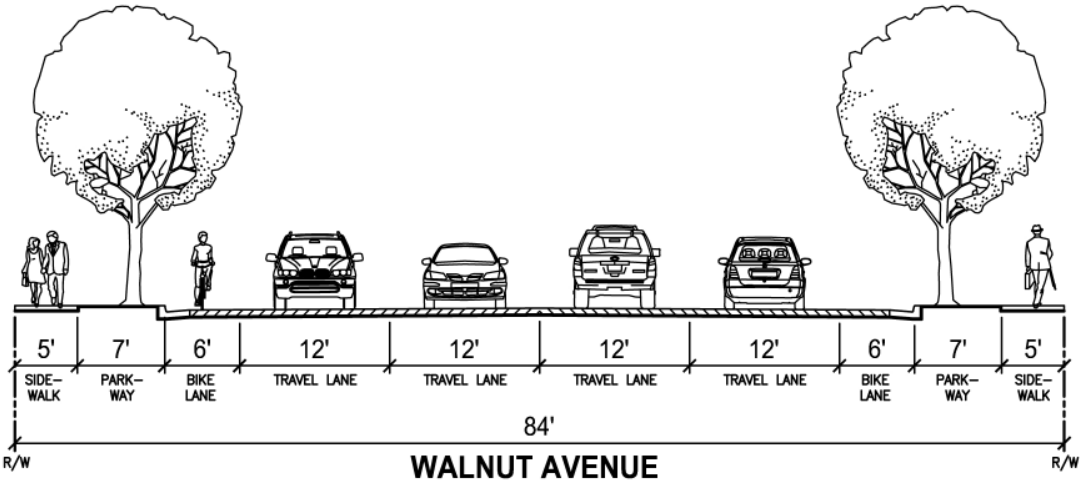
The City's Circulation Element currently indicates that Farmersville Boulevard between Visalia Road and Front Street will have two travel lanes in each direction with eight-foot (8') parallel parking and a seven-foot (7') sidewalk on the west side of the street. The east side of the street indicates 14-foot (14') diagonal parking and an eight-foot (8') sidewalk. The existing cross section for this segment of Farmersville Boulevard is depicted below. No changes to this cross section are proposed. Although this section of Farmersville Boulevard does not include a landscape median, it does include tree lined sidewalks, a "green streets" feature as indicated in the City's Circulation Element.



The existing cross-section for Visalia Road, per the City's Circulation Element, includes non-standard four-foot (4') bicycle lanes. To meet current standards per the *Highway Design Manual*, the cross section below, with five-foot (5') bicycle lanes, is proposed for Visalia Road. A reduction in the landscape strip from five feet (5') to four feet (4') is being proposed to accommodate the bicycle lane widths. The proposed cross-section for Visalia Road is shown below. It meets the criteria of "green streets", including landscaped medians and tree lined parkways, as recommended in the City's current Circulation Element.



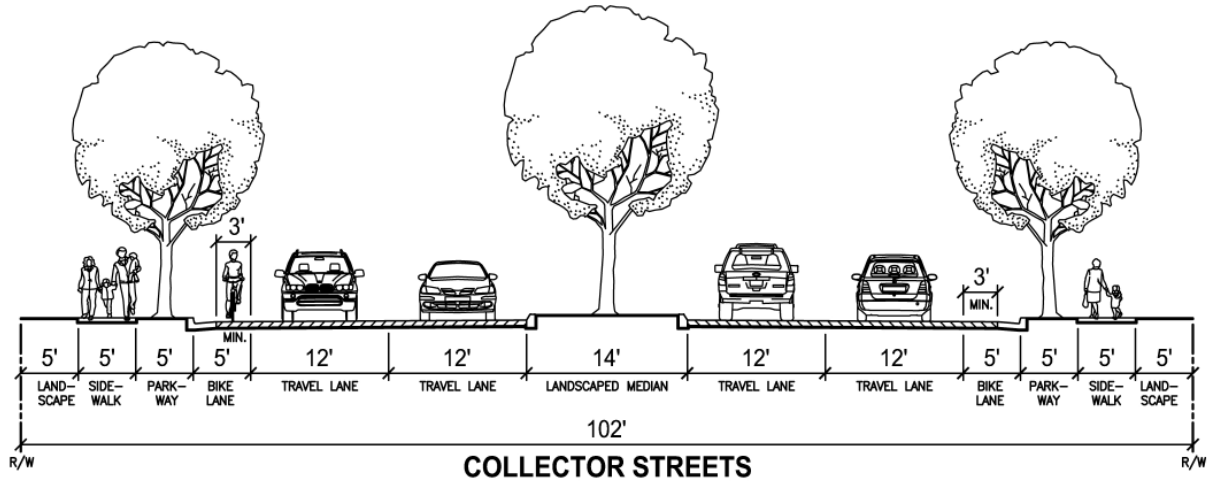
Walnut Avenue is currently designated a collector Street in the City's Circulation Element. Given it is approximately one mile north of the Visalia Road arterial and one mile south of SR 198, its spacing suggests it should be an arterial. Walnut Avenue will provide connection between collectors and activity centers in the City, as well as connection to the adjacent Cities of Exeter and Visalia. Therefore, it is recommended that Walnut Avenue be classified as an arterial with the cross section shown below. Although Walnut Avenue does not include a landscape median, it does include tree lined parkways, a "green streets" feature as indicated in the City's Circulation Element.



3.2.2 COLLECTORS

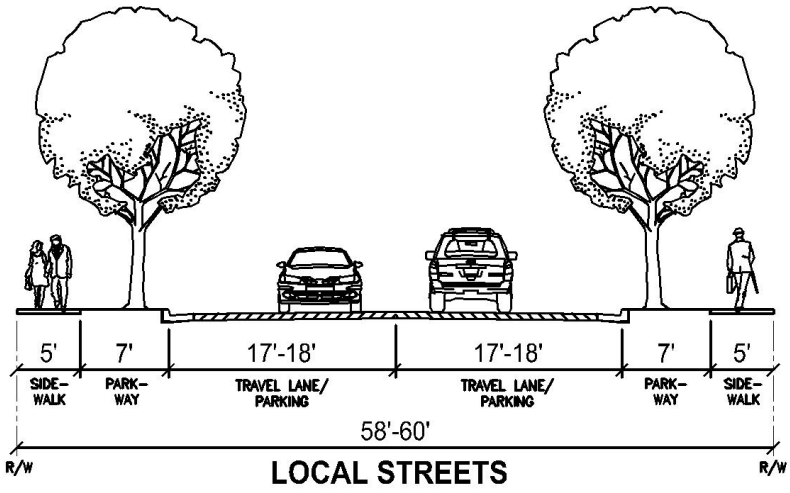
A collector street is a moderate capacity roadway whose function is to move traffic from arterials to local streets and provide access to residential neighborhoods. Per the current Circulation Element, Walnut Avenue is the only designated collector in the City. However, as indicated above, Walnut Avenue should be classified as an arterial. A few planned streets within the City's northern industrial areas, including Terry Avenue, are designated industrial collectors.

As indicated in the Existing Circulation Deficiencies/Concerns section, north-south, industrial, and school connectivity are major concerns for the City. As described in the Proposed Circulation Improvements section, additional collectors are proposed as shown in Exhibit B-1 to help address these concerns. The existing cross section for collectors is shown below and no changes are proposed. With landscaped medians and tree lined parkways, this proposed cross section meets the criteria of "green streets" per the City's Circulation Element.



3.2.3 LOCAL STREETS

Local streets, or residential streets, are a critical component of a City's overall transportation network. These are the streets residents live on, and they can be central to providing a sense of "community" in a City. The existing cross section for local streets is shown below and no changes are proposed.



NOTES:
1. Local streets on blocks less than 600 feet in length may be designed utilizing the smaller dimensions.
2. Subdivisions with average lot size larger than 8,000 s.f. are not required to install parkways.

3.3 Existing Circulation

The City's current General Plan Circulation Element was adopted by the City Council on November 6, 2002. The Circulation Element "identifies the different types of circulation routes in the community, such as roadways, bike paths and railroads"[2] that are existing and planned through year 2025. The current Circulation Element Map of the City's General Plan is shown in Figure 3.1. The City's current circulation system includes the following facilities:

3.3.1 HIGHWAY

State Route (SR) 198 is an east-west highway that serves Central California, stretching from U.S. 101 in the central coast region at its west end to the entrance of the Sequoia National Park at its east end. In the vicinity of Farmersville, SR 198 is a divided highway with two travel lanes in each direction and paved shoulders. There are interchanges at Farmersville Boulevard and Road 156.

3.3.2 ARTERIALS

Farmersville Boulevard is a north-south arterial that runs through the center of the community connecting to SR 198 near the northern City limits. The roadway continues south outside the Farmersville area and eventually connects to SR 137 (Tulare-Lindsay Highway). Through most of the City, Farmersville Boulevard has two travel lanes and a parking lane in each direction. North of Walnut Avenue and south of Oakland Street, Farmersville Boulevard tapers to one travel lane in each direction.

Design plans that include widening the roadway to include two travel lanes, a bicycle lane, parkway, and sidewalk in each direction are currently being completed for Farmersville Boulevard, from north of Walnut Avenue to SR 198. The plans include a landscaped median and prohibited parking. Construction is anticipated to be completed in 2014.

Visalia Road is an east-west arterial connecting Farmersville with the cities of Visalia to the west and Exeter to the east. Within the City, Visalia Road is typically two travel lanes in each direction with parking prohibited.

Design plans are currently being completed for Visalia Road to widen portions of the roadway to include two travel lanes in each direction. Where right-of-way is available, a landscaped median, bicycle lanes, and parking are also planned. Completion of construction is anticipated in 2013.

3.3.3 COLLECTORS

Walnut Avenue (Avenue 288) is an existing east-west collector running through the City midway between Visalia Road to the south and SR 198 to the north. In general, Walnut Avenue is one travel lane in each direction; however, newer developed sections are built to accommodate two travel lanes in each direction and a median or center two-way turn lane.

[2] City of Farmersville, Farmersville General Plan Update (Collins & Schoettler Planning Consultants, 2002) page 3-1.

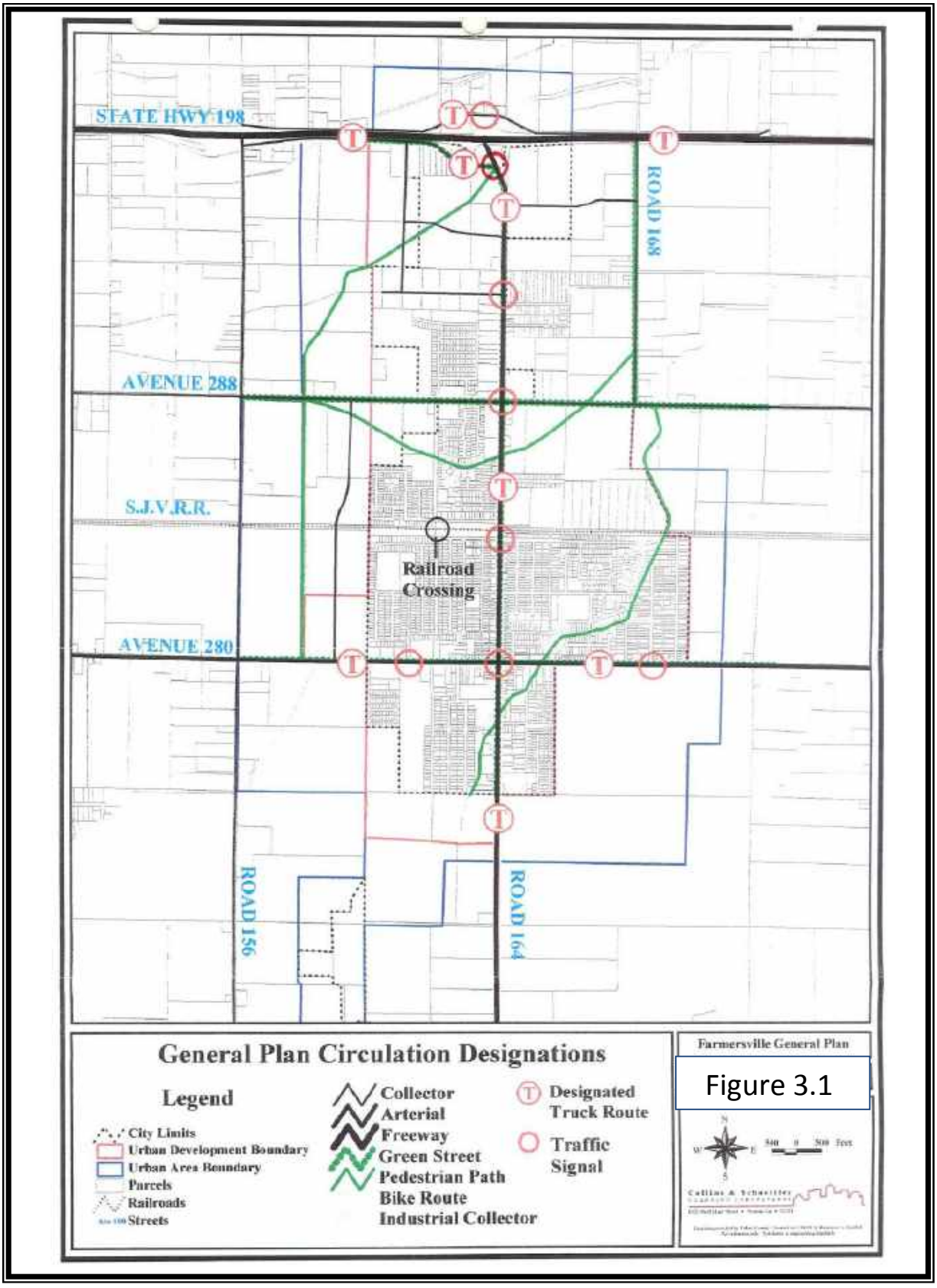

STATE HWY 198
ROAD 168
AVENUE 288
S.J.V.R.R.
Railroad Crossing
AVENUE 280
ROAD 156
ROAD 164
General Plan Circulation Designations
Legend
City Limits
Urban Development Boundary
Urban Area Boundary
Parcels
Railroads
Streets
Collector
Arterial
Freeway
Green Street
Pedestrian Path
Bike Route
Industrial Collector
Designated Truck Route
Traffic Signal
Farmersville General Plan

Figure 3.1

3.3.4 INDUSTRIAL COLLECTORS

The current Circulation Element identifies industrial collectors in the industrial and retail land use areas in the northern portion of the City near SR 198. Three new roadways have been proposed as industrial collectors, as well as the existing Terry Avenue.

3.3.5 LOCAL STREETS

Local streets provide traffic circulation internal to residential neighborhoods. Typically, local roadways are one travel and one parking lane in each direction. Local roadways connect neighborhoods to the transportation network.

3.3.6 ALLEYS

Alleys are limited in the City of Farmersville to providing rear access to older residential neighborhoods and to commercial buildings in downtown Farmersville.

3.3.7 BICYCLE FACILITIES

On October 25, 2010, the City of Farmersville adopted the Tulare County Regional Bicycle Transportation Plan for use in the City. Bikeway facilities include the following:

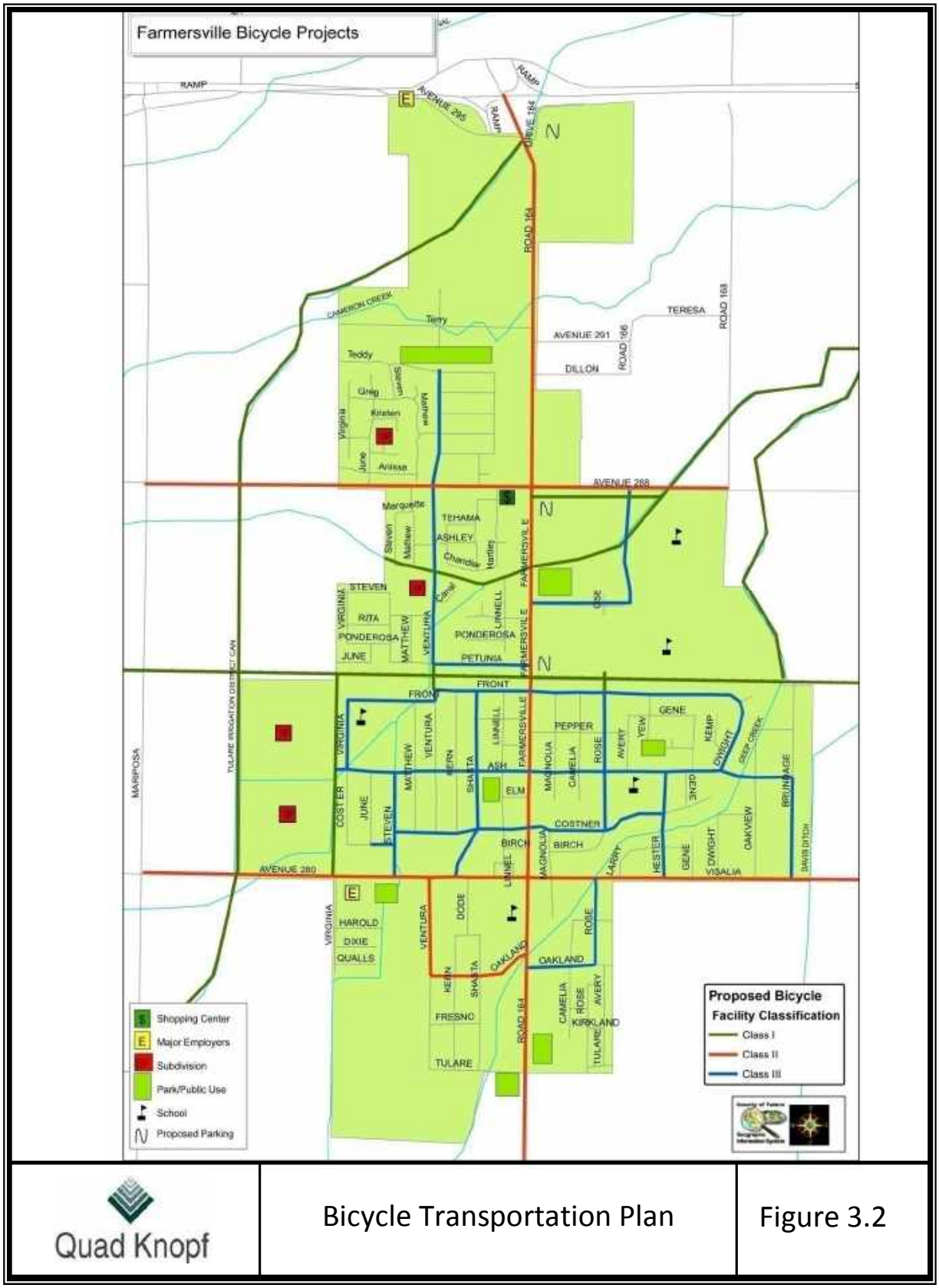
- Class I Bike Paths – provides for a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.
- Class II Bike Lanes – provides a signed and striped lane for one-way bike travel on a street or highway.
- Class III Bike Routes – provides for shared use with pedestrian or motor vehicle traffic. Class III Bike Routes are not striped but are often identified with signage.

Within Farmersville, the adopted plan proposes Class I Bike Paths along the Tulare Irrigation District Main Intake Canal, Extension Ditch, Blain Ditch, Deep Creek, the railroad frontage, and Walnut Avenue between Farmersville Boulevard and Extension Ditch. Class II Bike Lanes are proposed on Farmersville Boulevard, Visalia Road, Walnut Avenue, Oakland Street west of Farmersville Boulevard and a portion of Ventura Avenue south of Visalia Road. Class III Bicycle Routes are proposed on various local roadways to provide continuity to other bikeway facilities and connect neighborhoods to retail, schools and parks. The City's current Bicycle Transportation Plan is shown in Figure 3.2.

3.3.8 WATERWAY TRAILS

The City also adopted a Waterway Trails Master Plan[3] on February 22, 2010. This adopted master plan establishes a network of multi-purpose trails and open space corridors along the numerous waterways within the City. Paths, landscaping, and amenities such as lighting, benches, drinking fountains, and signage are included in the proposed plan. Trails are proposed along the Tulare Irrigation District Main Intake Canal, Cameron Creek, Extension Ditch, Blain Ditch, Deep Creek, and Davis Ditch. The map of the adopted Waterway Trails Master Plan is shown in Figure 3.3.

[3] City of Farmersville, Waterway Trails Master Plan (Collins & Schoettler Planning Consultants, 2010).



Quad Knopf	Bicycle Transportation Plan	Figure 3.2

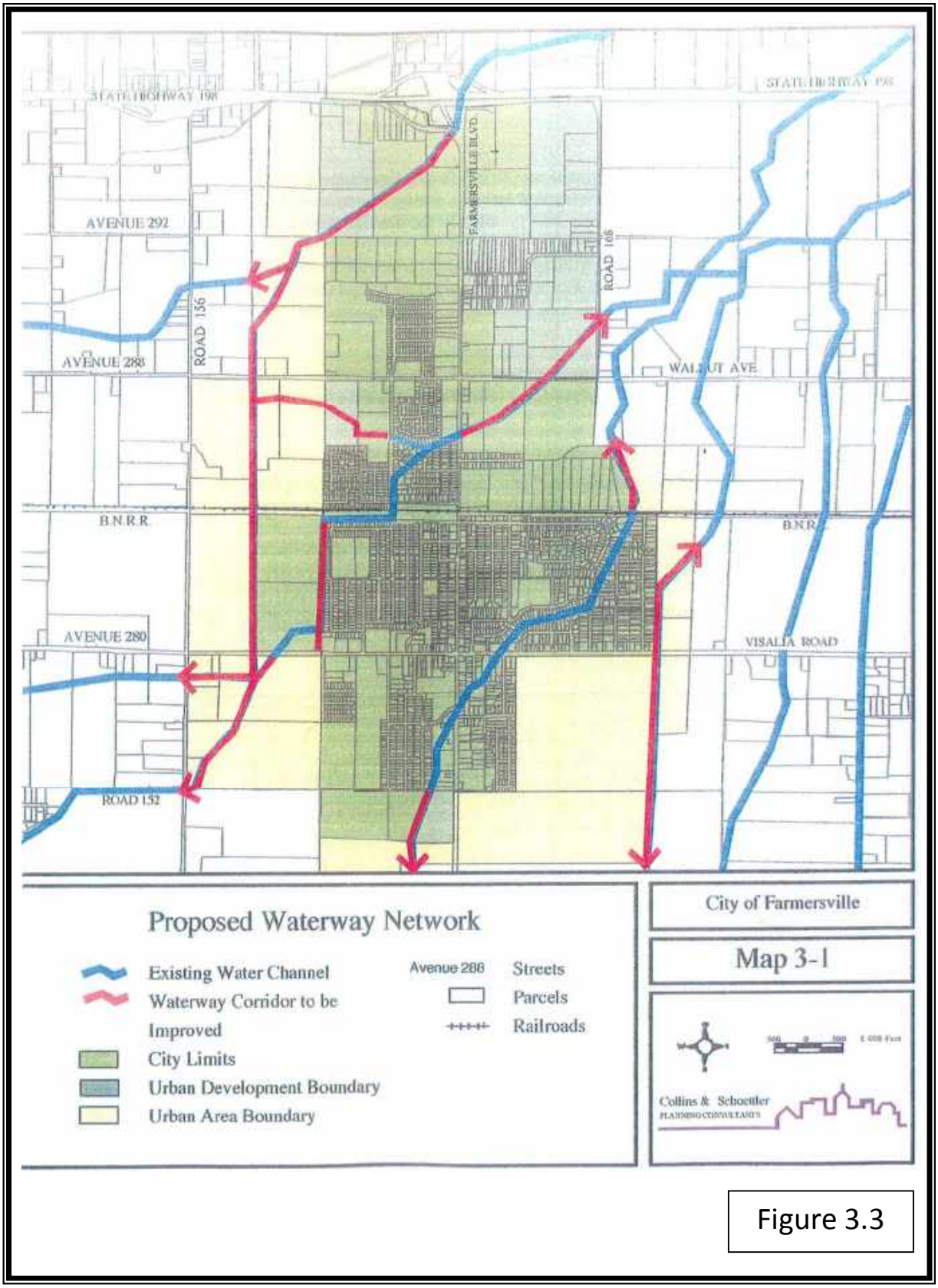

STATE HIGHWAY 198
AVENUE 292
AVENUE 288
AVENUE 280
ROAD 152
ROAD 156
ROAD 165
FARMERSVILLE BLVD
WALNUT AVE
B.N.R.R.
VISALIA ROAD
Proposed Waterway Network
Existing Water Channel
Waterway Corridor to be Improved
City Limits
Urban Development Boundary
Urban Area Boundary
Avenue 288
Streets
Parcels
Railroads
City of Farmersville
Map 3-1
Collins & Schoettler

Figure 3.3

3.3.9 SIDEWALKS

The Circulation Element indicates that all areas of the City shall have convenient pedestrian access, including connectivity between neighborhoods. Where possible, all street types are planned to include sidewalks for convenient and safe pedestrian access and parkways for shade trees.

3.3.10 TRAFFIC SIGNALS

Farmersville Boulevard has two existing traffic signals in the City – one at the intersection of Walnut Avenue and the other at Visalia Road. The City's current Circulation Element indicates these intersections are "not expected to require upgrades during the planning period (unless a large project is proposed that may adversely affect these intersections)."[4] The Circulation Element also identifies additional intersections that would require some type of traffic signalization during the period of the current General Plan. These intersections are:

- Farmersville Boulevard and Front Street,
- Farmersville Boulevard and Terry Avenue,
- Farmersville Boulevard and the frontage roads on both sides of SR 198,
- Visalia Road and Steven Avenue, and
- Visalia Road and Oakview Avenue.

Existing and proposed traffic signals, per the City's current Circulation Element, are shown in Figure 3.1.

3.3.11 RAILROADS

The Union Pacific Railroad (UPRR) runs east-west through central Farmersville connecting the Cities of Exeter and Visalia, and generally has a 100 foot right-of-way width, although some portions narrow to as little as 50 feet in width. The railroad is operated by San Joaquin Valley Railroad (SJVRR). Farmersville Boulevard is the only existing railroad crossing within the City limits. An additional crossing is located on the eastern UAB at Mariposa Avenue (Road 156). Currently, there are no spurs or sidings, and no utilization of the railroad in the City of Farmersville for the transportation of goods.

3.3.12 PUBLIC TRANSPORTATION

Visalia Transit currently has two convenient fixed routes that service the City of Farmersville. Route 9 originates at the Visalia Transit Center in downtown Visalia, and travels through Farmersville from Noble Avenue south on Mariposa Avenue, east on Walnut Avenue, south on Farmersville Boulevard, and east on Visalia Road to the City of Exeter. Along Visalia Road, Route 12 connects the Cities of Farmersville and Exeter to major retail centers on Mooney Boulevard in the City of Visalia. Route 9 has a bus stop in either direction at Farmersville Boulevard and Visalia Road. Route 12 has a bus stop at the City Hall located at Farmersville Boulevard and Virginia Avenue approximately one half mile west of downtown Farmersville.

[4] City of Farmersville, Farmersville General Plan Update (Collins & Schoettler Planning Consultants, 2002) page 3-6.

3.3.13 GREEN STREETS

The City's current Circulation Element states that the City shall establish a "green streets" program that incorporates landscaped medians and tree lined parkways. Although an official program has not been adopted, the Circulation Element designates Farmersville Boulevard, Walnut Avenue, and Visalia Road as "green streets". Current plans being designed for the widening of Farmersville Boulevard north of Walnut Avenue and the planned Visalia Road widening incorporate the landscaped medians and parkways, where space permits. Green streets policies encourage native tree planting. The infrastructure improvements will support land use plans that provide green spaces and landscaped streets. The strategy counteracts the effects of motor vehicle emissions and also serves to trap particulate matter and thereby improve air quality. "Green streets" will also encourage walkability, reducing vehicle trips.

3.4 Existing Circulation Deficiencies/Concerns

3.4.1 NORTH-SOUTH CONNECTIVITY

Currently, the existing railroad divides the northern and southern sections of Farmersville and is a major obstacle to providing traffic circulation connectivity throughout the City. Only one railroad crossing at Farmersville Boulevard exists within the City limits. This forces all neighborhood residents north or south of the tracks to travel to Farmersville Boulevard in order to cross to the other side of the City. When trains are moving through town, traffic can back up for a great distance, and any north-south movements are halted until the crossing is cleared.

Another railroad crossing exists at Mariposa Avenue. Although this is within the City's current UAB, it is approximately one-half mile west of the City limits. Additionally, the only existing connections to Mariposa Avenue near the City are from Visalia Road and from Walnut Avenue. Because this crossing is further away than the Farmersville Boulevard crossing for most neighborhoods in the City (one mile), it is often not used as a north-south connection for area residents.

Additional north-south collectors should be planned in the City. These additional collectors would provide additional connectivity to improve congestion on Farmersville Boulevard, allow direct access to the industrial and retail land uses planned in the northern portion of the City, reduce vehicle trip length, reduce fuel consumption and air pollution, and improve emergency response times in the City.

3.4.2 INDUSTRIAL AREA CONNECTIVITY

Per the City's existing Land Use Element of the General Plan, two large areas are reserved for industrial uses in northern Farmersville on either side of Farmersville Boulevard near SR 198. Existing access to these areas is limited to the Terry Avenue and Drive 164 connections to Farmersville Boulevard. As these areas develop, additional accesses will be needed to limit the amount of industrial (truck and employee) traffic on Farmersville Boulevard and various local roadways. Additional accesses to the industrial land uses will increase the viability of the industrial area, and reduce trip lengths, fuel consumption, and air pollution. Emergency response vehicles will also have better access, thereby improving public safety protection for this area.

3.4.3 SCHOOL COMPLEX CONNECTIVITY

Farmersville Unified School District is planning to complete development of a large, integrated school complex bordered by Freedom Drive on the west, Citrus Drive on the south, the alignment of Road 168 on the east, and Walnut Avenue on the north. The existing complex currently includes Farmersville High School, Freedom Elementary School, and the Farmersville Unified School District Office. Future plans for the school complex include a Middle School.

Currently, only two roadways provide access to the school complex; East Citrus Drive, west of the elementary school connecting to Farmersville Boulevard, and Freedom Drive, extending south from Walnut Avenue along the west boundary of the school complex. However, an existing fence at the east end of East Citrus Drive has for some time, prohibited vehicular through traffic but allows pedestrian access. Unrestricted vehicular access is currently limited to Freedom Drive only.

On May 14, 2012, the City Council approved the opening of East Citrus Drive to allow one-way vehicular eastbound access to the school complex with no returning westbound traffic, pending amendments and approval of environmental documents by the School District. Regardless of the approved partial opening of East Citrus Drive, traffic congestion occurs on East Citrus Drive, Freedom Drive, and Walnut Avenue. Studies completed by the School District indicate these streets will continue to operate at unacceptable levels during the peak hours and will worsen with the addition of the Middle School and as student population grows. Additional accesses to the school complex are needed to alleviate some of this congestion.

3.4.4 INCONSISTENCY OF EXISTING BICYCLE PLANNING DOCUMENTS

Plans for bicycle circulation in Farmersville are identified in three separate adopted and approved documents:

- Farmersville General Plan,
- Waterway Trails Master Plan, and
- Bicycle Master Plan.

The latter was prepared by Tulare County Association of Governments and then adopted by the City. While these plans are mostly compatible with each other, there are a few places where they are in conflict with each other. An analysis of each of the plans is needed to reconcile inconsistencies and develop a comprehensive approach for how each of the plans can function collectively.

3.5 Proposed Circulation Improvements

The proposed Circulation Plan, including proposed improvements, is shown in Exhibit B-1. As described below, this plan addresses the existing deficiencies and concerns noted in Section 3.4 above. The Bicycle Plan is shown in Exhibit B-2. This plan combines and reconciles the three adopted documents that together provide direction for bicycle planning efforts for the City.

3.5.1 NORTH-SOUTH CONNECTIVITY

Two new north-south collectors are proposed within the UAB. One is west of the existing City limits, and west of the existing residential neighborhoods along Virginia Avenue. See Figure 3.4. This proposed curvilinear alignment was chosen to accommodate approved plans for the proposed Plum Blossom subdivision located south of the railroad and west of Virginia Avenue. In the northern portion of the City, the proposed collector would realign to the east, connecting to Farmersville Boulevard approximately one half mile north of Walnut Avenue. This would provide direct connection to the northern industrial and retail land uses for the residents in the western portions of the City. In the southern portion of the City, the proposed collector would again realign to the east connecting to Farmersville Boulevard at the UAB. Local roadway extensions to this north-south collector should be planned at West Ash Street, West Petunia Street, West Garrett Avenue, West Anissa Street, West Carolyn Street, and Teddy Street.

To further improve connectivity as the City develops towards its western UAB, additional east-west collectors should be planned to connect this north-south collector to Mariposa Avenue. This would provide more direct access to SR 198 at Road 156 interchange. Two such collectors are proposed: the first at the southern UAB and the second north of the railroad tracks.

The second north-south collector is located east of Brundage Avenue. See Figure 3.5. This collector serves as an edge to the City and could help protect existing farm land outside of the UAB. It provides an additional connection to the industrial and retail land uses in northern Farmersville, and to SR 198 at the Farmersville Boulevard interchange. A local roadway extension to this north-south collector should be planned at East Ash Street.

Figure 3.4
Western North/South Collector

Figure 3.5
Eastern North/South Collector

3.5.2 INDUSTRIAL AREA CONNECTIVITY

As indicated above, the additional north-south collector proposed west of the City limits would realign to the east connecting at Farmersville Boulevard approximately midway between Walnut Avenue and SR 198 (Figure 3.6). The collector provides additional access to the City's industrial areas. Two collectors are also proposed in the western industrial area; one connecting to Noble Avenue and the other connecting to Mariposa Avenue. Both of these will provide additional access to SR 198 at the Road 156 interchange.

To help improve circulation within the eastern industrial area, a local roadway has been planned along the Road 166 alignment connecting to East Noble Avenue. This provides an outlet for the industrial area traffic to SR 198 via East Noble Avenue or Farmersville Boulevard. Terry Avenue is planned to extend to the west to provide full access to the southern portion of the western industrial area. A local roadway is planned to connect Terry Avenue to the proposed collector through the industrial areas. This provides additional access and allows for an industrial traffic connection to SR 198 via the Farmersville Boulevard or Road 156 interchange.

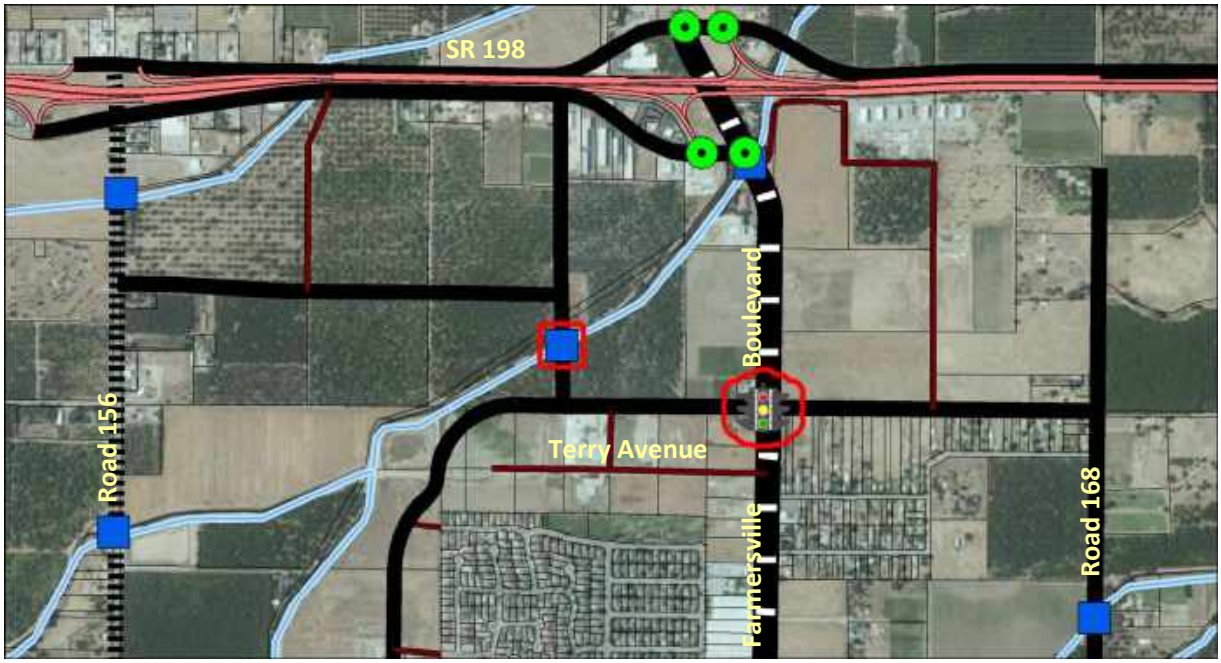


Figure 3.6 – Industrial Area

3.5.3 SCHOOL COMPLEX CONNECTIVITY

With the addition of the proposed Middle School, the school district plans to extend East Citrus Drive to the eastern limit of Farmersville High School (see Figure 3.7). A north-south local roadway is planned between East Citrus Drive and Walnut Avenue aligning with Road 168. The installation of a traffic signal is also planned at the Walnut Avenue and Road 168 intersection to help accommodate traffic entering and exiting the school complex.

In addition to the planned access east of Farmersville High School along the Road 168 alignment, East Citrus Drive is recommended to be extended to the planned north-south collector at the eastern edge of the City. This will increase connectivity around the school complex; decrease congestion on the existing roadways; and improve emergency response times to the area.

Figure 3.7 – Farmersville School Complex

3.5.4 TRAFFIC SIGNALS

As indicated previously, the current Circulation Element identifies intersections that would require some type of traffic signalization during the period of the current General Plan. These intersections are:

- Farmersville Boulevard and Front Street,
- Farmersville Boulevard and Terry Avenue,
- Farmersville Boulevard and the frontage roads on both sides of SR 198,
- Visalia Road and Steven Avenue, and
- Visalia Road and Oakview Avenue.

However, based on the proposed circulation improvements, including the planned additional collectors, local roadway connections to collectors, and changes to circulation in the north industrial area and around the school complex, not all of these intersections may require signalization. Future traffic signalization will likely occur at the intersections of arterials and collectors as shown in Exhibit B-1; however, the decision to install a traffic signal to control an intersection should always be based on an engineering study of roadway, traffic, and other conditions.

3.5.5 ROUNDABOUTS

The City's current General Plan encourages the use of roundabouts to provide traffic control at intersections. Design plans are currently being completed for a modern roundabout at the intersection of Farmersville Boulevard and Noble Avenue. Construction is anticipated to be completed in 2014. The City's future plans also include a complete SR 198/Farmersville Boulevard interchange redesign to include the installation of modern roundabouts at the off- and on-ramp intersections and the Farmersville Boulevard/SR 198 north frontage road intersection. These future roundabouts are depicted in Exhibit B-1.

Roundabouts can also be used as an alternative to the installation of a traffic signal or other control measures at some intersections. Before choosing a roundabout as an intersection control measure, a feasibility analysis should be completed to confirm its appropriateness for a given location.

3.5.6 BIKEWAYS

As indicated previously, the City of Farmersville adopted the Tulare County Regional Bicycle Transportation Plan for use in the City, as well as a Waterway Trails Master Plan. The Waterway Trails Master Plan focuses on Class I Bike Paths/Trails along the numerous waterways throughout the City. The Tulare County Regional Bicycle Transportation Plan addresses Class I Bike Paths/Trails in all areas of the City, as well as Class II Bike Lanes and Class III Bike Routes. Although these two plans focus on different types of bikeway facilities, there are overlapping components to the plans and they are not consistent with each other. This CIMP consolidates both of these adopted plans and address the inconsistencies, and also identifies appropriate bikeway facilities to be included with the proposed CIMP network. The proposed CIMP bikeway facilities are shown in Exhibit B-2.

Along with the existing bikeway facilities shown in Figures 3.2 and 3.3, the CIMP proposes additional facilities to address the connectivity issues in the City. As shown in Exhibit B-2, Class II Bike Lanes are included along all the new collectors proposed in the City. These facilities provide direct connections for the residents to the industrial and retail land uses, schools, and parks. The addition of these facilities provides a travel option which reduces congestion, thereby reducing fuel consumption and air pollution.

The Waterway Trails Master Plan recommends an open space corridor, with a trail, on both sides of the waterway. Although this is an ideal scenario, this may not be feasible for the City of Farmersville. An open space corridor and trail on only one side of the waterway should be allowed when existing conditions prohibit development on both sides. In this case, connections to adjacent neighborhoods on both sides of the waterway should be included to ensure access to the trail system wherever possible.

3.6 Estimated Costs

The development of a master plan for the City's Circulation system is dependent upon both the prioritization which should be afforded to each needed facility and the funding which can be made available for construction. The proposed Circulation Master Plan includes arterials, collectors and local roadways. Since local roadways are ordinarily the responsibility of the

developer, only the arterial and collector costs are included in the CIMP. A cost per linear foot was estimated for each type of roadway and includes: asphalt, class II base, street lights, sidewalks, curb and gutter, and median curbs, signals, culvert crossings, railroad crossings and landscaping where appropriate.

Right-of-way was not part of the estimate, because it is assumed that right-of-way will be dedicated with the future development projects that need the roadways. Table 3-1 is the summary of the estimated costs.

Table 3-1
Estimated Costs per Lineal Foot

Type	Cost/l.f.	Developer Cost/l.f.	Net Cost/l.f.
Farmersville Blvd (100' R/W)	$568.02	$333.20	$234.82
Visalia Road (116' R/W)	$704.68	$333.20	$371.48
Walnut Avenue (82' R/W)	$347.31	$256.65	90.66
Collector Street (102' (R/W)	$518.18	$307.98	$210.20

Applying these costs to the circulation system depicted on Exhibit B-1, the following capital costs in Table 3-2 are established.

Table 3-2
Capital Improvement Program Summary

Type	Length (ft)	Cost	Developer	Net
Farmersville Blvd (100' R/W)	10,560	$5,998,000	$3,518,000	$2,480,000
Visalia Road (116' R/W)	2,800	$1,973,000	$933,000	$1,040,000
Walnut Avenue (82' R/W)	5,650	$1,962,000	$1,450,000	$512,000
Road 156 (100' R/W)	7,900	$4,487,000	$2,632,000	$1,855,000
Collector Street (102' R/W)	50,793	$26,320,000	$15,643,000	$10,677,000
Construction Subtotal		$40,740,000	$24,176,000	$16,564,000
Contingencies (15%)		$6,111,000	$3,626,400	$2,485,000
Subtotal		$46,851,000	$27,802,000	$19,048,600
Engineering, Surveying and Construction Administration (20%)		$9,370,000	$5,561,000	$3,810,000
Total Cost		**$56,221,000**	**$33,363,000**	**$22,858,000**

The costs included in Tables 3-1and 3-2 are estimates based on the 2012 bidding atmosphere, and actual costs could vary from the estimates presented, depending on inflation/deflation rates affecting construction. It is common practice to use Engineering News Record (ENR) construction cost index to project the change in costs on a yearly basis. The costs included in this report should be reviewed every five years and at the minimum, the ENR construction cost index should be applied to adjust the estimates on an annual basis.

3.7 Fees

The proposed roadways developed in this study were not based on traffic generation, but circulation needs of the City. The proposed roadways will be used to serve the newly developed areas outside the existing city limits. The City will require the developer to install the outside 32 feet of all collectors and arterials which would include sidewalk, curb and gutter. This will reduce the overall cost as shown in 3-2. It also is anticipated that the City will receive grants for street improvements in the amount of $250,000 per year. This amount is based on the City receiving $10,000,000 over the next 20 years from State Transportation Program and Measure R. It is anticipated the City will receive $6,000,000 in the next two years (from Measure R) for the construction of Farmersville Boulevard. The other $4,000,000 is a conservative estimate for future grants. The grant funding would cover the entire project whether it is anticipated to be developer cost or City cost, thus reducing the overall City cost to $17,800,000.

Total Acres to develop = 1,752 (UAB) + 186 (Vacant) – 433 (right of way) = 1,505

Cost per acres = $17,800,000/1505 = $11,827.25 per acre.

The calculated fee per acre will need to be adjusted on an annual basis based on the Engineering News Record Construction cost Index.

3.8 Recommendations

The recommendations provided below are proposed to improve traffic circulation in the City of Farmersville. Some of these recommendations are the product of previously adopted plans or proposed modifications to these plans. Many of these recommendations are long term goals for the City, but should be planned for as the City continues to grow. Continued growth in the City utilizing these recommendations will help promote critical development of the retail and industrial areas, improve connectivity throughout the City, revitalize the downtown area with new street and landscape improvements, decrease the number of vehicle trips and fuel consumption within and outside the urban areas, improve air quality by decreasing ozone levels and particulate matter, lessen childhood asthma triggers, decrease obesity and inactivity rates by providing sidewalks and bikeways and improved access to parks, and allow efficient and safe movement for all modes of transportation.

1. Amend the Circulation Element of the City's current General Plan as follows:

    - Reclassify Walnut Avenue from a collector to an arterial roadway.
    - Include the new collector streets proposed in this CIMP.
    - Revise the railroad and signal locations proposed in this CIMP.
    - Include the proposed roundabouts proposed in this CIMP.
    - Update the street types to include the proposed cross-sections to meet current design standards.
    - Designate Mariposa Street as an arterial.

2. Continue developing, and implementing, a "green streets" program in the City.

3. Amend the next City Bicycle Master Plan to include the Class I, II, and III bikeways proposed in this CIMP.

CHAPTER FOUR

WATER SYSTEM

CHAPTER FOUR WATER SYSTEM

4.1 Existing Water System

4.1.1 INTRODUCTION

The CIMP will provide a road map for serving critical infill development within the Farmersville Urban Area Boundary, while protecting the valuable farmland outside of the boundary. The CIMP will include planning for water lines to enable new infill development. The development of a well-planned water system will support infill development and increased housing density, which is forecast for Farmersville. Planning for the necessary infrastructure to support this compact growth pattern will allow the City to meet the challenges of adopted land use plans and sustain the community in the long term. Many future planned developments are depending on plans for adequate water supplies.

The Farmersville CIMP will also help the State achieve its' goal to reduce per capita water consumption by 20 percent by the year 2020, by linking Farmersville's land use plans with water planning. The CIMP will focus on the nexus between water and growth, accommodating growth that minimizes the effect on water consumption and distribution costs. The Farmersville CIMP is consistent with the water-related objectives outlined in the Integrated Regional Water Management Plan.

4.1.2 GENERAL SYSTEM DESCRIPTION

Water production for the water distribution systems is generated from groundwater wells, and currently does not depend on surface waters. The water system consists of eight (8) water wells, hydropneumatic pressure tanks, approximately 144,000 lineal feet of pipe, and various valves and hydrants. The water distribution system is interconnected between fire and domestic services through a network of pipes that are directly fed by water wells located in different parts of the City.

The existing pipe network system is comprised of the major elements shown in Table 4-1:

Table 4-1
Existing Water System Inventory

Pipe Size (inches)	Length (feet)
4	10,600
6	53,200
8	56,300
10	9,500
12	14,000
Pressure Tanks	8
Wells	8
Storage Tanks	0

4.1.3 EXISTING WELL SITES

Currently eight well sites are located in the City's water distribution system (see Exhibit C-1). Well Site 2 is currently out of service, and Well Site 8 is undergoing maintenance. On average, the wells can each produce around 700 gallons per minute (gpm), and are considered fairly shallow, with groundwater depths encountered approximately 60 feet below ground surface. The operation of the water wells is dependent on the production rate of a well being matched with the water demand of the service connections. During the peak demand periods, the existing hydropneumatic tanks provide some of the equalization required to absorb the differences between the demands from the service connections and the production rates from the wells.

4.1.4 EXISTING WATER DEMANDS

In 1993, the average daily demand of the water system was recorded at 1,000 gpm, and currently the system is meeting an average daily demand of 1,500 gpm. There are two peak demands that could stress the production rates of the system. The first peaking factor is the maximum daily demand, which includes the peaking factors of diurnal patterns on an average day; currently estimated at 3,900 gpm. The second peaking factor accounts for peak hour demands, which includes the peaking factors of diurnal patterns, and fire protection demands; currently estimated at 6,000 gpm.

The current water distribution system is handling average daily demands, maximum daily demands, and peak hour demands with low head losses and is suitable under normal operation conditions. A second analysis was conducted using the maximum daily demands along with fire demands and assuming the best producing well is out-of-service. The results of the water model show that the existing water system can reasonably meet the existing demands under fire flow conditions with velocities below seven feet per second and pressures at 60 psi as shown in Exhibit C-2.

4.1.5 CAMERON CREEK COLONY

The CIMP will address critical water needs for Cameron Creek Colony, an 81-lot neighborhood located adjacent to the city, but just outside Farmersville city limits. Privately owned wells are failing due to their shallow depth and contamination from septic systems that are too close to the domestic wells serving the existing residences. Some residents have requested city water be extended into the area because they are buying water for drinking and cooking. In some cases, the septic tanks are failing, resulting in pollution of critical groundwater supplies due to nitrate contamination. This study will consider appropriate costs to provide City water service to the area.

4.2 Evaluation of Future Water System

4.2.1 FUTURE WATER DISTRIBUTION SYSTEM

In order to allow the City to eventually grow out to the Urban Area Boundary (UAB), new water lines will need to be installed to service areas outside the existing City limits. While the current

General Plan only allows development within the Urban Development Boundary (UDB), the water system needs to be master planned to support growth to the UAB to avoid water line under sizing. The current water distribution system will also need an additional well site with a storage tank, and the extension of the distribution system with 6-inch, 8-inch, 10-inch, and 12-inch water lines as shown in Exhibit C-3.

An additional well site located in the northeast portion of the UAB will be required for future expansion. In addition to the new well, a 500,000 gallon storage tank (0.50 MG), with the potential for a second 500,000 gallon storage tank, is recommended.

4.2.2 NEW WELL AND STORAGE TANK

To accommodate peak hour demands within the UAB, a new well site is recommended to increase the water production capacity. Since the northeast portion of the City has the highest elevation, an at-grade storage tank at the location would provide a good source of storage for fire protection with the inclusion of a booster station. The American Water Works Association (AWWA) M32 recommends storage tanks to have a volume capacity equal to 25% of the average daily demand plus four hours of fire protection storage, which results in approximately 0.90 MG of storage or two 0.50 MG tanks. For meeting the current needs, one 0.50 MG storage tank would meet the fire protection requirements and the City could continue to use the hydropneumatic tanks for meeting maximum daily demands.

4.3 Estimated Costs

4.3.1 DISTRIBUTION SYSTEM

The development of a master plan for the City's water system is dependent upon both the prioritization that should be afforded to each needed facility and the funding which can be made available for construction.

The summarized components of the plan are outlined in Table 4-2. Priority of the lines to be constructed will be dependent upon how the City grows. The City is hoping to attract industrial users to the northwest portion of the UAB, which would increase the priority to construct new water facilities to serve that area.

Table 4-2
Capital Improvement Program Summary

Item	Quantity	Unit	Cost/Unit	Approx. Cost
8" Water Line	23,400	LF	$ 85.00	$ 1,989,000.00
10" Water Line	5,900	LF	$ 94.00	$ 554,600.00
12" Water Line	4,300	LF	$ 95.00	$ 408,500.00
Water Well	1	EA	$ 900,000.00	$ 900,000.00
Booster Pump (from Tank)	2	EA	$ 60,000.00	$ 120,000.00
Water Storage Tank (0.5 MG)	1	EA	$ 500,000.00	$ 500,000.00
Boring	300	LF	$ 450.00	$ 135,000.00
Land Acquisition	0.75	AC	$ 30,000.00	$ 22,500.00
Construction Subtotal				**$ 4,629.600.00**
Contingencies (15%)				$ 694,440.00
Subtotal				**$ 5,324.040.00**
Engineering, Surveying, and Construction Administration Cost (20%)				$ 1,064,808.00
Total Cost				**$ 6,388,848.00**

Note: The cost estimates per lineal foot includes trench resurfacing, isolation valves at intersections, complete in place at current prevailing wage rates.

The top priority on the list of recommended improvements is the 0.50 MG storage tank and booster pump station, if land can be made available near the northeast boundary of the City. Other capital improvements on the list will depend on the City's growth areas.

The costs included in Table 4-2 are estimates based on the 2012 bidding atmosphere, and actual costs could vary from the estimates presented, depending on inflation/deflation rates affecting construction. It is common practice to use Engineering News Record (ENR) construction cost index to project the change in costs on a yearly basis. The costs included in this report should be reviewed every five years and at the minimum, the ENR construction cost index should be applied to adjust the estimates on an annual basis.

4.3.2 CAMERON CREEK

The current city water system has the ability to serve Cameron Creek Colony once the water lines are installed. Since the water lines for Cameron Creek Colony are considered local lines the cost for construction will fall on the residents of Cameron Creek Colony. The cost estimate shown in Table 4-3 would be used to help the residents find funding to construct the water lines.

Table 4-3
Cameron Creek Colony Water Improvement Program Summary

Item	Quantity	Unit	Cost/Unit	Approx. Cost
8" Water Line	4462	LF	$ 85.00	$ 379,270
Fire Hydrants	6	EA	$ 2,500.00	$ 15,000.00
Valves	10	EA	$ 900.00	$ 9,000.00
Water Meters	89	EA	$ 500.00	$ 44,500.00
Booster Pump (from Tank)	2	EA	$ 60,000.00	$ 120,000.00
Construction Subtotal				**$ 447,770.00**
Contingencies (15%)				$ 67,000.00
Engineering, Surveying, and Construction Administration Cost (20%)				$ 103,000.00
Total Cost				**$ 618,000.00**

Note: The cost estimates per lineal foot includes trench resurfacing, isolation valves at intersections, complete in place at current prevailing wage rates.

4.3.3 Fees

The proposed water lines within this master plan are based on the potential development out to the UAB. Since some of this area is outside the current general plan and there is no certainty regarding the location of future development, the basis of the fee will be the undeveloped acreage contained within the UAB.

Total Acres to develop = 1,752 (UAB) + 186 (Vacant) – 433 (right of way) = 1,505 ac.

Cost per acres = $6,388,848/1505ac. = $4,245 per acre.

The calculated cost of $4,245 per acre need to be adjusted on an annual basis based on the Engineering News Record Construction cost Index.

4.4 Conservation

4.4.1 STRATEGIES

The Farmersville CIMP will meet water conservation objectives by utilizing five important strategies:

- A full review of existing water infrastructure will be conducted to identify areas of "system fatigue," reduce leakage, and prevent future water losses. The Environmental Protection Agency (EPA) reports there are 240,000 water main breaks per year in the United States. Taking proactive steps to maintain and/or rehabilitate existing infrastructure is an important strategy to protect water resources and ensure safe, reliable water delivery. The "fix it first" strategy is typically deemed to be most critical to protecting valuable water resources.

- The CIMP will enable compact growth and efficient land use strategies that will save water. As noted in the EPA guide, "Growing towards More Efficient Water Use: Linking Development, Infrastructure, and Drinking Water Policies", compact growth helps communities reduce costs and conserve water. Compact neighborhood design, which makes maximum use of smaller lots and attached housing, has less landscaping and thus less demand for water (lawns, landscaping, and gardens account for 50-70% of water usage). Ultimately, this could make the difference between Farmersville needing to develop new water sources or using existing water sources efficiently well into the future.

- The area's system of surface irrigation ditches and channels provides abundant opportunities to design storm water facilities in locations that can also accept surface water sources for ground water recharge. This can be accomplished through exchange agreements with area farmers and irrigation companies for supplies of year-round treated waste water, once the City has implemented tertiary treatment of its wastewater to meet Title 22 requirements.

- The City's properly treated wastewater can be reused, providing a year-round supply of water for recharging groundwater and for irrigation of certain crops.

- In 2010, the City began installing water meters for 100% of its customers. Empirical evidence has proven that metered water delivery and billing encourages more conscientious water use. The CIMP will support the City's efforts to establish metered delivery and billing for all of its customers before the 2020 deadline.

4.5 Recommendations

The current water system is functioning adequately. A key issue for this system is the lack of water storage. The current system relies completely on groundwater pumping to supply the needed water. If there are problems with more than one well at a given time there will be problems providing fire flow. In the future, the City may also experience difficulty balancing well production with service demand. These issues can be resolved with the addition of a water storage tank. The northeast portion of the City has the highest elevation and should be considered the best location for the storage tank.

To improve water circulation and overall system performance in the area bounded by Rose Avenue, Brundage Avenue, Visalia Road and Front Street, a 10 inch water line is needed in Visalia Road. Currently this area is serviced by 8 inch and smaller lines which run through local streets. The proposed 10 inch line in Visalia Road will provide this area with a larger connection to the water wells on the east side of the City.

CHAPTER FIVE

WASTEWATER

CHAPTER FIVE WASTEWATER

5.1 Existing Sewer System

5.1.1 INTRODUCTION

The CIMP will provide a road map for critical infill development within Farmersville's Urban Area Boundary, while protecting the valuable farmland outside of the boundary. The CIMP will include planning for wastewater lines to enable new infill development. The development of a well-planned wastewater system will support infill development and increased housing density, which is forecast for Farmersville. Planning for the necessary infrastructure to support this compact growth pattern will allow the City to meet the challenges of adopted land use plans and sustain the community in the long term. Many planned developments are dependent on plans for adequate wastewater disposal systems.

5.1.2 GENERAL SYSTEM DESCRIPTION

The Farmersville sewer system is fairly typical for Tulare County communities and is a combination of underground gravity flow pipelines, lift stations and a sewer treatment plant.

The existing system is comprised of the major elements shown in Table 5-1:

Table 5-1
Existing Sewer Inventory

Pipe size (inches)	Length (feet)
6	26,350
8	74,580
10	22,230
12	10,880
18	1,390
21	1,920
24	1,780
Manholes	390
Lift stations	4

5.1.3 EXISTING LIFT STATIONS

The City's sewer system currently has four lift stations. One lift stations is located at the Oakview Avenue and Ash Street intersection. The second lift station is located at the intersection of Yew Street and Sandy Avenue. Both of these lift stations serve a small area that is not scheduled to be expanded. These lift stations function adequately for the areas served.

A third lift station is located at Petunia Street and Ventura Avenue. This lift station is functioning properly and serves a small area that is not proposed to expand beyond current flows.

The fourth lift station is located at the intersection of Walnut Avenue and Ventura Avenue and was designed to service the northern portion of the City. The existing lift station has a capacity of 500 gpm and was designed to allow for larger pumps to be installed that would increase the capacity to 1,035 gpm at a future date. This lift station was designed to handle the area within the UAB north of Walnut Avenue. This lift station lacks a flow meter and, without a flow meter, it will be difficult to decide when the bigger pumps will be needed.

5.1.4 EXISTING SEWER TREATMENT PLANT

The City's sewer treatment plant is located about a mile south of Visalia Road along the extension of Virginia Avenue. The facility consists of headworks and aerated ponds first constructed in 1967. The plant was expanded in 1978 and the aeration ponds were lined in 1987. The design capacity of the existing plant is 1.25 mgd; the current average daily flow is approximately 0.95 mgd.

5.1.5 USAGE

The 1983 master plan calculated a disposal rate of 140 gallons per day per capita, which in the context of a master plan is considered to be very high. With the advent of water conservation strategies and availability of more accurate population numbers, the calculated usage rate has declined since 1983. Currently, on a straight population basis (no commercial/industrial factors), the disposal rate is estimated to be 88 gallons per capita per day. Since this estimate is based on a straight population basis, its use for planning the needs of future growth would be conservative.

5.1.6 CAMERON CREEK COLONY

The CIMP will address critical wastewater needs for Cameron Creek Colony, an 81-lot neighborhood located adjacent to the City, but just outside Farmersville city limits. Privately owned wells are failing due to their shallow depth and contamination from poorly operating septic systems that are too close to the domestic wells serving the existing residences. In some cases, the septic tanks are failing resulting in inadequate treatment of sewage and pollution of critical groundwater supplies due to nitrate contamination. Some residents have requested city sewer be extended into the area because of the failing septic systems. This study will consider appropriate costs to provide City sewer service to the area.

5.2 Evaluation of Future Sewer System

5.2.1 SEWER COLLECTION SYSTEM

In order to plan for the City to grow out to the UAB, new sewer lines will need to be installed to service areas outside the existing City limits. The original 1983 sanitary sewer master plan served the east side of Farmersville (Areas 1, 2, 3, 4, 5) with a new trunk line labeled Line 1. The west side of Farmersville (Areas 12, 13, 14) was served by a new trunk line labeled Line 6 (a portion of line 6 from the treatment plant to Visalia Road was installed in 1997).

Line 1 was proposed to serve the area south and east of the existing City limits. This line is still needed to serve this area. There are 40 acres along Visalia Road (originally called Tributary Area 5) that would be serviced by the existing 10 inch line in Visalia Road.

Line 2 will not be necessary. This line was eliminated by development that has occurred in this area. The west side of Farmersville Boulevard is being serviced by the line in Walnut Avenue as well as a line located in Ashley Street. The east side of Farmersville Boulevard is proposed as a single development and would be serviced by the Walnut Avenue Line (Line 4).

Line 4 will be needed in the future to serve the area north of Walnut Avenue and east of Farmersville Boulevard. It will also be available for the school complex on the south side of Walnut Avenue should the Citrus Avenue line reach its ultimate capacity.

In 2000, the North Side Sewer Study was completed. The study sized sewer lines to accommodate growth in the area north of Walnut Avenue. This area included 713 acres with an estimated ultimate flow of 1,035 gpm. The CIMP has expanded the area of study to include the lands within the UAB. As a result, the area serviced by the Walnut Avenue lift station is now 925 acres. Using the same rational as the North Side Sewer Study (use rate of 0.0011 million gallons per day per acre), the flow for this area will be 1.018 mgd or 707 gpm. This is within the ultimate flow rate for the study but reduces the peaking factor from 1.6 to 1.5.

Since other sewer plans have been completed since the 1983 master plan was adopted, new service areas were created to allow for the incorporation of the new study areas into the CIMP. Exhibit D-3 shows the new service areas.

The new service areas are called regions and the acreages they include are listed in Table 5-2.

Table 5-2
Sewer Study Areas

Region Name	Total Acres	Residential Acres	Commercial Acres	Industrial Acres	Institutional Acres
North Sewer Study	925	236	230	439	20
West Region	467	327	20	0	120
Southeast Region	509	464	27	0	18

The southeast region contains Tributary 5 which will be served by existing sewer lines. This will reduce the southeast region to 469 acres.

5.2.2 FUTURE COLLECTION SYSTEM

For the purposes of this study, the future density will be six (6) dwelling units per acre and 3.2 people per dwelling units. Also, the current estimated use of 88 gallons per person per day was used. This will result in an estimated flow of 1,689 gallons per day per acre.

The North Side Sewer Study referenced earlier, sized the sewer lines and the existing lift station to serve the area north of Walnut Avenue. The main line in Farmersville Boulevard and the Walnut Avenue lift station were installed in 2001. The current lift station has a capacity of 500 gpm with an ability to upgrade to 1,035 gpm. The lift station is in need of a flow meter to allow the City to monitor the actual flows in order to properly plan for the timing of the future upgrade of the pumps.

Two trunk lines are needed in the North Side Sewer Study area. A trunk line, Line F, will need to be located on Walnut Avenue east of Farmersville Boulevard. A second line, Line G, will need to be installed in Noble Avenue with a bore under the freeway to extend a sewer line to Mineral King Avenue, to serve the area north of Highway 198. The remaining lines to be installed in the north sewer study area will be considered developer-responsible lines. These lines are 8 inch or 10 inch lines sized to service a specific area within the study. See Exhibit D-2 for location of trunk lines.

The southeast region will be serviced by trunk lines that will follow the proposed collectors in the area. The expected flow from the southeast area is estimated to be 530,000 gpd. Applying a peaking factor of 1.6, the peak flow is expected to be 848,000 gpd. To accommodate this estimated peak flow, the trunk line along the south side of the area will need to be a 15” line with a minimum slope of 0.0014. This sizing is consistent with the 1983 Sewer Master Plan. The pipe size can be reduced to 10” once the line has extended to the east UDB, and can be further reduced to 8” once the line has extended to Visalia Road. The future residential developments in this area will need to install the local sewer lines to serve the areas being developed. Exhibit D-2 depicts the proposed lines in this area as A, B, and C.

The west region will be serviced by an existing 24” trunk line located in Virginia Avenue south of Visalia Road. North of Visalia Road, the area will be served by a proposed trunk line located in the proposed collector street that runs through the middle of that area. The west region is expected to generate an estimated flow of 528,000 gpd. Applying a peaking factor of 1.6, the peak flow is estimated to be 845,000 gpd. This will require a 15 inch sewer line located within the proposed collector. This line may be reduced to 10 inch once it extends beyond Front Street. Development within the area will be responsible for installing the local sewer lines to serve the areas being developed. Exhibit D-2 shows the proposed lines in this area as D and E.

5.2.3 SEWER TREATMENT PLANT

The Preliminary Engineering Report (PER) completed in 2010 for the Wastewater Treatment Plant and updated in August of 2012, calls for an expansion of the sewer treatment plant to 1.4 mgd. This is expected to serve the City until 2025 or until a population of 15,866. The recommendation of the PER was for the use of aeration lanes with activated sludge. This

configuration is scalable, and can be incrementally expanded by adding additional aeration lanes. The PER has projected the 2050 population of Farmersville at 24,746 with a needed treatment capacity of 2.4 mgd.

5.3 Estimated Costs

5.3.1 COLLECTION SYSTEM

The development of a master plan for the City's sewer system is dependent upon both the prioritization that should be afforded to each needed facility and the funding which can be made available for construction.

The summarized components of the plan are outlined in Table 5-3. Priority of the lines will depend on how the City grows. The City is currently trying to attract industrial users in the North Side Sewer Study Area. This might require the planned upgrade to the Walnut Avenue lift station.

The foremost priority on the list is the flow monitor on the Walnut Avenue Lift Station. The remaining capital improvements on the list will depend on the actual activity within the various growth areas of the City.

The costs included in Table 5-3 are estimates based on the 2012 bidding atmosphere and actual costs could vary from the estimates presented, depending on inflation/deflation rates affecting construction. It is common practice to use Engineering News Record (ENR) construction cost index to project the change in costs on a yearly basis. The costs included in this report should be reviewed every five years and, at the minimum, the ENR construction cost index should be applied to adjust the estimates on an annual basis.

Table 5-3
Sewer Capital Improvement Program Summary

Item	Qty.	Unit	Cost/Unit	Approx. Cost
Add flow meter to Walnut Lift Station	1	EA	10,000	$10,000.00
Upgrade Walnut Avenue Lift Station	1	EA	$50,000.00	$50,000.00
10” North Sewer Study Line	1,320	LF	$100.00	$132,000.00
8” North Sewer Study Line	2,100	LF	$90.00	$189,000.00
Highway 198 bore	250	LF	$450.00	$112,500.00
15” Southeast Sewer Line	6300	LF	$125.00	$787,500.00
10” Southeast Sewer Line	3400	LF	$100.00	$340,000.00
8” Southeast Sewer Line	2600	EA	$90.00	$234,000.00
15” West Sewer Line	3300	LF	$125.00	$412,500.00
10” West Sewer Line	2500	LF	$100.00	$250,000.00
Construction Subtotal				$2,517,500.00
Contingencies (15%)				$377,625.00
Subtotal				**$2,895,125.00**
Engineering, Surveying, and Construction Administration Cost (20%)				$579,025.00
Total Cost				**$3,474,150.00**

The cost per lineal foot includes a manhole every 400 feet and trench resurfacing.

5.3.2 WASTEWATER TREATMENT PLANT

The PER completed for the City in 2010 and updated in August, 2012 recommended the current plant be upgraded to secondary treatment and expanded to handle 1.4 mgd. The PER estimated the cost of the upgrade to be $14.5 million which included design, land costs and contingencies.

5.3.3 CAMERON CREEK COLONY

The current city wastewater system has the ability to serve Cameron Creek Colony once the sewer lines are installed. Since the sewer lines for Cameron Creek Colony are considered local lines the cost for construction will fall on the residents of Cameron Creek Colony. The cost estimate in Table 5-4 would be used to help the residents find funding to construct the sewer lines.

Table 5-4
Cameron Creek Sewer Improvement Program Summary

Item	Qty.	Unit	Cost/Unit	Approx. Cost
8" Sewer Line	4600	LF	$80	$368,000
Manholes	14	EA	$3,500	$49,000
Laterals	81	EA	$1,500	$121,500
Construction Subtotal				$538,500
Contingencies (15%)				$80,775
Engineering, Surveying, and Construction Administration Cost (20%)				$123,855
Total Cost				**$743,130**

The cost per lineal foot includes trench resurfacing.

5.3.4 FEES

The proposed sewer lines within this master plan are based on the potential development out to the UAB. Since some of this area is outside the current general plan and there is no certainty regarding the location of future development, the basis of the fee will be the undeveloped acreage contained within the UAB. The wastewater treatment fee will need to be based on dwelling units. This is due to the fact the treatment plant has a fixed hydraulic treatment capacity and future expansions will need to be funded by the future development. The 1.4 mgd wastewater treatment plant is estimated to cost $14,500,000. The existing flow into the plant is 0.9 mgd, so 0.5 mgd (36%) is for future growth. This 0.5 mgd will serve an estimated population of 5,500 people based on 90 gallons per person. Using the current people per household of 3.2 this equates to 1,719 dwelling units.

Total Acres to develop = 1,752 (UAB) + 186 (Vacant) – 433 (right of way) = 1,505 ac.

Wastewater collection fee:
Cost per acre = $3,474,150/1505ac. = $2,308.50 per acre.

Wastewater Treatment fee:
Cost per acre = $5,220,000/1719 du. = $3,036.65 per dwelling unit

The calculated fees will need to be adjusted on an annual basis based on the Engineering News Record Construction Cost Index.

5.4 Recommendations

The current collection system is functioning adequately. The only current problem areas are the lack of a flow meter at the Walnut Avenue lift station and the condition/capacity of the existing wastewater treatment plant.

The flow meter at the Walnut Avenue lift station should be installed as soon as practical to ensure that the capacity of the lift station is not reaching the limits of the existing installed pumps.

The capacity of the treatment plant has been an issue for a number of years. The current decline in new home construction has given the City time to plan the upgrade without affecting the overall development of the City.

CHAPTER SIX

STORM DRAIN

CHAPTER SIX STORM DRAIN

6.1 Existing Storm Drain Facilities

6.1.1 INTRODUCTION

The CIMP will provide a road map for critical infill development within Farmersville's UAB, while protecting the valuable farmland outside of the boundary. The CIMP will include storm drainage facilities to enable new infill development. The development of a well planned storm sewer system will support infill development and increased housing density, which is forecast for Farmersville. Planning for the necessary infrastructure to support this compact growth pattern will allow the City to meet the challenges of adopted land use plans and sustain the community in the long term. Many planned developments are dependent on plans for adequate storm water disposal and management systems.

The CIMP will also provide guidelines to recapture storm water for recharge and groundwater sustainability programs. New storm drain systems will capture urban runoff and direct it to percolation ponds to naturally filter and return surface water back into the ground. A second strategy to improve water quality includes recapturing and naturally filtering urban runoff from storm drain systems, which will be planned in the CIMP. This strategy decreases water pollution by directing runoff into percolation ponds. The contaminated water is naturally filtered as it seeps into the ground and recharges the local water table. Directing the storm drainage that is generated within the City to recharge facilities is essential to keep underground water supplies replenished and to reduce the number of contaminants that could potentially reach the local water supply.

6.1.2 GENERAL SYSTEM DESCRIPTION

The Farmersville storm drainage system is fairly typical for Tulare County communities and consists of a combination of surface drainage and underground gravity flow pipelines. The three primary discharge locations are Deep Creek, Extension Ditch and the Front Street detention pond. The existing storm drainage system is comprised of the major elements shown in Table 6-1:

Table 6-1
Existing System Specifications

Pipe size (inches)	Length (feet)
12	5,971
15	221
18	510
21	108
24	57
27	8
30	19
33	8
42	17
48	92

Drainage Inlets – 304

Manholes – 137

Drainage ponds – 5
- Front Street(detention) approximate capacity 36.0 acre-feet
- Roy Park Pond (detention)
- City Hall basin (retention)
- Woodcrest Pond (retention)
- Terry Avenue Pond (retention)

Storm Drainage Lift Stations – 1
- Front Street

6.1.3 LINE CAPACITIES AND FLOWS

Existing drainage areas and pipeline slopes and sizes were determined using information from the master plan of 1989 and other existing information. In order to evaluate line capacities and design flows, the following generalized assumptions were made:

a. Two-year design storm (a storm intensity which statistically has a 50% probability of occurring in any given year) based on City of Farmersville rainfall intensity curves

b. Coefficient of runoff – "C" (the percentage of total rainfall which reaches the drainage system):

   See Table 6-2

c. Roughness coefficient – "n" (coefficient based on pipeline roughness; the larger the "n", the less the pipeline capacity):

   "n" = 0.013

Each drainage area and sub-area was evaluated to compare existing line capacity to design flows. Two design flows were established. First, an "unrestricted" design flow assumed that the entire drainage area contributed to the line being evaluated as if all upstream pipelines were adequately sized. Second, a "restricted" design flow that allowed upstream pipelines to contribute only at their existing capacity. Through this analysis process, it was determined that the existing system is appropriately sized for the given drainage flows experienced.

6.1.4 DRAINAGE PONDS

The existing drainage ponds serve various areas within the City.

Front Street Pond (Detention)
This is the largest of the ponds and serves Areas A, B, C, and AA (see Exhibit E-1 for areas) with a combined total land area of approximately 423 acres. The current capacity of the pond is approximately 36 acre-feet. Two (2) 10 hp pumps are used (one is for backup) to pump water from the pond into Extension Ditch. Each pump has a capacity of approximately 2,100 gpm. One (1) pump has the ability to drain a full pond in four days.

Roy Park Pond (Detention)
This pond serves Area W and has a total land area of approximately 0.30 acres. The pond capacity is estimated at 1.2 acre-feet.

City Hall Basin (Retention)
This pond is part of the City Hall complex. Streets do not drain into this pond. The only runoff that it receives is from the City Hall Complex. No problems with this pond have been reported.

Woodcrest Pond (Retention)
This pond is a temporary pond sized to serve the Woodcrest Subdivision. This subdivision is comprised of 54 residential lots. The pond is maintained by the subdivision and there are no reports of problems.

Terry Avenue Pond (Retention)
This pond is located at the end of the current asphalt surface on Terry Avenue. The pond is temporary and was sized to handle only the street runoff from Terry Avenue. The parcel map for this area depicts a permanent pond at the very westerly end of the parcel map. Current lots that front on Terry Avenue are required to maintain their lot drainage on site.

6.1.5 EXISTING DITCH CAPACITY

Watercourses within the study area are Cameron Creek, Deep Creek, Extension Ditch, Blain Ditch, Lower Extension Ditch, Hart-Sweeney Ditch and Sims-Davis Ditch. Except for Cameron Creek, which is operated by the Tulare Irrigation District (TID), all other channels are operated by the Consolidated People's Ditch Company (CPD). In reviewing existing and proposed discharges into these channels, the CPD and its ditches are currently at or near capacity and they have indicated that no further discharges can be accepted by CPD. Deep Creek is capable of taking significant discharge increases (in the order of 20-30 cubic feet per second). Discharges to CPD facilities are governed by an agreement between the CPD and the City of Farmersville.

6.1.6 EXISTING DRAINAGE AREAS

The existing drainage facilities along with their tributary areas are shown in Exhibit E-1.

The existing areas of the 1989 Storm Water Master Plan were used as the starting point to evaluate the existing condition of the storm drain system. Adjustments were made to the individual drainage sub-area boundaries if new drainage patterns have been implemented. Also, new drainage sub-areas were added to cover the lands within the City's UAB.

Sub-Area A (Citrus Drive)
This area consists of approximately 31 acres, located on both sides of Farmersville Boulevard. Surface flows run westerly to collection points on Citrus Drive, Ponderosa Street and Linnel Avenue where a pipeline carries the drainage into Sub-Area B and into the Front Street Storm Drain Pond. The curb and gutter, and cross-gutters along Citrus Drive, between Farmersville Boulevard and Linnel Avenue are very flat, creating local ponding issues.

Sub-Area B (Petunia Street to Farmersville Boulevard)
This area contains approximately 16.5 acres. A 30-inch pipe in Petunia Street carries drainage from this sub-area as well as Sub-Area A, to the Front Street ponding basin.

Sub-Area C (Front Street and Ventura Avenue)
This area contains approximately 140 acres, created primarily by the various phases of Orchard Estates and Lewis Estates. A series of pipelines collect surface runoff and carry the drainage flows to the Front Street ponding basin.

Sub-Area D (Farmersville Boulevard)
This area contains approximately 65 acres, including Farmersville Boulevard, from the railroad to Deep Creek, Visalia Road easterly to Deep Creek, and the Birch Street/Magnolia Avenue area. The existing 15 inch pipe in Farmersville Boulevard, which gravity drains southerly to Deep Creek, is significantly undersized; and once south of Visalia Road, it is only capable of carrying 16 percent of design flows. The most serious existing drainage problem is on Magnolia Avenue, just north of Visalia Road. This area used to flood severely because water from Farmersville Boulevard would back up and "bubble-up" at this location. This problem was reduced in 1986, when a flap-gate was installed on the discharge, but the area is still susceptible to flooding.

Sub-Area E (Rose Avenue and Ash Street)
This area contains approximately 54.5 acres. The storm drainage flows are collected by pipelines which ultimately drain through a 30 inch pipeline into Deep Creek.

Sub-Area F (Pepper Street and Gene Avenue)
This area contains approximately 33 acres. The storm drainage flows are collected by pipelines which ultimately drain through a 27 inch pipeline into Deep Creek.

Sub-Area G (Dwight Avenue)
This area contains approximately 9 acres. The storm drainage flows from this small area are collected by 12 inch and 15 inch pipelines which drain into Deep Creek.

Sub-Areas H, I, J, K, L and M (along both sides of Deep Creek, from Hester to Southern Pacific Railroad) and ***Sub-Areas T, U and V (along both sides of Deep Creek, from Magnolia Avenue to Visalia Road)***

These are all small drainage areas (1.4 to 16.5 acres) which each surface drain to a single drainage inlet or curb opening and then flow directly into Deep Creek. No drainage problems were identified by City staff in these areas.

Sub-Area N (E. Visalia Road)
This area contains approximately 38 acres. The storm drainage flows are collected into a pipeline running westerly along Visalia Road, which eventually discharges through a 21 inch pipeline into Deep Creek. Although the pipe sizes are adequate, a 21 inch pipeline enters Deep Creek below the bottom of the creek bed, and therefore must bubble-up into the creek through a recently installed outlet structure. This bubble-up reduces the system's effectiveness.

Sub-Area O (Hester Avenue and Larry Street)
This area contains approximately 13 acres. Storm drainage flows drain along the alley north of Visalia Road by surface and "bubble-ups", to a 12 inch pipeline, which drains into Deep Creek. The 12 inch pipeline is capable of carrying only 63 percent of design flow.

Sub-Area P (Shasta Avenue and Visalia Road)
This area contains approximately 23 acres, with surface flows draining to a 12 inch pipeline along Visalia Road. This pipeline overflows through an outlet structure into Hart-Sweeney Ditch. The 12 inch pipeline is capable of carrying only 26 percent of design flow. Further, there are no drainage facilities available in the area of Peco Street and Linnel Avenue.

Sub-Area Q (Harold Street and Virginia Avenue)
This area contains approximately 19.5 acres. In this area, surface flows are conveyed in streets and through pipelines to two retention basins. These systems are adequate.

Sub-Areas R and S (Shasta Avenue and Kern Avenue)
These two areas contain approximately 66 acres. Surface flows drain from the north end of these areas, south to Tulare Street, and then are collected into two undersized 12 inch pipelines, capable of carrying only 31 percent and 33 percent of design flows).

Sub-Area W (Langford Tract)
This area contains approximately 15 acres. The surface flows in this area are collected by an 18 inch pipeline, which drains into a retention basin. This system is adequate.

Sub-Area X (Camelia Avenue)
This area contains approximately 13 acres. This area has no sub-surface collection or disposal system. Storm water flows surface drain to the south end of Camelia Avenue, where they are drained onto vacant property to the south.

Sub-Area Y (S. Farmersville Boulevard)
This area contains approximately 21 acres. The area's storm drainage flows were originally partially collected by an undersized 15 inch pipeline (50 percent of design flows) which drains to Deep Creek. A recent cleaning of the line shows that it was fully plugged and the outfall in Deep Creek could not be found. Areas south of the 15 inch inlet, as well as overflow from the 15 inch pipeline, surface drain south onto vacant agricultural land just south of the existing City limits. There are also onsite collection points at an apartment site and the City Corporation Yard which have gravity pipeline connections to Deep Creek.

Sub-Area Z (Walnut Avenue east of Farmersville Boulevard)
This area is essentially composed of the Farmersville Unified School District's school site and the future City Sports Park. The area contains approximately 146 acres. The school site will continue to retain the storm drainage generated from this area on site. The future sports park will also be designed to retain drainage on site.

Sub-Area AA (Walnut Avenue west of Farmersville Boulevard)
This area contains approximately 236 acres. The area has curbs and gutters which allow storm drainage flows into a pipe network that drains into the Front Street ponding basin. New projects along Farmersville Avenue south of Ashley Avenue have been required to retain storm water on site since the existing pipe system does not extend to this area.

Sub-Area AB (Terry Avenue)
This area contains approximately 112 acres. This is a mostly undeveloped area zoned for industrial uses. Drainage from individual parcels fronting on Terry Avenue are required to retain drainage on site. Existing drainage along Terry Avenue is captured in a temporary retention pond at the end of the pavement. Future plans, per the SR 198 Corridor Specific Plan, call for a retention pond at the west end of Terry Avenue.

Sub-Area AC (Cameron Creek Colony)
This area contains approximately 309 acres. This area is mostly undeveloped except for the Cameron Creek Colony, an unincorporated county residential area. The drainage from this area is planned to be handled by two detention ponds; one to be constructed in the future north of Cameron Creek Colony, and the other near Walnut Avenue.

Sub-Area AD (Industrial area north of TID Canal)
This area contains approximately 177 acres. This area is currently outside the City limits but within the City's UAB. This area lies north of the TID canal.

Sub-Area AE (UAB south of Walnut Avenue)
This area contains approximately 525 acres. This area is currently undeveloped except for the Linnel Colony at the southeast corner of Walnut Avenue and Avenue 156. The drainage from this area will be handled by detention ponds.

Sub-Area AF (East UAB)
This area contains approximately 346 acres. This area is currently undeveloped.

Sub-Area AG (South UAB)
This area contains approximately 167 acres. This area is currently undeveloped.

6.2 Engineering and Planning Criteria

6.2.1 HYDROLOGY

One of the most important steps in the preparation of the Storm Drain Master Plan of 1989 was the development of the hydrology. This occurred before any determination could be made as to

pipeline sizes and storm water basin capacities. Hydrology, in its broadest sense, is the science which deals with the occurrence of water on and in the earth. The hydrology used to prepare this report is the same as that which was studied and developed for the Storm Drain Master Plan of 1989, as a review of the past hydrology was found to be consistent with current methodologies in use today.

An accepted procedure for urban drainage design for small drainage areas – such as located within the City of Farmersville – is a procedure called the Rational Method. The basic Rational Method formula, used in this study, is

Q=CIA

Where:

Q = Peak flow rate in cubic feet per second (cfs)
C = Coefficient of Runoff
I = Average rainfall rate in inches per hour corresponding to the time of concentration
A = Drainage area in acres

The basic design criteria used in this report is the once-in-two-year-storm, or more commonly referred to as a storm that has a two-year return period. "Return period" does not imply that there will be a given number of years between storm events. It only means that over many years such a storm will occur an average of the number of years designated. The two-year return period storm will occur on the average of 50 times in 100 years. For example, three of these storms may be in successive years, all three may occur in the same year or many years could elapse between such events.

The coefficient of runoff (C) is primarily based on the land use of the drainage area, and the rainfall intensity. The coefficient of runoff is a dimensionless ratio which measures the amount of runoff that can be expected to occur for a particular land use. An example of this would be if 1 inch of rain falls on a residential lot, it is expected that 0.30 inches of rain would occur as runoff and the balance would be retained on the property. The coefficient of runoff in this example would be 0.30. The coefficient of runoff values used in this report are listed in Table 6-2:

Table 6-2
Coefficient of Runoff (C)

Land Use	(C)
Commercial/Industrial/Office	0.80
Residential	
Low Density	0.30
Medium Density	0.40
High Density	0.50
Parks, Open Space	0.10

The land uses listed above are based on the Farmersville General Plan map which was adopted in November 2002.

The rainfall intensity (I) is based on the time of concentration and the storm frequency. The time of concentration is the time that it takes runoff to travel from the furthest point of the drainage area to the point for which the peak flow rate is being calculated. For the purpose of this study, time of concentration is equal to the lot time (or initial time) plus the travel time from the initial area to the point being considered. The lot, or initial time, is based on the Tulare County Improvement Standard which states the lot to street time is 20 minutes for lots smaller than ½ acre and 15 minutes for lots larger than ½ acre. A maximum lot time of 20 minutes was used for exceptionally large lots such as school grounds. Travel time is dependent upon the method of conveyance, i.e., pipeline or gutter. For runoff being conveyed by gutter, the velocity of the water is assumed to travel at 1.5 feet per second. For water being conveyed by pipeline, the calculated velocity of flow is used. This rainfall intensity (I) for a particular storm frequency and a time of concentration can then be obtained from Exhibit E-4. This information was developed by the use of the procedures outlined in the Tulare County Flood Control Master Plan. These procedures were developed from hydrologic analysis of available data and studies of the National Weather Service and the California Department of Water Resources.

One of the significant integral parts of the master plan facilities in the City of Farmersville is the use of detention and retention storm water basins and the use of temporary detention basins when required master planned trunk lines are not yet installed.

The basic storm criterion for the sizing of a ponding basin is either: a) a 10 year storm with 18" free board below the lowest street drainage curb inlet grate, or b) a 50-year storm with water at the top of the lowest top of curb within the drainage area, whichever creates the largest pond. The storage equation for a basin is:

S = (P/12)CA

Where:

S = Storage, in acre-feet
P = Rainfall depth for design storm in inches
C = Coefficient of Runoff
A = Drainage area in acres

Rainfall depth, P, is the total amount of rainfall that will occur for a given design storm. The 10-year return period/10-day duration storm will yield a total of 4.3 inches. The 50-year return period/10-day duration storm will yield a total of 5.6 inches. These amounts are taken from Exhibit E-3.

The Coefficient of Runoff (C) and Drainage Area (A) have been discussed earlier in this Section.

Retention Basins

The design criteria for sizing a retention basin (no discharge except for percolation and evaporation) is either a 10 year or 50 year storm as outlined above, for a duration of 10 days. The storage equation is used as outlined above.

Detention Basins

The design criteria for sizing a detention basin (discharge by pump or gravity during the design storm period) is the same 10 or 50 year storm as outlined, except that the duration period is chosen for that point during the design storm where the difference between total inflow and total discharge

is the greatest. The duration period will vary with each drainage area and can be solved graphically utilizing the Rainfall Depth Curves, as shown in Exhibit E-3.

Since detention basins are designed with an outlet to a water channel they should also be designed to allow for groundwater recharge during the dry time of the year. The design would divert water from the water channel to the detention basin and allowed to percolate.

Temporary Basins

Temporary basins shall use the same criteria as a retention basin to hold the runoff generated by the area served by the basin. Temporary basins are allowed only upon the approval of the City Engineer.

6.2.2 HYDRAULICS

The method used in determining pipeline sizes is by use of Manning's Formula. This equation is:

$$\mathbf{Q = (1.486/n)AR^{2/3}S^{1/2}}$$

Where:

Q = Discharge of pipeline in cubic feet per second (cfs)
n = Coefficient of roughness
A = Area of pipe based on Inside Diameter
R = Hydraulic Radius
S = Slope of the Energy Grade Line

In the use of this formula, the following assumptions and limitations are to be used:

1. Coefficient of roughness (n) = 0.013
2. Pipes assumed to be flowing at full capacity.
3. Limiting minimum velocities of 2.5 feet per second which is considered to be a minimum self-cleansing velocity.

One of the major criteria that is used in all the study areas is the utilization of existing drainage facilities. Those facilities that are hydraulically sufficient to carry the required flows are incorporated in the final master plan drainage facilities.

6.3 Estimated Costs

Table 6-3
Storm Drain
Capital Improvement Program Summary

Item	Qty.	Unit	Cost/Unit	Approx. Cost
Area for Storm Ponds	65	Ac	$30,000.00	$1,950,000.00
42" Storm Line	2,650	LF	$250.00	$662,500.00
36" Storm Line	15,200	LF	$200.00	$3,040,000.00
24" Storm Line	11,000	LF	$180.00	$1,980,000.00
Pump Stations	6	EA	$50,000.00	$300,000.00
Construction Subtotal				$7,932,500.00
Contingencies (15%)				$1,189,875.00
Subtotal				**$9,122,375.00**
Engineering, Surveying, and Construction Administration Cost (20%)				$1,824,475.00
Total Cost				**$10,946,850.00**

The cost per lineal foot includes a manhole every 400 feet and trench resurfacing.

Table 6-4
Existing Deficiency Costs

Item	Qty.	Unit	Cost/Unit	Approx. Cost
Area for Storm Pond	5	Ac	$30,000.00	$150,000.00
42" Storm Line	670	LF	$250.00	$167,500.00
36" Storm Line	3,440	LF	$200.00	$688,000.00
24" Storm Line	2,650	LF	$180.00	$477,000.00
12" Storm Line	1,100	LF	$100.00	$110,000.00
Pump Stations	1	EA	$50,000.00	$50,000.00
Install Pumps on Front Street pond	1	EA	$25,000.00	$25,000.00
Construction Subtotal				$1,667,500.00
Contingencies (15%)				$250,125.00
Subtotal				**$1,917,625.00**
Engineering, Surveying, and Construction Administration Cost (20%)				$383,525.00
Total Cost				**$2,301,150.00**

The cost per lineal foot includes a manhole every 400 feet and trench resurfacing.

6.3.1 FEES

The proposed storm system within this master plan are based on the potential development out to the UAB. Since some of this area is outside the current general plan and there is no certainty regarding the location of future development, the basis of the fee will be the undeveloped acreage contained within the UAB.

Total Acres to develop = 1,752 (UAB) + 186 (Vacant) – 433 (right of way) = 1,505ac.

Cost per acre = $10,946,850/1505ac. = $7,273.65 per acre.

The calculated fee per acre will need to be adjusted on an annual basis based on the Engineering News Record Construction cost Index.

6.4 Recommendations

6.4.1 EXISTING ISSUES

Areas D, P, Q, R, S, X and Y need a storm drain pond and trunk lines to properly handle the drainage generated from those sub-areas. The storm drain pond would be located in an area south of Tulare Street adjacent to Deep Creek. This pond will be a detention pond with an outlet to Deep Creek. The pond will need to be a minimum of 29 acre-feet capacity and the outlet pump needs to be a minimum of 8 cfs. The trunk lines need to be:

1. 42” line east from the pond to Carmela Avenue.
2. 12” line from the end of Carmela Avenue to the Trunk line.
3. 36” line in Farmersville Boulevard from Visalia Road south to the Trunk line.
4. 36” line (in Tulare Street) west from the pond to Matthew Avenue.
5. 24” line from Visalia Road to the Trunk line in Tulare Street.

The Front Street pond in its current configuration is undersized. To meet the current City standards, the pumps will need to be a minimum of 30 horsepower pumping 14 cfs. This would mean adding a 20 horsepower pump and continue operating the existing 10 horsepower pumps. The Extension Ditch has a cross section that can handle approximately 30 cfs. Preliminary discussions with CPD to increase the discharge by 10 cfs from this pond to Extension Ditch are ongoing.

6.4.2 FUTURE NEEDS

The SR 198 Corridor Specific Plan (completed in 2003) proposed two ponds for the industrial area. These ponds were proposed as detention basins with the basin on the east side of Farmersville Boulevard discharging into the basin west of Farmersville Boulevard and this basin having an outlet discharging into the TID canal. The pond on the east side of Farmersville Boulevard will need to be a minimum of 26 acre-feet capacity with a discharge pump of 10 cfs. The pond on the east side of Farmersville Boulevard needs to be a minimum of 29 acre-feet capacity with a discharge pump of 10 cfs.

The SR 198 Corridor Specific Plan split Area AC in half with the north half being industrial and included in the plan and the south side being residential and outside the plan area. The residential area needs a retention pond to serve the area. The retention pond would be located north of Walnut Avenue near Road 168. The retention pond will need to be 29 acre-feet capacity.

Area AD which lies north of the TID canal contains approximately 177 acres and needs a detention basin of 30 acre-feet capacity. This basin is proposed to be adjacent to the TID canal.

Area AE contains 525 acres and will require a total of 52 acre-feet of detention basin volume. This is proposed to be accommodated in three basins. The first would be located near Walnut Avenue with a 6 acre-feet capacity. The second would be located near the Front Street basin with a16 acre-feet capacity. The third basin is proposed at the south end of the area at the TID canal. This basin will need to be 30 acre-feet capacity.

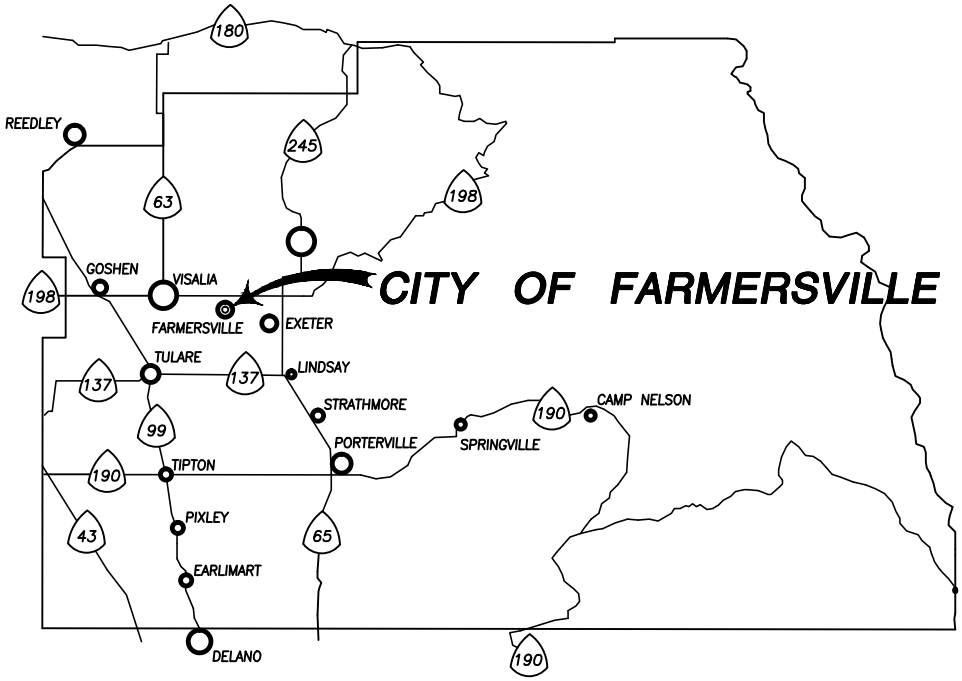
Area AF contains 346 acres and will require retention of approximately 66 acre-feet capacity. This is proposed to be addressed with the use of two basins. The first will be approximately 30 acre-feet capacity and be located south of Walnut Avenue along the UAB line. The second will be approximately 36 acre-feet capacity and located at the UAB around the Avery Avenue alignment.

Area AG contains 167 acres and will require a detention basin with a discharge to Deep Creek. The basin will need to be approximately 12 acre-feet capacity with a discharge pump of 5 cfs.

APPENDICES

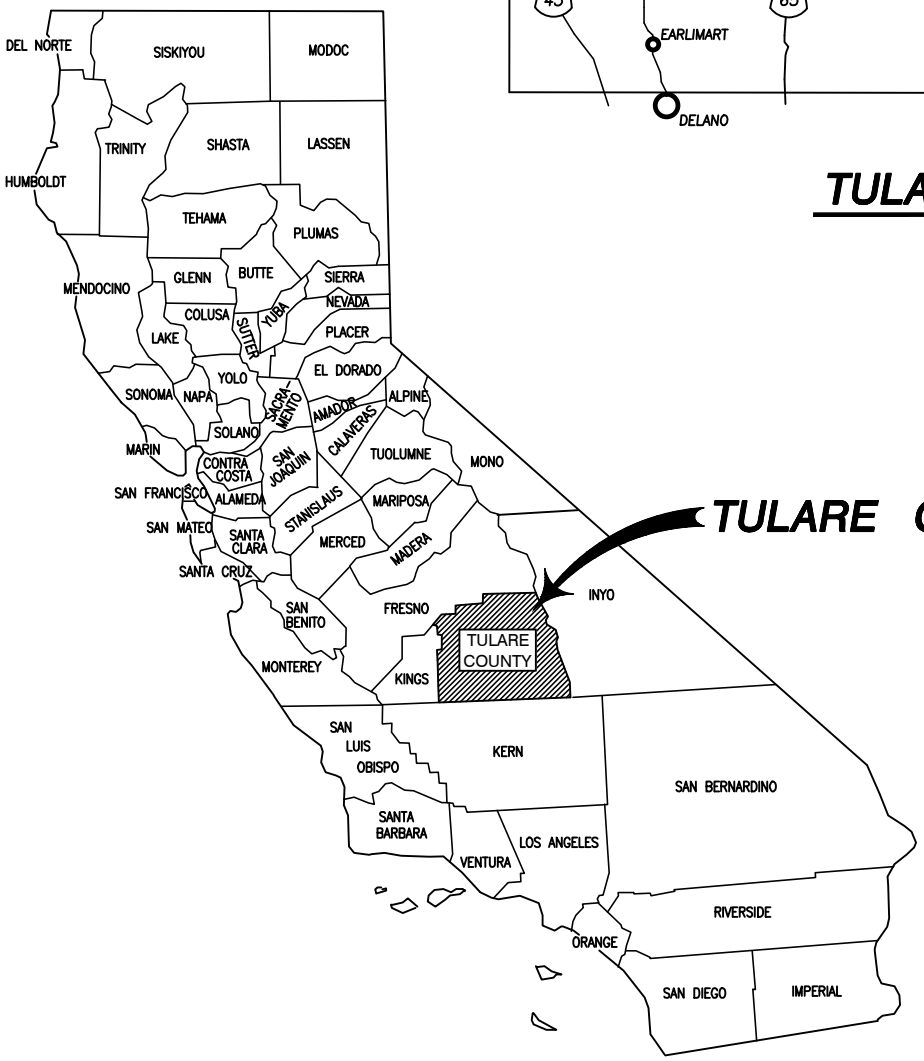
APPENDIX A

GENERAL MAPS



TULARE COUNTY

No Scale



TULARE COUNTY

STATE MAP

No Scale

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JOB NO.	F110131
DWG. NAME:	F110131-EXHIBIT A-1.dwg
SCALE:	AS SHOWN
SHEET NO.:	1 OF 1

EXHIBIT A-1

LOCATION MAP

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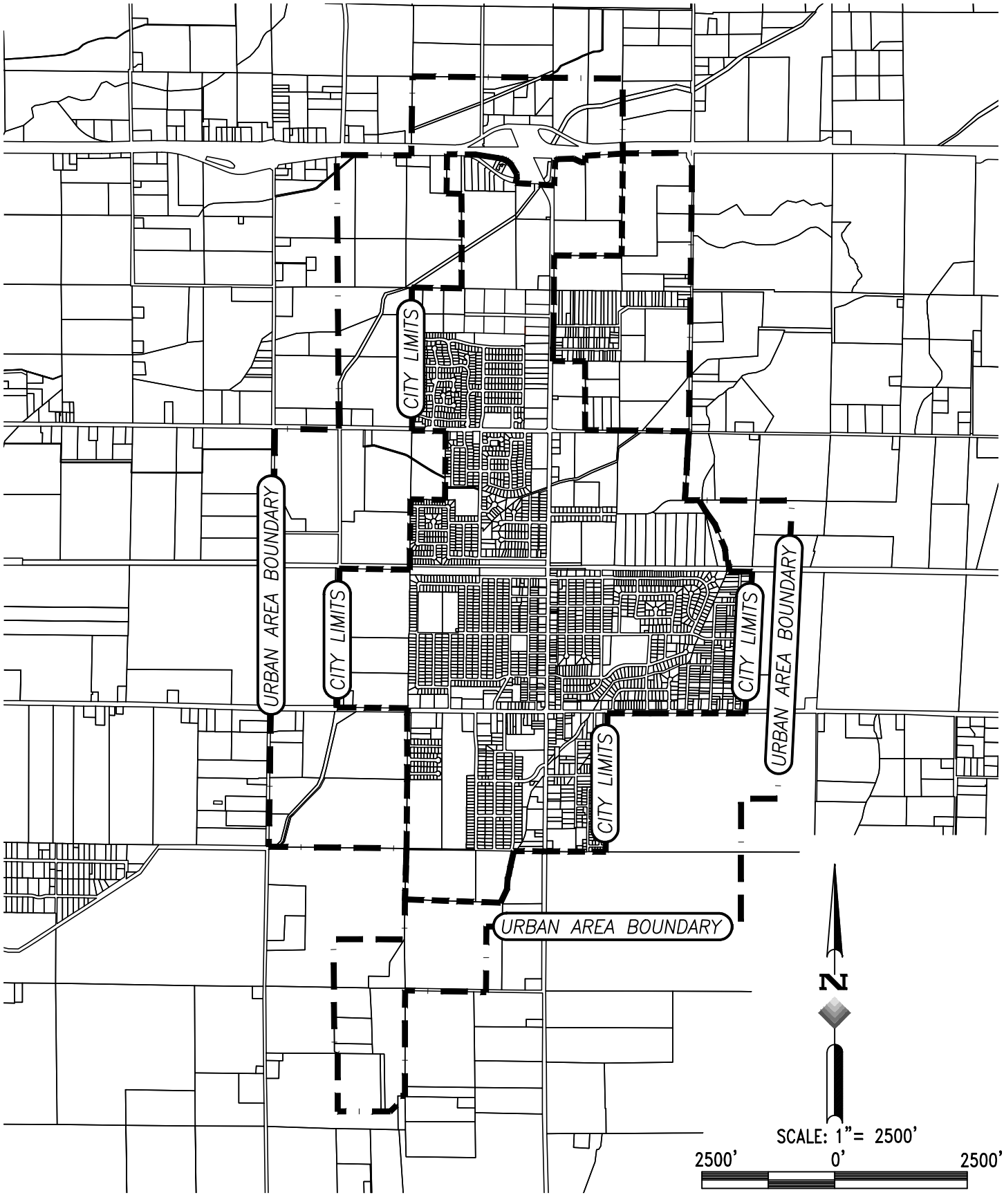

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SCALE:	AS SHOWN
SHEET NO.:	1 OF 1

EXHIBIT A-2

STUDY AREA BOUNDARY

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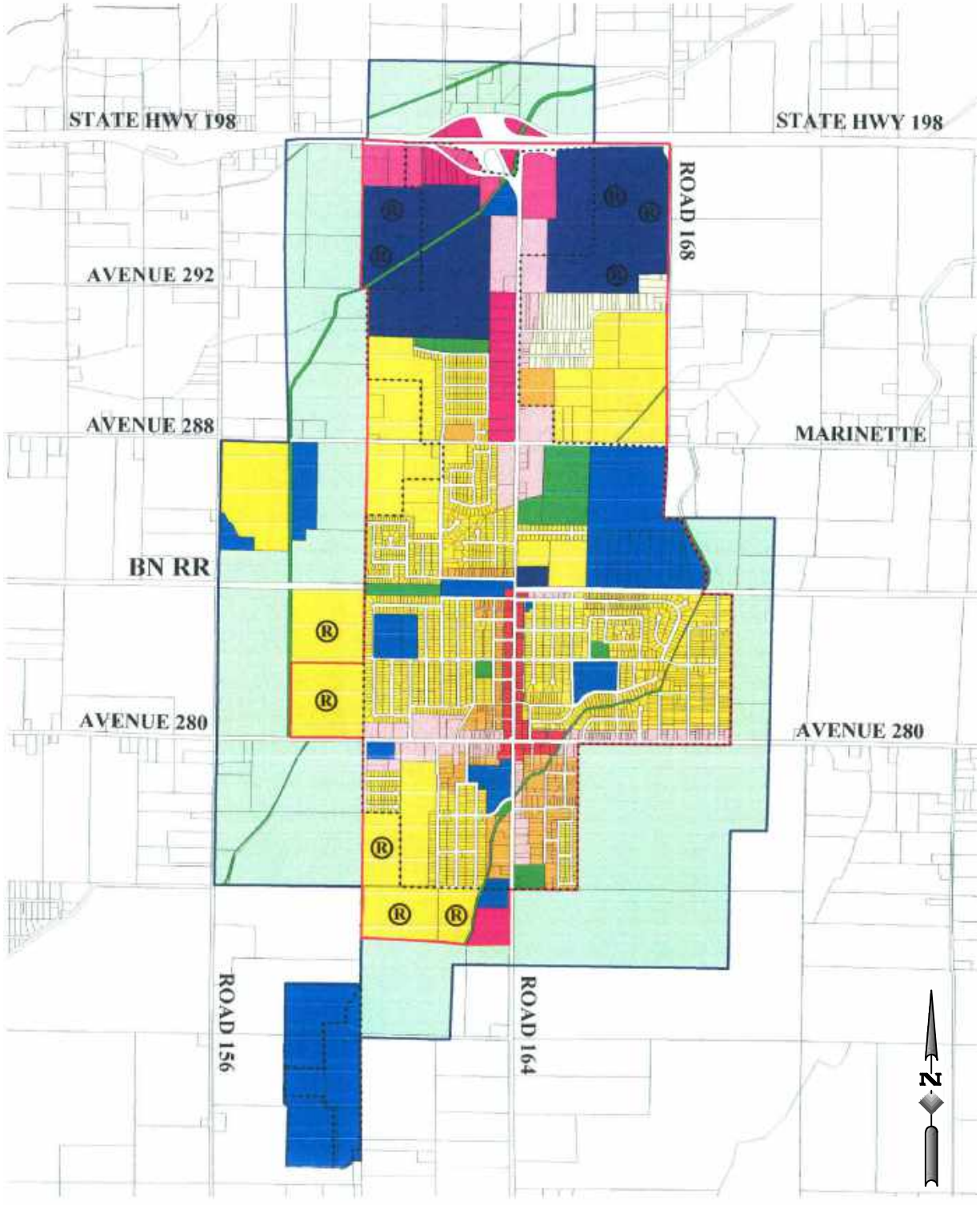

General Plan Land Use Designations

- Low Density Residential
- Medium Density Residential
- Medium-High Density Residential
- General Commercial
- Central Commercial
- Highway Commercial
- Service Commercial
- Industrial
- Public Facilities
- Open Space
- Agriculture/Urban Reserve
- Mixed Use Overlay
- Right-Of-Way
- Ⓡ Reserve

Legend

- City Limits
- Urban Development Boundary
- Urban Area Boundary
- Parcels
- Rd. 164 Streets

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DWG. NAME:	F110131-EXHIBIT A-3.dwg
SCALE:	NO SCALE
SHEET NO.:	1 OF 1

EXHIBIT A-3

GENERAL PLAN LAND USE DESIGNATIONS

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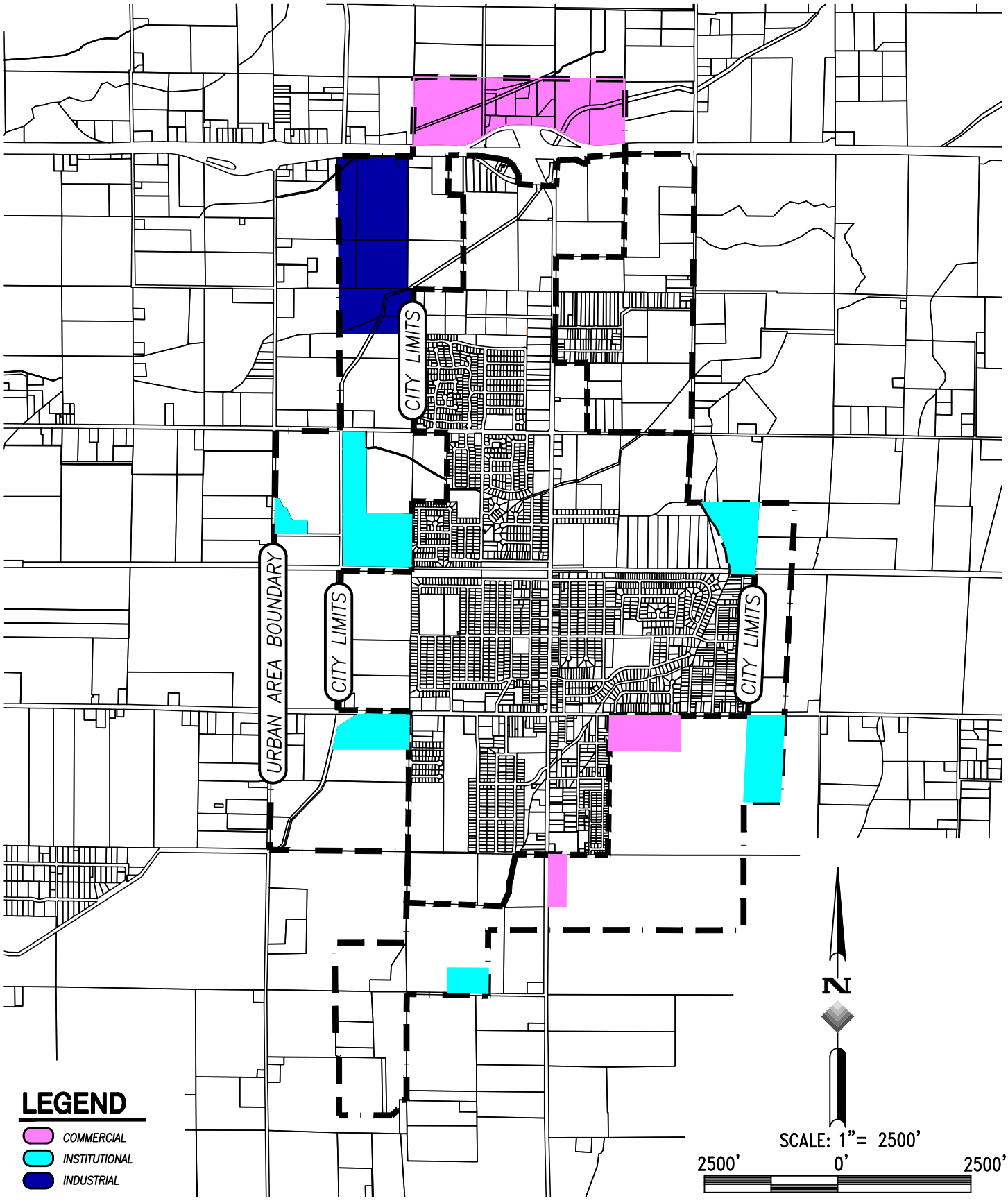

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EXHIBIT A-4

FUTURE LAND USE

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STREET MAP

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City of Farmersville	
INFRASTRUCTURE MASTER PLAN	**EXHIBIT A-5**

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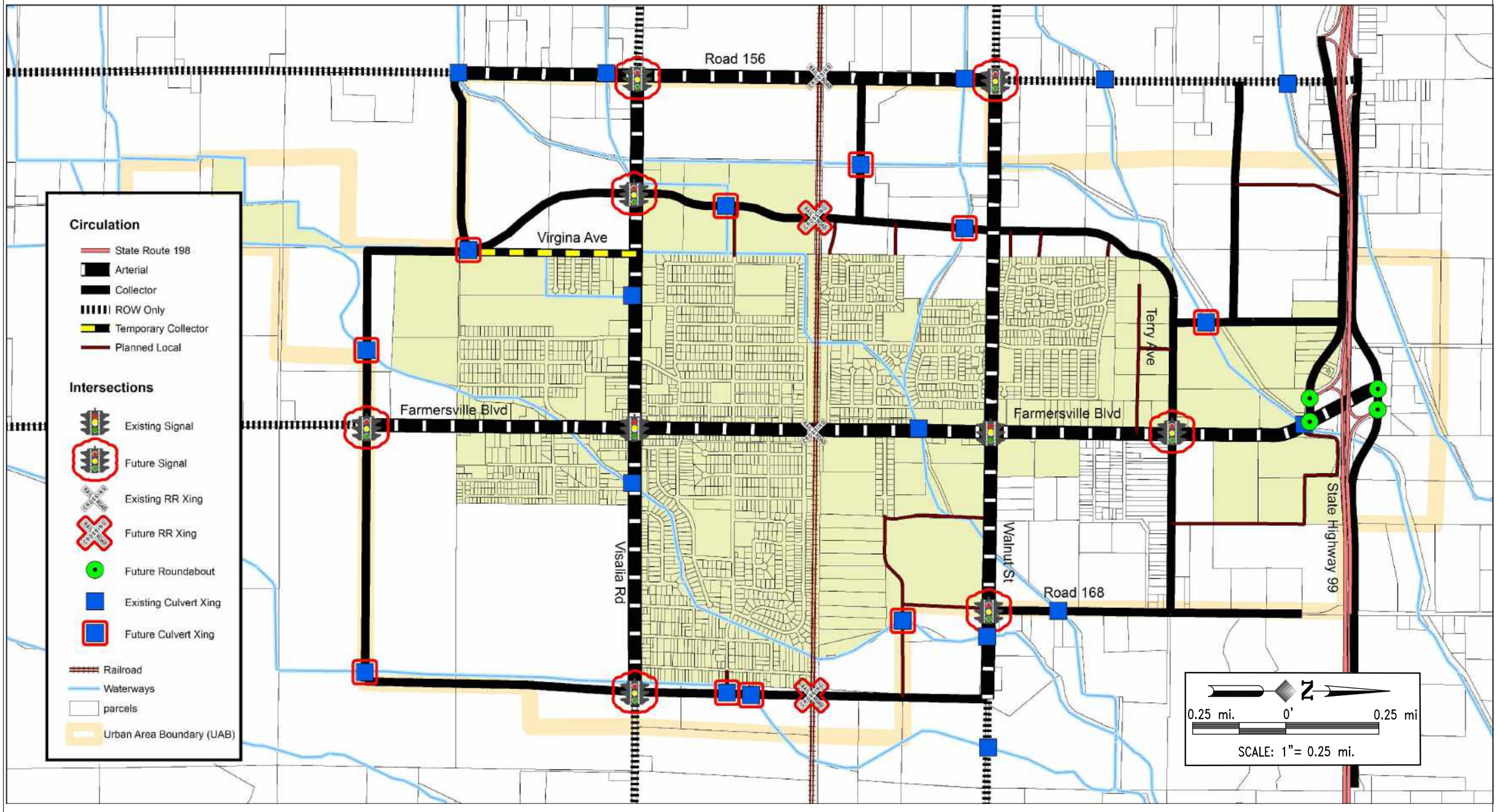
APPENDIX B

CIRCULATION MAPS



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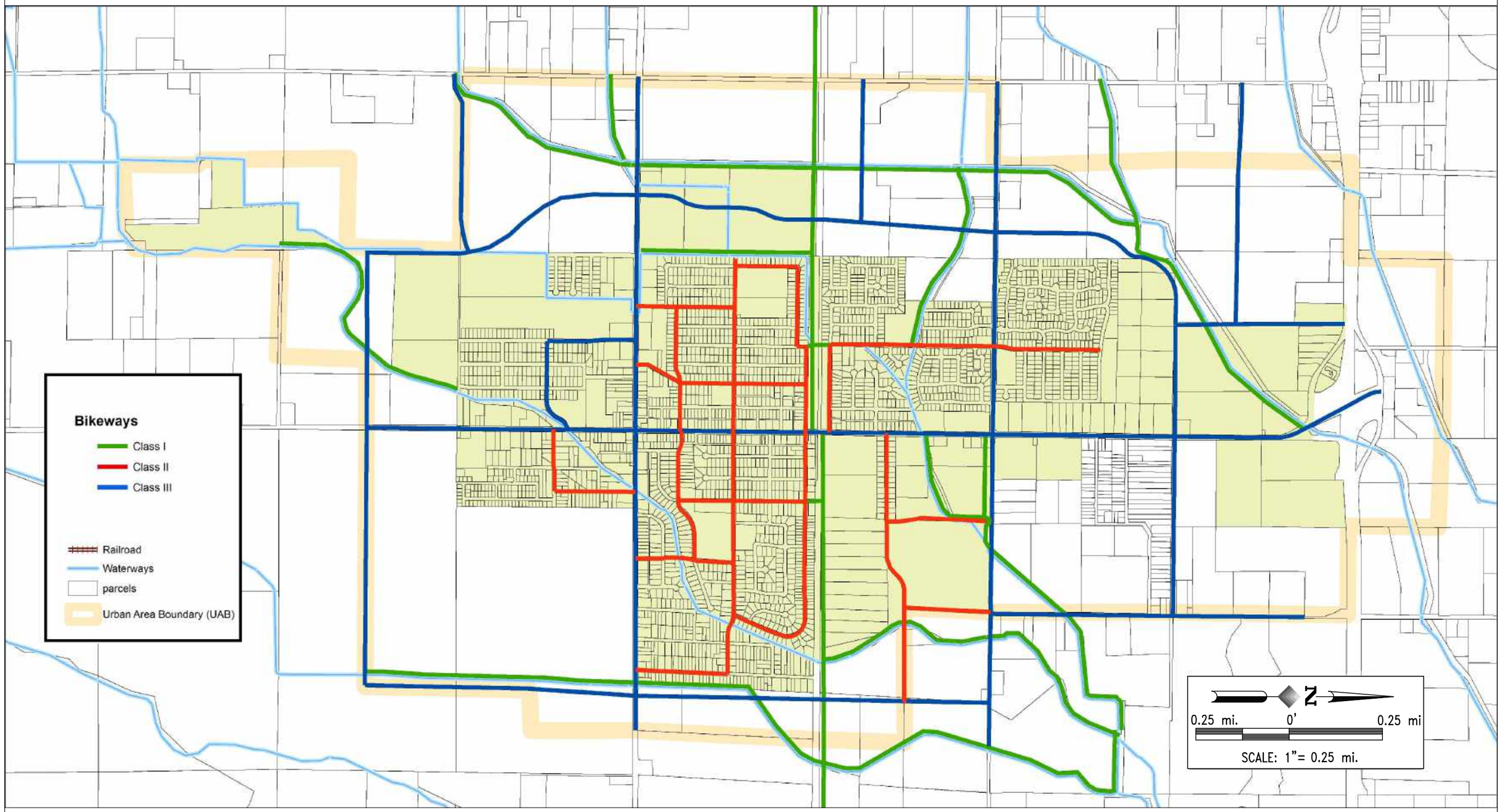
CIRCULATION PLAN

INFRASTRUCTURE MASTER PLAN

EXHIBIT B-1



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CITY OF FRESNO

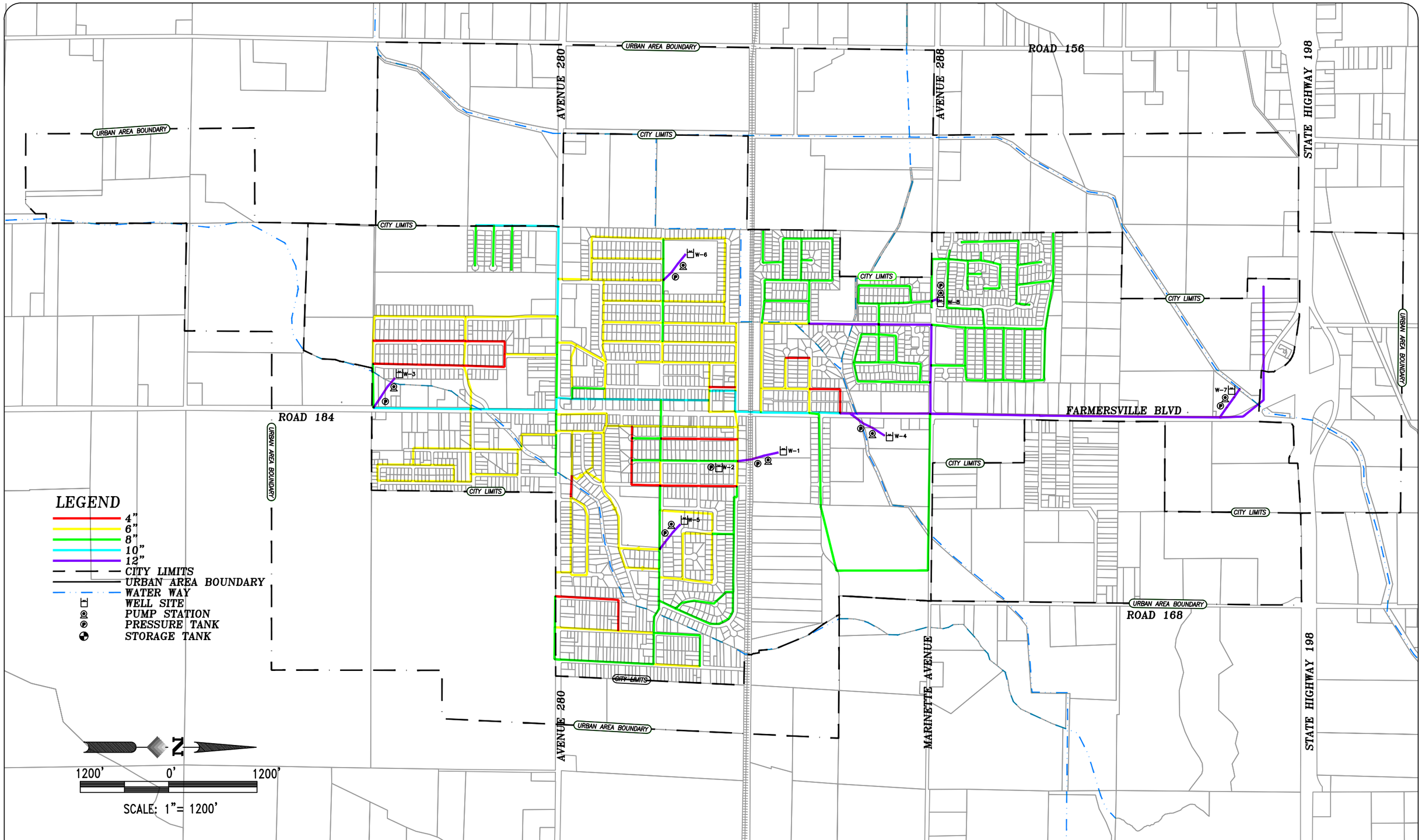
BIKEWAY PLAN

INFRASTRUCTURE MASTER PLAN

EXHIBIT B-2

APPENDIX C

WATER MAPS



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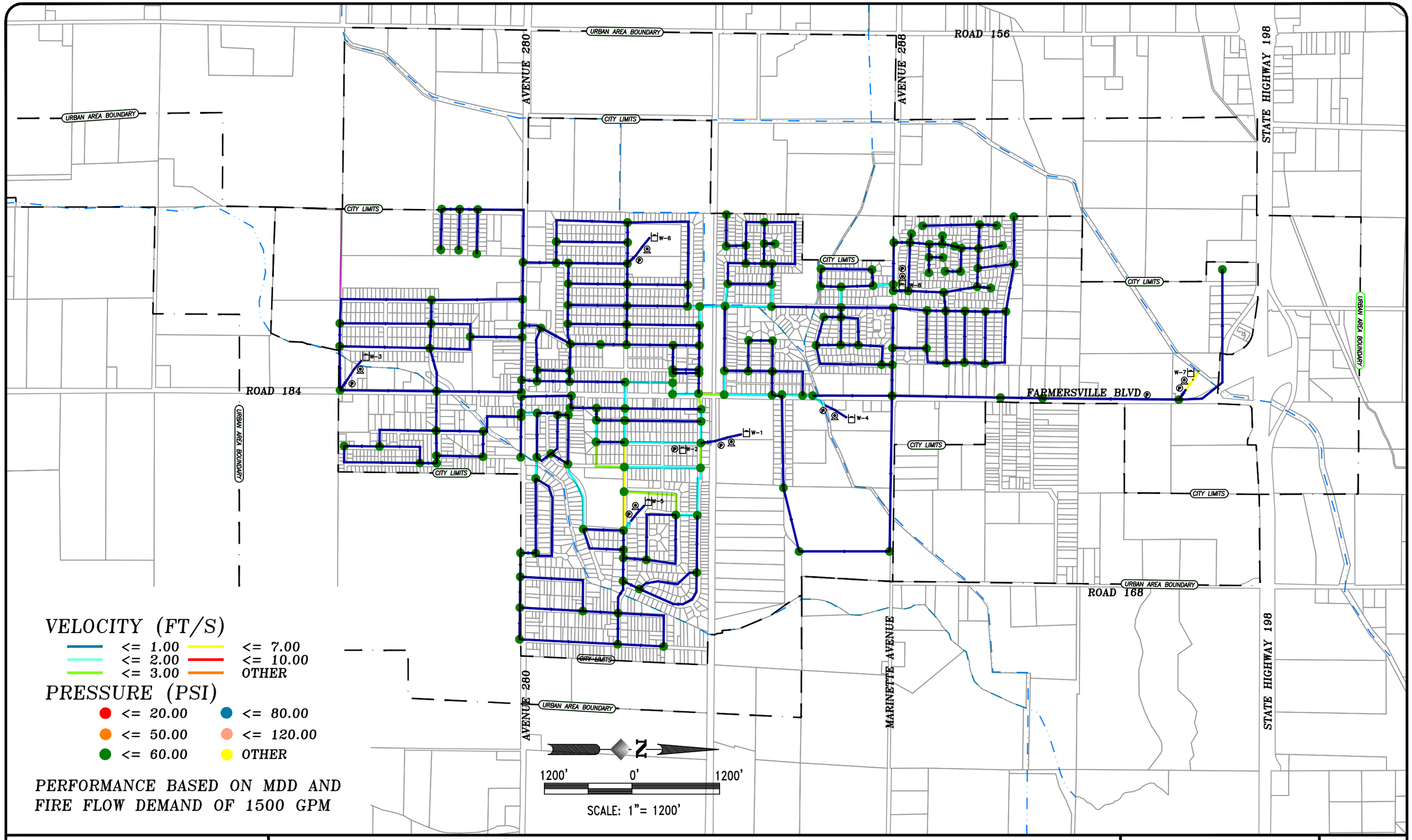
EXISTING WATER SYSTEM

INFRASTRUCTURE MASTER PLAN

EXHIBIT C-1



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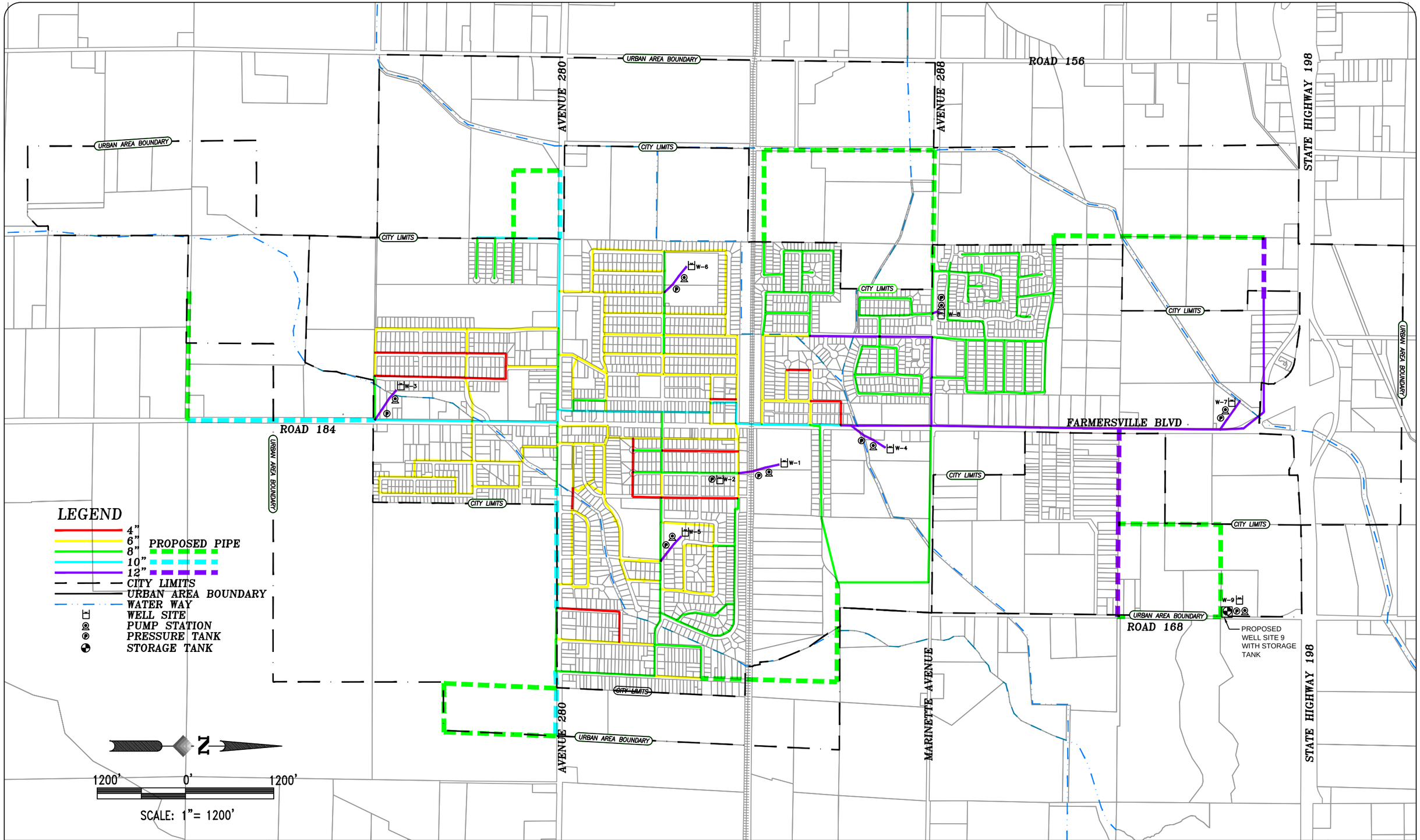
CITY OF FARMERSVILLE

EXISTING WATER SYSTEM PERFORMANCE

INFRASTRUCTURE MASTER PLAN

EXHIBIT C-2



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PROPOSED WATER SYSTEM

INFRASTRUCTURE MASTER PLAN

EXHIBIT C-3

APPENDIX D

SANITARY SEWER MAPS

URBAN AREA BOUNDARY

ROAD 156

AVENUE 280

AVENUE 288

STATE HIGHWAY 198

WWTP

CITY LIMITS

FARMERSVILLE BLVD

ROAD 184

FUTURE SPORTS COMPLEX 88 ACRES

ROAD 168

MARINETTE AVENUE

LEGEND

- EXISTING 6"
- EXISTING 8"
- EXISTING 10"
- EXISTING 12"

N

1200' 0' 1200'

SCALE: 1"= 1200'

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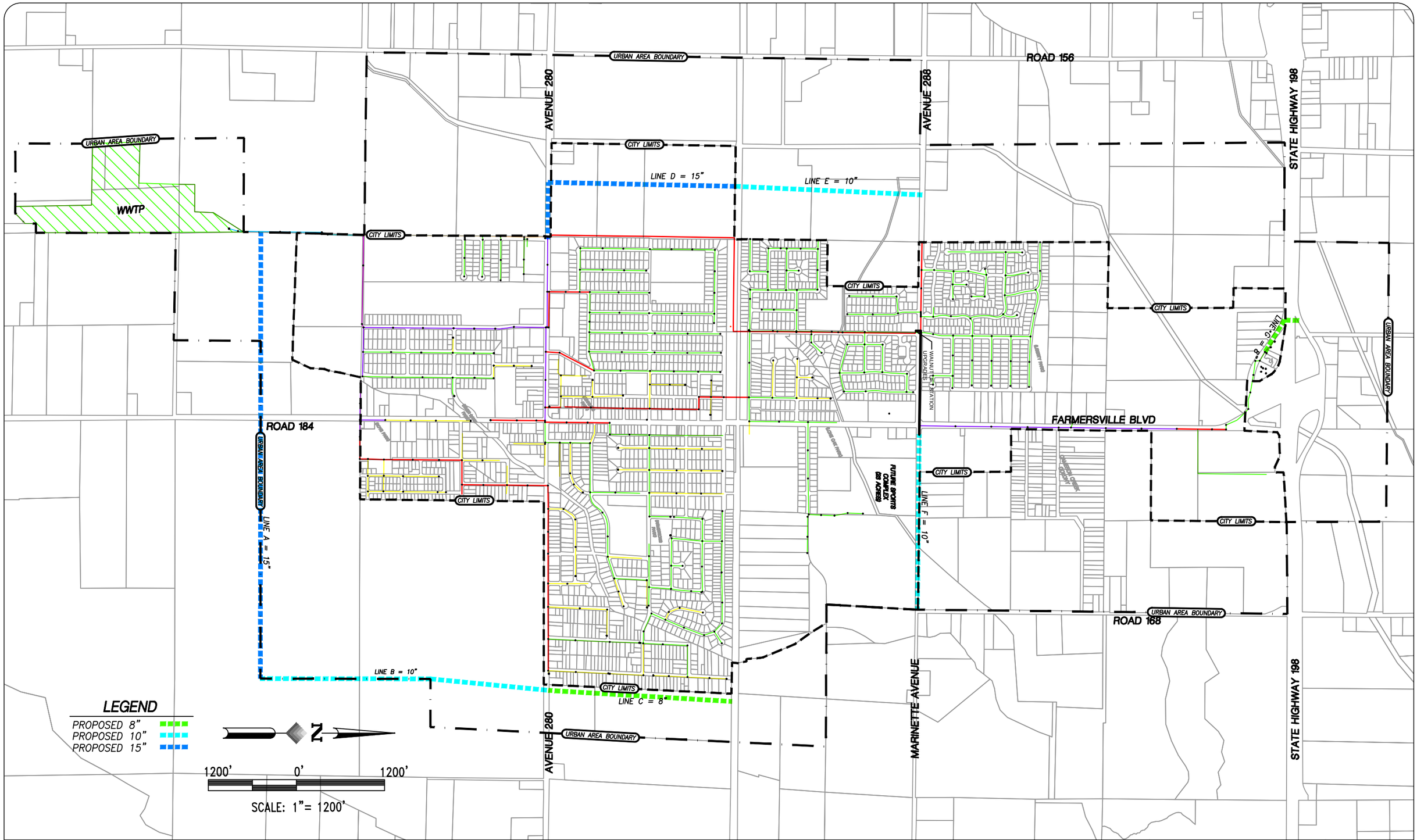
CITY OF FARMERSVILLE

EXISTING SANITARY SEWER SYSTEM

INFRASTRUCTURE MASTER PLAN

EXHIBIT D-1



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PROPOSED SANITARY SEWER SYSTEM

INFRASTRUCTURE MASTER PLAN

EXHIBIT D-2

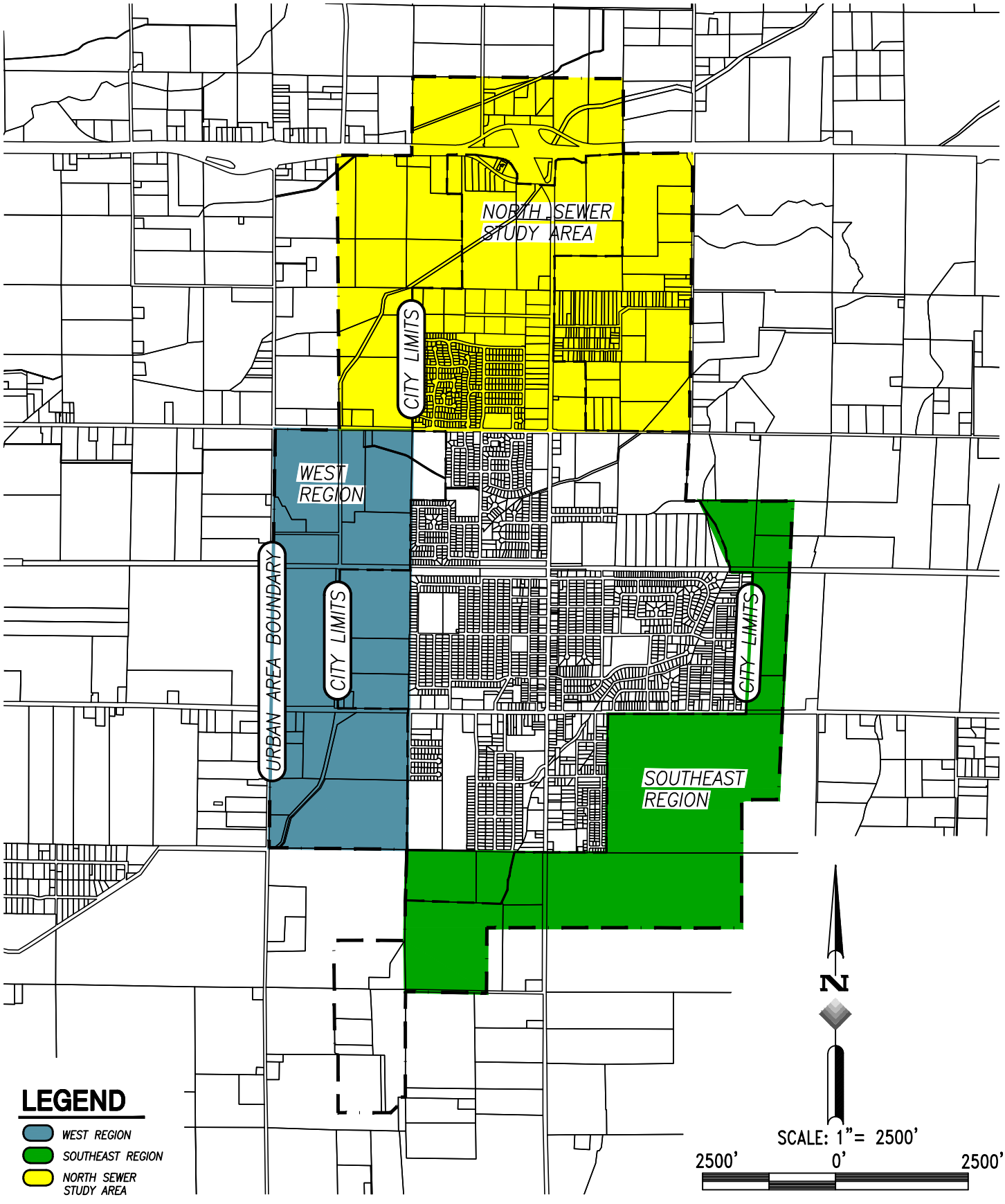

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EXHIBIT D-3

SEWER STUDY AREAS

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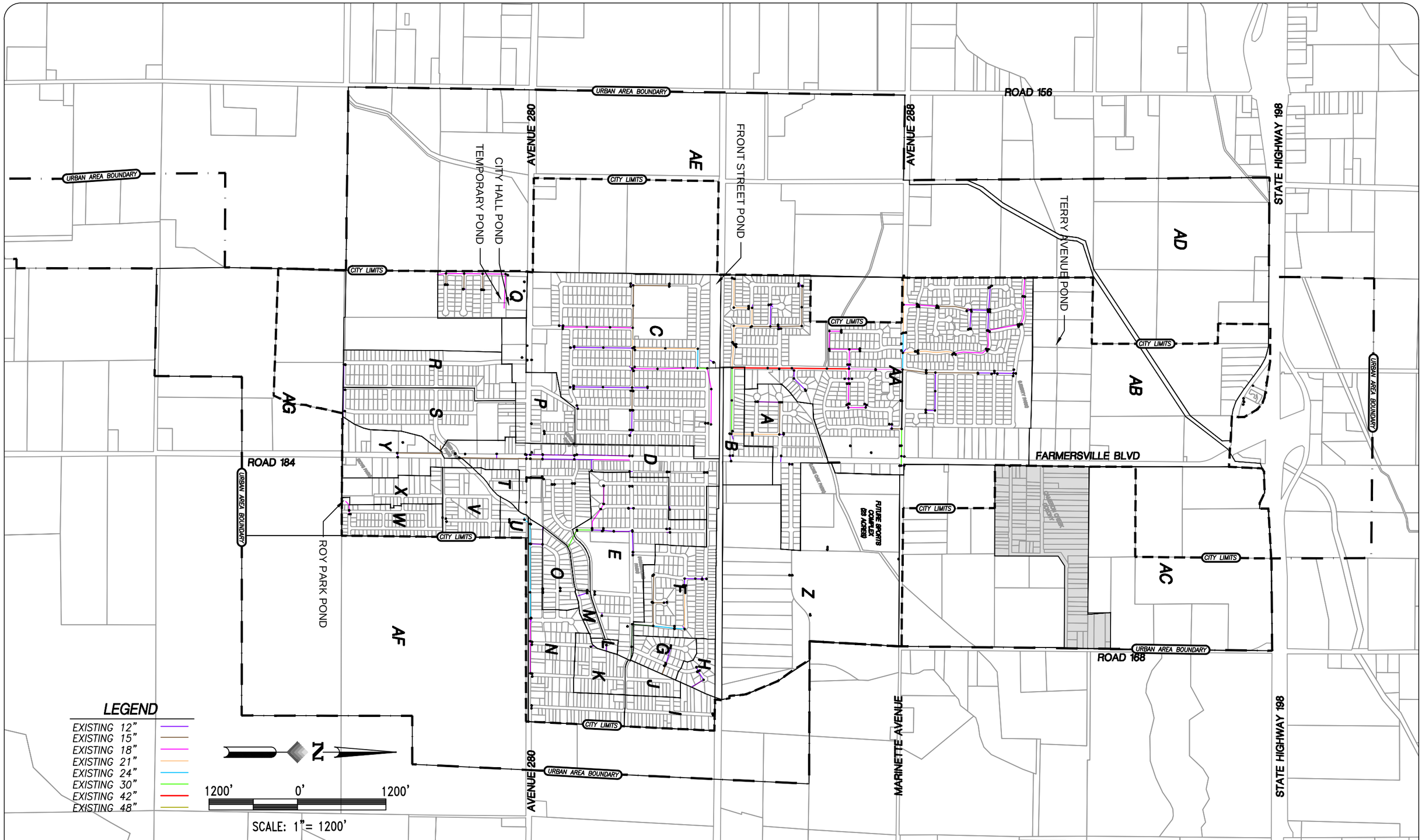
APPENDIX E

STORM DRAIN MAPS AND REFERENCES



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EXISTING STORM DRAIN SYSTEM

INFRASTRUCTURE MASTER PLAN

EXHIBIT E-1

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URBAN AREA BOUNDARY
AVENUE 280
CITY HALL POND
TEMPORARY POND
CITY LIMITS
FRONT STREET POND
AVENUE 288
6TH AVENUE
STATE HIGHWAY 198
TERRY AVENUE POND
AD
AB
AE
C
AA
A
B
AG
R
S
P
Q
Y
X
W
V
U
T
D
E
O
M
L
N
K
G
F
H
J
I
Z
AC
AF
ROAD 184
ROY PARK POND
FUTURE SPORTS COMPLEX (60 ACRES)
FARMERSVILLE BLVD
ROAD 168
MARINETTE AVENUE

LEGEND

- PROPOSED 12"
- PROPOSED 24"
- PROPOSED 36"
- PROPOSED 42"
- PROPOSED POND

N

1200' 0' 1200'

SCALE: 1"= 1200'

Quad Knopf

CITY OF FARMERSVILLE

PROPOSED STORM DRAIN SYSTEM

INFRASTRUCTURE MASTER PLAN

EXHIBIT E-2

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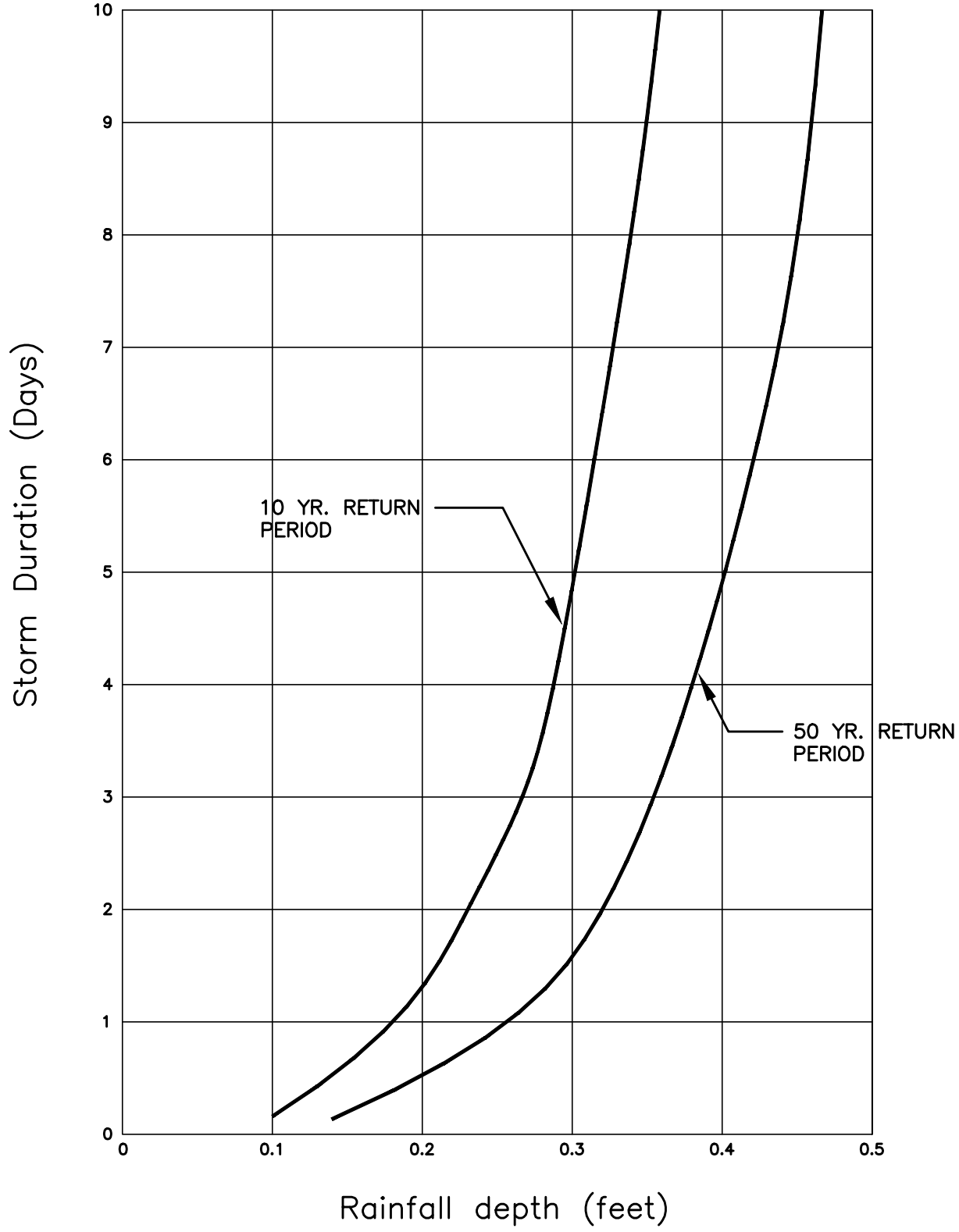

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JOB NO.	F110131
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SHEET NO.:	E-3

EXHIBIT E-3

RAINFALL DEPTH CURVES

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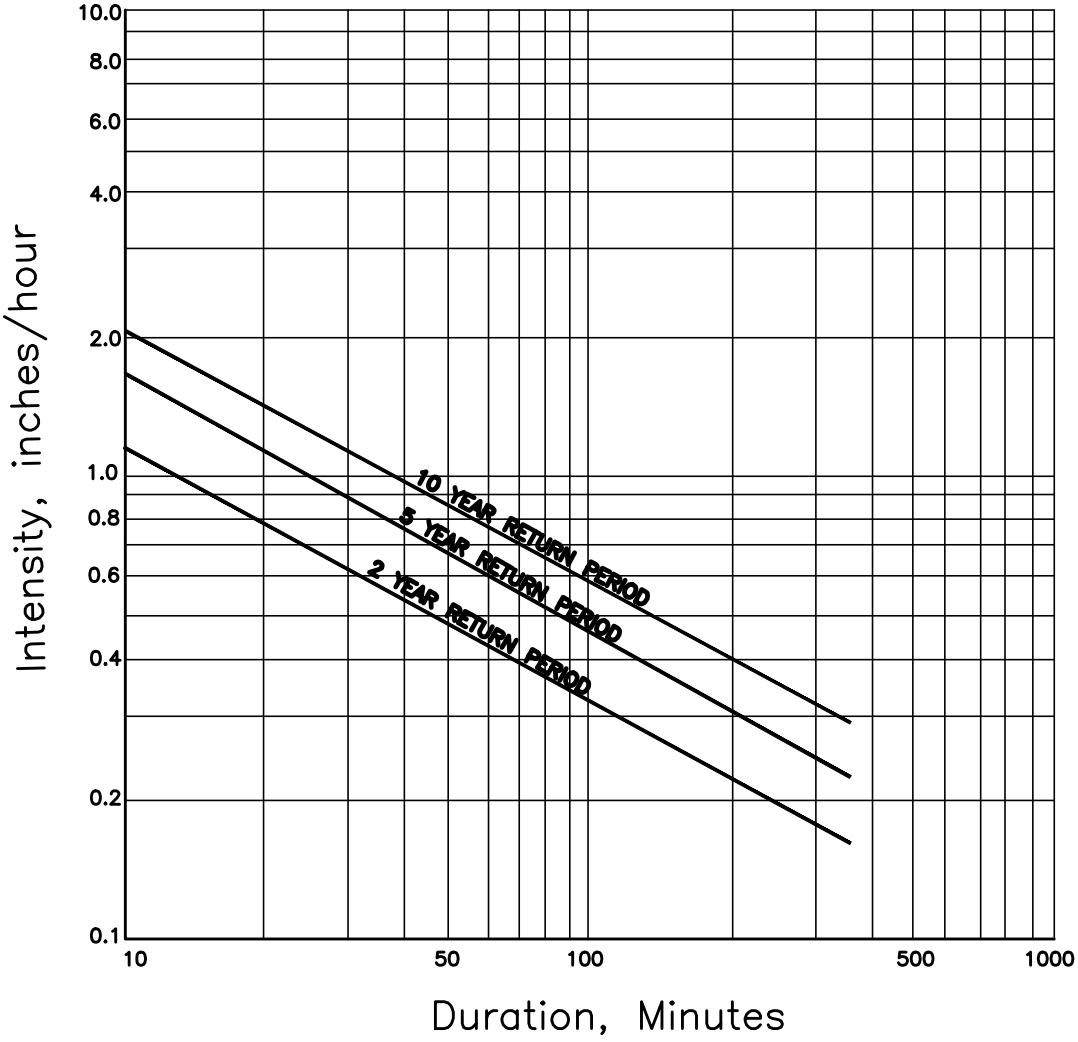

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JOB NO.	F110131
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SCALE:	NTS
SHEET NO.:	E-4

EXHIBIT E-4

RAINFALL INTENSITY CHART

PREPARED BY:
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FAX: (559) 733-7821

DRW BY: | CHK BY:

Peak Storm Run-off - *Rational Method Q=CIA where:*

Q = Peak Flow rate in cubic feet per second
C = Coefficient of Runoff (see below)
I = Rainfall intensity in inches/hr (see Exhibit D-4)
A = Drainage area in acres

Pipeline Capacity - *Manning Equation* $Q = (1.49/n)A(r)^{\frac{2}{3}}(s)^{\frac{1}{2}}$ *where:*

Q = Flow rate in cubic feet per second
A = Cross-sectional area of pipe in square feet
r = Hydraulic radius
s = Slope in feet per foot
n = Friction-loss coefficient = 0.013

Rainfall Intensity Duration Chart *(see Exhibit E-4)*

Two-year Return Period

Detention Basins

Rainfalll Depth - 10-year Return Period with 18" freeboard below lowest grate
or
50-year Return Period with HWL at lowest TC (whichever creates largest pond)

Duration Days - To be determined based on discharge criteria (see Exhibit E-3)

Retention Basins

Rainfalll Depth - 10-year Return/10-day duration Period with 18" freeboard below lowest grate
or
50-year Return Period/10-day duration with HWL at lowest TC
(whichever creates largest pond)

Coefficient of Runoff *(minimum)*

Parks/Open Areas	*0.10*
Residential	
Low Density (Single Family)	*0.30*
Medium Density (Duplex, ect)	*0.40*
High Density (Apartments)	*0.50*
Commercial/Industrial/Office	*0.80*

Lot to Street Time *= 20 min. (Residential only)*

Gutter Velocity *= 1.5 feet per second*

PLOT DATE:
JOB NO. F110131
DWG. NAME: APPENDIX E DRAWING.DWG
SCALE: NTS
SHEET NO.: E-5

EXHIBIT E-5

STORM DRAIN DESIGN CRITERIA

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TEL: (559) 733-0440
FAX: (559) 733-7821

DRW BY:
CHK BY:

APPENDIX F

COMMENTS CARDS RECEIVED

Farmersville Infrastructure Master Plan
Comment Form

(Plan Maestro Comprensivo Infraestructural)

Please give us your comments!

(Por favor dénos sus comentarios!)

Name *(Nombre)*	Mike Santanna		
Address *(Dirección)*			
E-mail *(Correo electrónico)*		**Phone** *(Teléfono)*	

Comments *(Comentario)*

Is there a need to discuss water banking in the Master Plan. Using the storm Ponds to perculate ~~or~~ irrigation water during the summer.

This comment was addressed in Chapter 6 Section 6.2.1. Added language to encourage detention basins be designed to allow for groundwater recharge.

11-7-2012

Farmersville Infrastructure Master Plan
Comment Form

(Plan Maestro Comprensivo Infraestructural)

Please give us your comments!

(Por favor dénos sus comentarios!)

Name *(Nombre)*	Guy Chimin		
Address *(Dirección)*	Cameron Creek		
E-mail *(Correo electrónico)*		**Phone** *(Teléfono)*	

Comments *(Comentario)*

Proposed Collector north of Cameron Creek will not work due to the ~~the~~ ground elevation. Ground is about 6' Below the surrounding area.

The master plan does show a collector north of Cameron Creek, however the exact placement is not known at this time. During the development of the surrounding area a location and design will be finalized.

11-7-2012

Farmersville Infrastructure Master Plan
Comment Form

(Plan Maestro Comprensivo Infraestructural)

Please give us your comments!

(Por favor dénos sus comentarios!)

Name *(Nombre)*	Greg Gomez		
Address *(Dirección)*	280 Kirsten		
E-mail *(Correo electrónico)*	GOMEZ.GREGP@Gmail.com	Phone *(Teléfono)*	747-3492

Comments *(Comentario)*

I would like to see a light or three way stop at Freedom & Walnut Traffic at Citrus needs to be two way.

The circulation around the Farmersville School District campus is an ongoing issue that is being addressed by the School District and the City. Long term plans call for a traffic signal at Road 168 and Walnut Avenue that will help with the situation currently at Freedom Drive and Walnut Avenue.

11-7-2012

Farmersville Infrastructure Master Plan
Comment Form

(Plan Maestro Comprensivo Infraestructural)

Please give us your comments!

(Por favor dénos sus comentarios!)

Name *(Nombre)*	ALFredo H GUEVARA		
Address *(Dirección)*	686 W FRONT		
E-mail *(Correo electrónico)*		Phone *(Teléfono)*	559-747-3501

Comments *(Comentario)*

PLAN de CIRCULACION
CIUDAD dibidida POR VIA del TREN
en EXISTENCIA un CRUCERO NECESITAMOS
POR LO MENOS 2 CRUCEROS MAS
EN LA CIUDAD

Reference: Circulations plan
Currently the city is divided by the train tracks with only one crossing.
We need at least two additional crossings in the city.

Railroad crossing are coved in the report under circulation. Railroad crossings are specifically mentioned in Section 3.4

11-7-2012

Farmersville Infrastructure Master Plan
Comment Form

(Plan Maestro Comprensivo Infraestructural)

Please give us your comments!

(Por favor dénos sus comentarios!)

Name *(Nombre)*	ALFredo H GUEVARA		
Address *(Dirección)*	680 W FRONT ST		
E-mail *(Correo electrónico)*		Phone *(Teléfono)*	559-747-3501

Comments *(Comentario)* FRONT ST AREA (C)

que solucion sele bA~~HA~~den AL PROBLEMA de desCARGE del AGUAS GRIS QUE CAUSA problema de SALUD

STORM DRAIN SYSTEM

#2 PEPER & Oakview – segundo problema

Reference: Storm Drain System

What solution will be given to the problem of gray water that is causing the health problems at Front Street and drain ditch, and also at Peper and Oakview.

The gray water issue has to do with the flat slope on the irrigation channel. It also is a maintenance issue that will need to be addressed by the Irrigation Company and City staff.

11-7

Farmersville Infrastructure Master Plan
Comment Form

(Plan Maestro Comprensivo Infraestructural)

Please give us your comments!

(Por favor dénos sus comentarios!)

Name *(Nombre)*	Maria		
Address *(Dirección)*	[redacted]		
E-mail *(Correo electrónico)*		Phone *(Teléfono)*	592-3080

Comments *(Comentario)*

Corner of Oakview and Ash there is a bad sewer smell around once a month.

There is an existing issue with rags in the Oakview Avenue lift station. This is an ongoing maintenance issue and is being handled by the Public Works staff.

11-7-2012

Farmersville General Plan Update

- Land Use Element
- Circulation Element
- Open Space, Conservation, Parks and Recreation Element

Prepared by

COLLINS & SCHOETTLER
PLANNING CONSULTANTS

Farmersville General Plan

Part I

Land Use Element
Circulation Element
Conservation/Open Space, Parks and Recreation Element

Adopted by the Farmersville City Council
Resolution 2002-64, on November 6, 2002

Approved by the Farmersville Planning Commission
Resolution 2002-03 on September 10, 2002

Prepared by

COLLINS & SCHOETTLER
PLANNING CONSULTANTS
1002 W. Main Street • Visalia, CA • 93291
(559) 734-8737 • (fax) 734-8767
email: mail@weplancities.com

weplancities.com

PART I:

LAND USE, CIRCULATION, OPEN SPACE/CONSERVATION ELEMENTS

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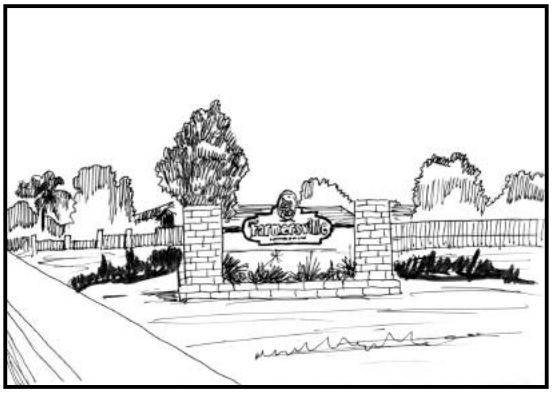
CHAPTER 1: INTRODUCTION

Farmersville

Farmersville is located in Tulare County in the central-southern portion of the San Joaquin Valley. It is located on the south side of State Route 198, a major east/west highway that serves central California. The City is bisected by Farmersville Boulevard, a north/south roadway, and Visalia Road, a major Tulare County east/west roadway.

Farmersville is five miles east of Visalia, the county seat of Tulare County, and two and one-half miles west of Exeter and ten miles northwest of Lindsay (see Map 1-1).



The General Plan

In an effort to insure that land and resources within the State of California are properly managed and developed and that the health, safety and welfare of its citizens are protected, each California city and county is required to prepare a long-term, comprehensive planning that details how the city will physically develop. This document - the General Plan - contains seven mandated elements - land use, circulation, housing, open space, conservation, safety and noise.

Farmersville's first general plan was prepared by the County of Tulare in 1964. Subsequently, the County, which provided planning services to the city, updated the general plan in 1986. The County also prepared and adopted the Urban Boundaries Element for the city of Farmersville in 1974. This document established 20-year and ultimate growth lines around the city.

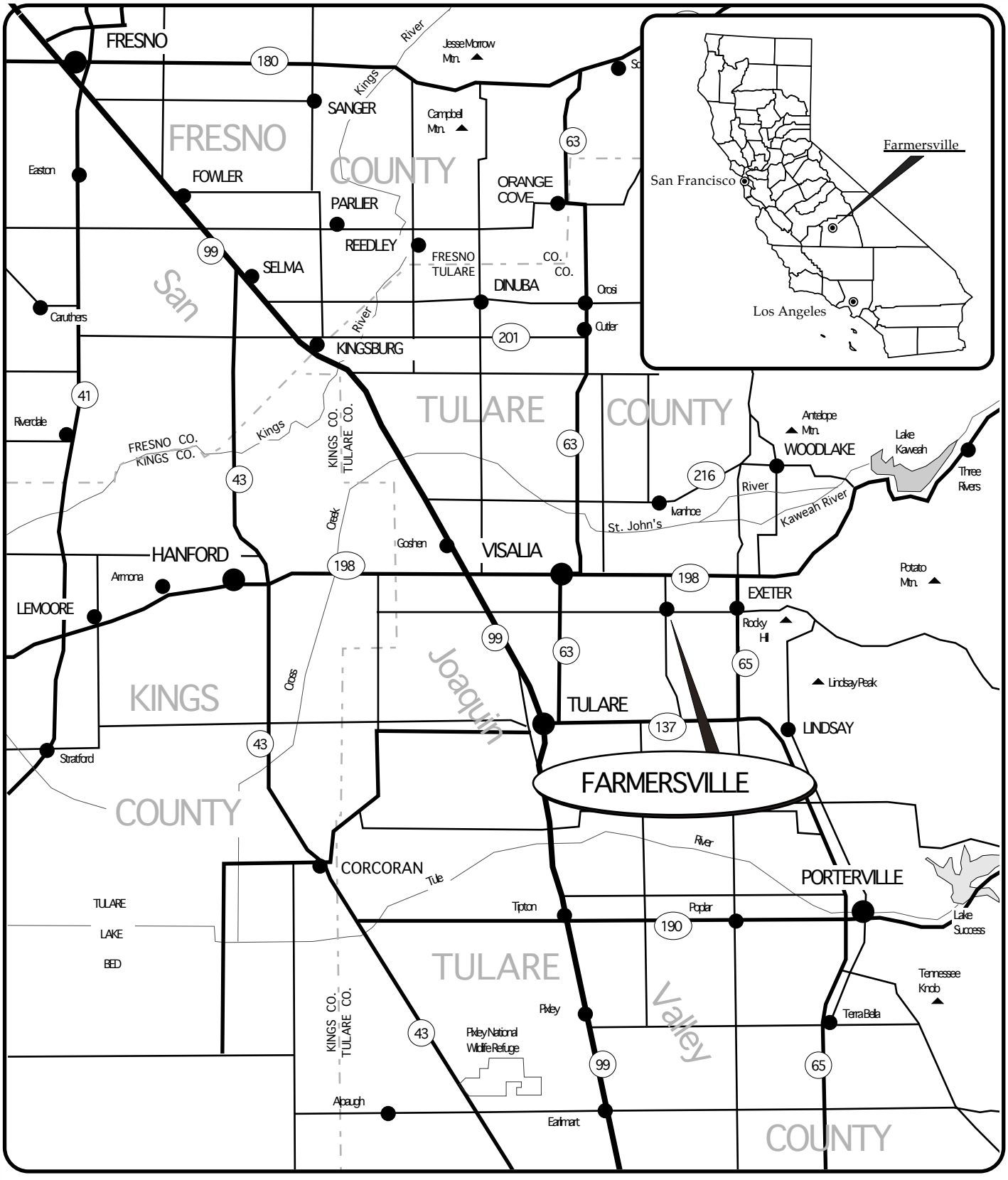
This document will serve to update four of Farmersville's general plan elements:

- Land use
- Circulation
- Open Space
- Conservation

F.Y.I

The California State Legislature first required California cities and counties to prepare a general plan in 1927

Farmersville's first general plan was prepared by the County of Tulare in 1964



City of Farmersville

Regional Location

map 1-1

For purposes of clarity the Open Space and Conservation elements will be combined into one chapter - the Open Space/Conservation/Parks Element. In that sense, Farmersville will have three updated elements of the General Plan

Farmersville has already updated its Housing Element in 1992. The Safety Element (1975) and Noise Element (1976) are adequate in regards to policy direction and do not need updating at this time.

Farmersville's vision and expectations for its future are best expressed through its General Plan. The General Plan may be viewed as a community "blueprint" for the future. Specifically, Farmersville's residents have expressed their vision and expectations for the future in the goals, policies and action programs contained in the General Plan. In addition, the land use and circulation maps included in the General Plan provide a visual display of how land uses and roadways will be arranged in Farmersville.

The principals and ideas reflected in the goals, policies, action programs and land use and circulation maps resulted from community surveys and workshops, study sessions and public hearings.

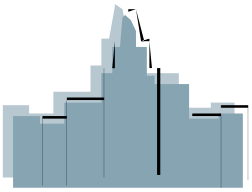
The primary goal of the General Plan is to facilitate a well-planned community. Farmersville's success in fulfilling this goal will depend on how well the City adheres to the General Plan. In this regard, the General Plan can:

- guide the Planning Commission and City Council on land use, circulation, and capital improvement decisions;
- inform the public where certain types of development will occur in the community;
- educate the public on how Farmersville's resources will be managed; and
- provide the private sector with a document upon which it can base investment decisions.

Farmersville's vision and expectations for its future are best expressed through its General Plan.

This document updates four elements of Farmersville's General Plan:

Land



The land use element details how future land uses will be arranged and what form they will take.

Circulation

The circulation element shows where future roadways will travel and what kinds of traffic roadways will likely carry. Other modes of transportation, like bicycles, walking and transit are also considered.

Open Space & Conservation

The open space/parks and conservation element plans for recreational needs and also sets forth policies to conserve resources, such as agricultural land and air quality.

The Farmersville Planning Area

The Farmersville planning area is located within Farmersville's Urban Area Boundary (UAB) line. Within the UAB line there are other planning lines, including the Urban Development Boundary (UDB) line and the city limit line. The UAB line is defined by the county's Urban Boundaries Element as:

> *" ... the areas where land uses are presumed to have an impact on the adjacent incorporated city, and within which the cities' concerns are to be given serious consideration as part of the land use review process. The urban area is considered to be the next logical area in which urban development may occur and the area within which Urban Development Boundaries may ultimately be expanded."*

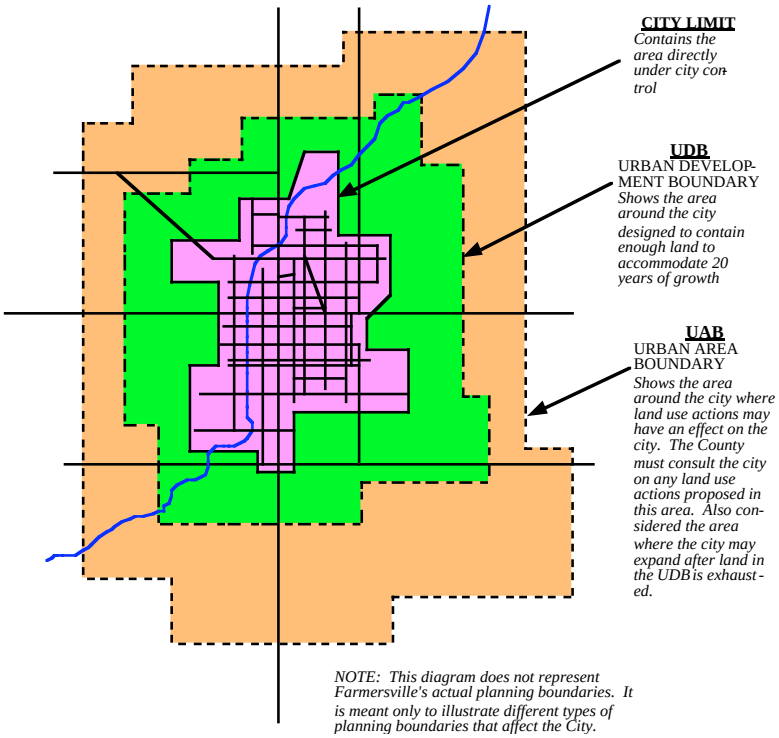
The UDB line is defined as:

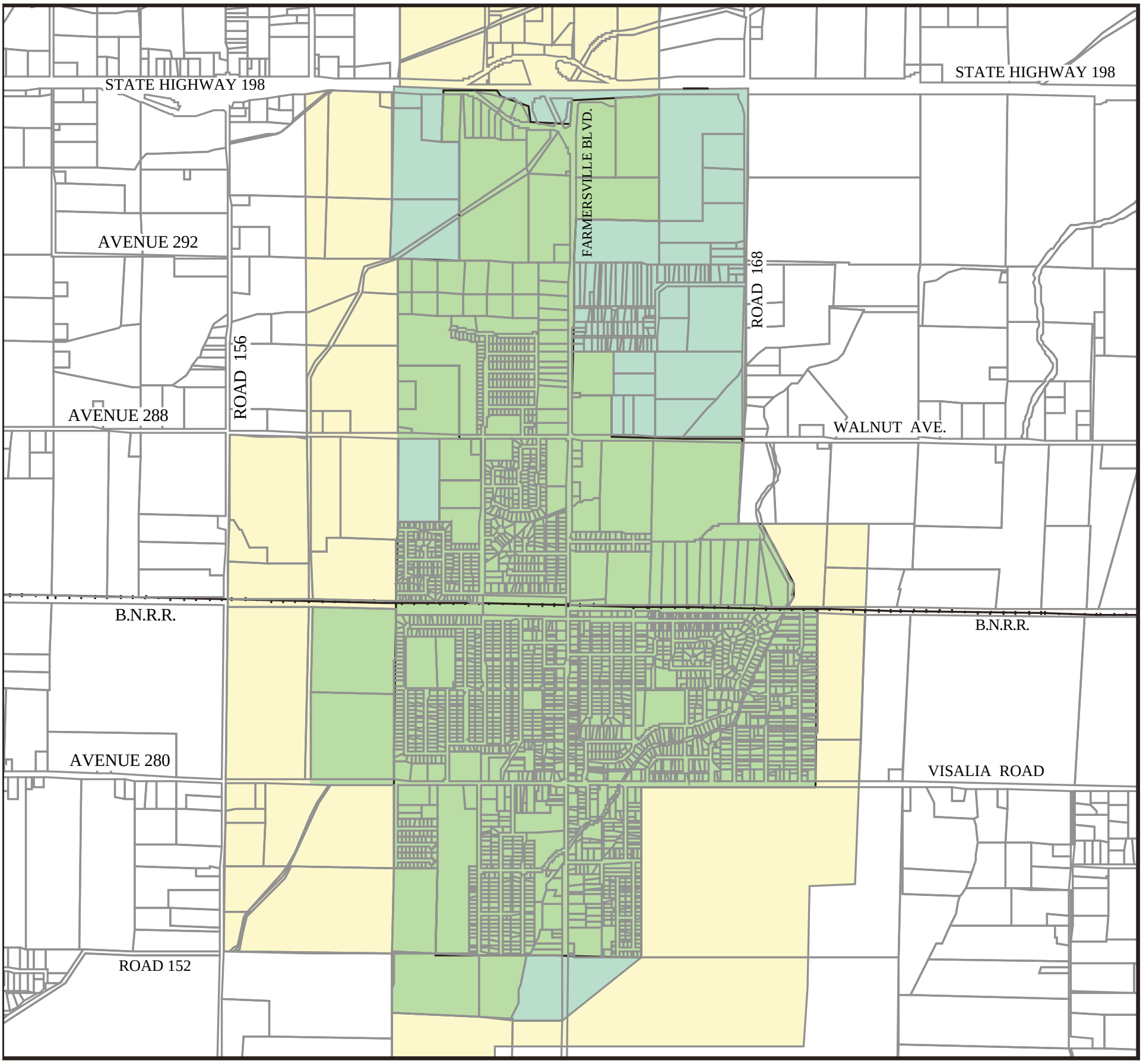
> *"... a 20-year planning boundary within which urban development is expected to occur over the plan period.*

The UAB and UDB lines were adopted by the city in 1999 and by the county in 2000. The UAB line contains 4.8 square miles (3,075 acres); the UDB line, 2.9 square miles (1,846 acres); and the city limits line, 1.8 square miles (1,155 acres). (Map 1-2).

The planning area contains the urbanized portion of Farmersville, the Tulare County subdivision known as Cameron Creek Colony, Linnell Camp - a Tulare County Housing Authority community, rural residential development, scattered industrial developments and agricultural lands. The dominant agricultural crop is walnut orchards.

A definition of planning boundaries in Tulare County





Planning Area Boundaries

(as of 12/18/06)

City Limits

Urban Development Boundary

Urban Area Boundary

Avenue 288 Streets

Parcels

Railroads

City of Farmersville

Map 1-2

500 0 500 1,000 Feet

Collins & Schoettler
PLANNING CONSULTANTS

Planning Period

The Farmersville General Plan update will be a 23-year plan, 2002 - 2025. Every five years, it should be reviewed and updated to insure that it is reflective of changes in community attitudes and market forces.

State planning law permits the mandatory elements of the General Plan to be amended as often as four times per year. This provision in State law allows the city to "fine-tune" its General Plan; however, since the General Plan is a "public" document, any amendment should have the broad support of the public.

The General Plan update is intended to guide Farmersville's planning for a twenty-three year period, from the year 2002 to 2025.

General Plan Objectives

The objectives of the Farmersville General Plan are to:

- project Farmersville's future growth and make provisions for this growth through the General Plan;
- create a unique and attractive city by investing in projects that will enhance Farmersville's appearance and marketability;
- provide a safe and pleasant environment and enhance property values throughout the community by avoiding and eliminating land use conflicts;
- promote increased sales tax revenue in Farmersville by providing sufficient land for a wide range of commercial uses.
- Protect and preserve natural resources, such as farmland, air and water quality and native vegetation, while facilitating growth of the community.
- provide for a greater variety of housing choices and shopping opportunities;
- ensure that there are adequate public facilities to serve Farmersville in the future;
- ensure that Farmersville's infrastructure system can effectively serve the land use framework;

Farmersville's economy is supported by agriculture. The need to grow while preserving agricultural land presents a challenge for the future.

- enhance the character of Farmersville by creating an improved and revitalized downtown area;
- promote economic development and enhanced employment opportunities in Farmersville by designating sufficient land for industrial uses, retail stores, and office parks;
- recognize the changing conditions and trends in the planning area and market place and make appropriate amendments to the General Plan;
- recognize past land use approval actions and adopted land use policies;

Promote economic development and enhanced employment opportunities in Farmersville

What is the legal background for the General Plan?

Planners and decision-makers have likened the General Plan to the U.S. Constitution in that decisions regarding land use, circulation, housing and capital improvements must be consistent with the goals, objectives and policies of this document. In City of Santa Ana v. City of Garden Grove, 100 Cal. App. 3d 521, 532 (1979), the court of appeal, in explaining California's general plan legislation in 1971, stated it has:

> *". . . transformed the general plan from just an "interesting study" to the basic land use charter governing the direction of future land use in the local jurisdiction . . . . As a result, general plans now embody fundamental land use decisions that guide the future growth and development of cities."*

The General Plan has been called the equivalent of the U.S. Constitution for cities.

All Actions of a City Must be Consistent with the General Plan

City decisions that are not consistent with the General Plan place that community in a legally tenuous position and subject to legal challenge. In Friends of "B" Street . et. al. v. City of Hayward, et. al., 106 Cal. App. 3d 988 (1980), the court concluded that construction of public improvements (e.g. street projects, sewer lines, etc.) must be consistent with the General Plan. Further, the court stated that the General Plan essentially is the constitution for all future development within the city.

A General Plan, which is internally inconsistent, lacks one or more of the mandatory elements, or is lacking required information, can potentially prevent a city from issuing land use approvals, including building permits, zone changes, and subdivisions, if the Court finds that any one of the aforementioned conditions exist (Sierra Club v. Kern County, 126 Cal. App. 3d 698, 704 (1981); Resource Defense Fund v. County of Santa Cruz, 133 Cal. App. 3d 800, 803 (1982); Camp v. Mendocino, 123 Cal. App. 3d 334 (1981)).

For example, the Farmersville Housing Element may include a policy that states that the city provide adequate sites for a range of housing types, including multi-family residential uses. The Land Use Element would have to be consistent with this policy by designating sufficient land area for this type of development.

Another example of inter-element consistency involves the use of population projections, which is the basis for future land needs for housing units and other types of land uses. The Land Use and Housing Elements should use the same population projections in their needs analysis to avoid inter-element inconsistencies.

The courts have enacted a building moratorium in cities that have violated their general plans, or that have not updated their plans.

How is this document organized?

The Farmersville General Plan and accompanying environmental impact report are combined into one document. Part 1 contains four of the seven state-mandated elements of the General Plan. These elements are: land use, circulation, and two elements that have been combined, the open space/conservation element. Each element is generally formatted as follows:

PART 1: GENERAL PLAN ELEMENTS

I. Introduction

II. Existing Conditions

III. Projections

IV. Goals

V. The Plan

- A. Issue
- B. Policy
- C. Action Program

Part 2 contains existing conditions (background information) on the City of Farmersville. It is support information for the three general plan elements found in Part 1 and serves as the existing conditions section of the environmental impact report (EIR) contained in Part 3. It is formatted as follows:

Part 2: Existing Conditions

I. Human Environment

- A. Population
- B. Socio-economic Conditions
- C. Housing Characteristics
- D. Services
- E. Land Use
- F. Infrastructure

II. Physical Environment

- A. Climate
- B. Topography

Farmersville's General Plan update is organized into three main parts:

1. General Plan elements
Consisting of four elements:
- *Land Use*
- *Circulation*
- *Open Space*
- *Conservation*

2. Existing Conditions
A discussion of existing conditions in the planning area

3. Environmental Impact Report
An analysis of environmental effects that will result from the General Plan

C. Soils
D. Geology

III. Resources

A. Scenic
B. Agricultural
C. Cultural
D. Biotic
E. Air Quality
F. Water Quality

IV. Risk of Upset

A. Flooding
B. Noise
C. Seismic

Part 3 of this document contains the Environmental Impact Report (EIR) prepared for the Farmersville General Plan. This part of the document discusses the environmental impacts associated with the implementation of the General Plan. In addition, it lists mitigation measures and discusses plan alternatives that can reduce the General Plan's impact on the environment. The EIR is organized as follows:

Part 3: Environmental Impact Report

I. Executive Summary
II. Introduction
III. Project Description
IV. Environmental Setting (see Part 2)
V. Environmental Impact Analysis
VI. Unavoidable Adverse Environmental Impacts
VII. Alternatives to the Proposed Actions
VIII. Growth-Inducing Impacts
IX. Long-Term Implications of the Proposed Project
X. Cumulative Impacts
XI. Effects Found Not to be Significant
XII. Persons and Agencies Consulted

Preparation of the General Plan also requires Farmersville to undertake an Environmental Impact Report. This is because the growth that is accommodated by the General Plan will have significant impacts on the environment.

CHAPTER 2: LAND USE ELEMENT

Introduction

The Land Use Element is the most prominent of the seven mandatory elements of the General Plan. It, more so than the other elements, has the most significant impact on existing and future Farmersville residents. It is the element that determines the general location of residential, commercial, industrial, public and open space uses and it discloses building intensities and population densities for the planning area.

In planning circles, the land use and circulation elements of the General Plan have been termed the "blueprints" for the development of a city. The goals, policies, and implementation measures of the elements are considered to be the "instructions" for the blueprints.

The Farmersville Land Use Element contains seven sections:

1) existing land use patterns and population trends;

2) population and land use projections;

3) land use designations and population densities;

4) planning issues and land use goals;

5) land use policies and actions (implementation measures);

6) land use designation/zoning district matrix; and a

7) land use map.

Existing Land Use Patterns and Population Trends

Farmersville's urban area is generally centered along Farmersville Boulevard, the city's major north/south roadway. The city's downtown commercial area is situated along Farmersville Boulevard generally between Visalia Road and Front Street. Additional commercial areas are located on Visalia Road, east and west of Farmersville Boulevard and on Farmersville Blvd., north of Front Street and south of Visalia Road.

Residential neighborhoods are situated in all quadrants of the community. The oldest neighborhoods are located around the intersection of Farmersville Blvd. and Visalia Road. Newer residential development is occurring in the northwest portion of the community, north and south of Walnut Avenue. The community has a very limited amount of industrial development. A nut/fruit drying facility is located in the center of the urban area, on the east side of Farmersville Boulevard, north of the railroad. There is a cement mixing operation in the city's only industrial park on Terry Avenue, on the west side of Farmersville Boulevard.

Prominent public uses in Farmersville include the five campuses operated by Farmersville Unified School District. These include Farmersville High School on Walnut Avenue, west of Farmersville Boulevard, Farmersville Junior High School on Virginia Avenue and Ash Street, Hester Elementary School on Ash Street and Rose Avenue, and Snowden Elementary School and the continuation high school on Farmersville Boulevard , south of Visalia Road. Major city-owned facilities include six neighborhood parks, the Farmersville Civic Center on Visalia Road and Virginia Avenue, Public Works yard on Farmersville Boulevard, south of Tulare Street, two city-operated child-care centers and the city's wastewater treatment plant, located southwest of the urban area.

As of the year 2002, Farmersville's city limits contained 1,205 acres, approximately 1.9 square miles. The Urban Development Boundary contains 1,726 acres and the Urban Area Boundary contains approximately 2,952 acres. Table 2-1 shows the makeup of land uses within the city limits, UDB and UAB.

Table 2-1
Existing Land Use Acreages

	City Limits	Urban Development Boundary	Urban Area Boundary	Total
Single Family Residential	416	76	35	527
Multi-Family Residential	21.8	0.9	63.7	86
General Commercial	27.5	2.3	0	30
Service Commercial	16.1	0.4	1.4	18
Industrial	32.4	0	41.8	74
Agricultural	193.5	357	924	1,474
Parks	14.4	0	0	14
Public/Quasi-Public	62.5	31	35.9	129
Schools	76.9	0	5.2	82
Waterways	7.4	0	16.4	24
Vacant	185.8	13.8	14.9	215
Right-of-Way	151	150	283	
Total	1,205	631	1,421	
Total acreage in Plann ing Boundary	1,205	1,686	2,957	

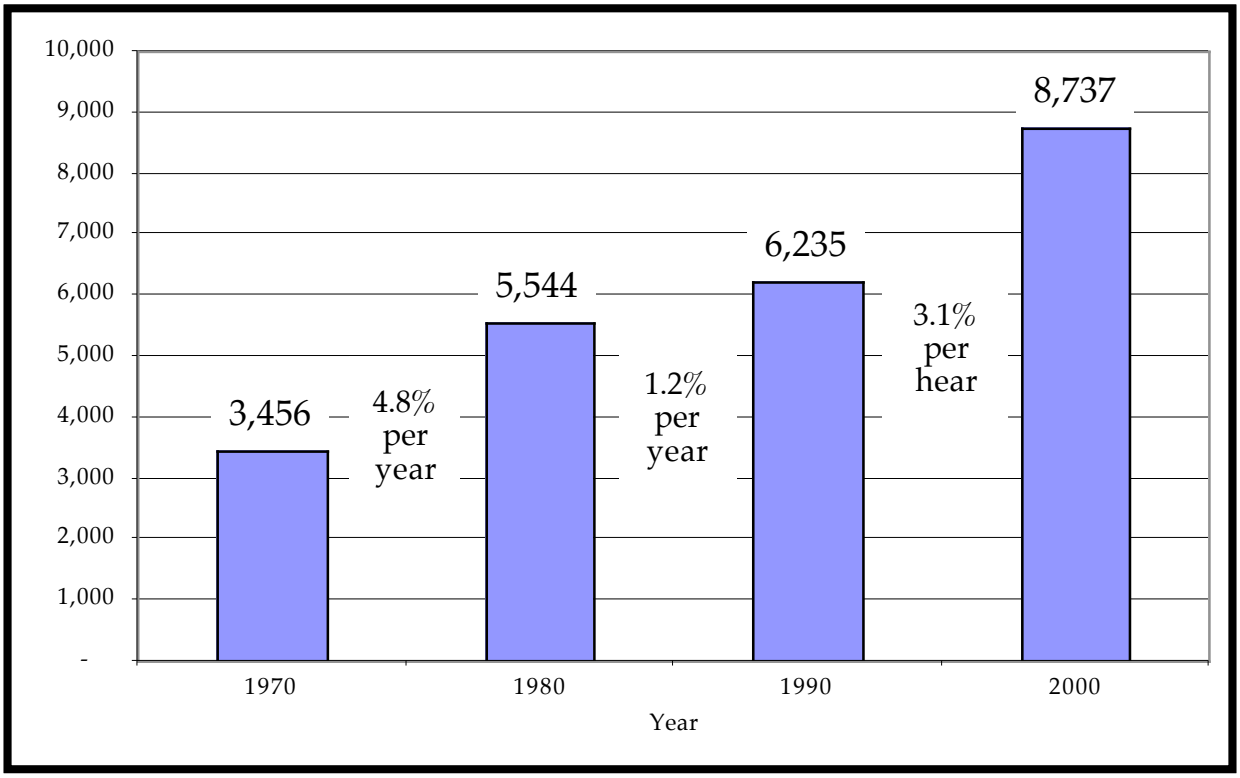
Since 1990, Farmersville has been averaging 35 new single family and 7 multiple family residential units per year.

Population

From 1990 to 2000, Farmersville's population growth during this time period has been about 3.4% per year. This ranks highest of Tulare County's eight incorporated cities. Exeter experienced a rate of 2.3% per year, Visalia, 1.9%, Lindsay, 2.1% and Woodlake 1.6%. Farmersville's population growth of 3.4% per year averages out to about 250 persons per year.

Chart 2-1 display's Farmersville's historic growth since 1970.

Chart 2-1
Population Growth
1970 - 2000



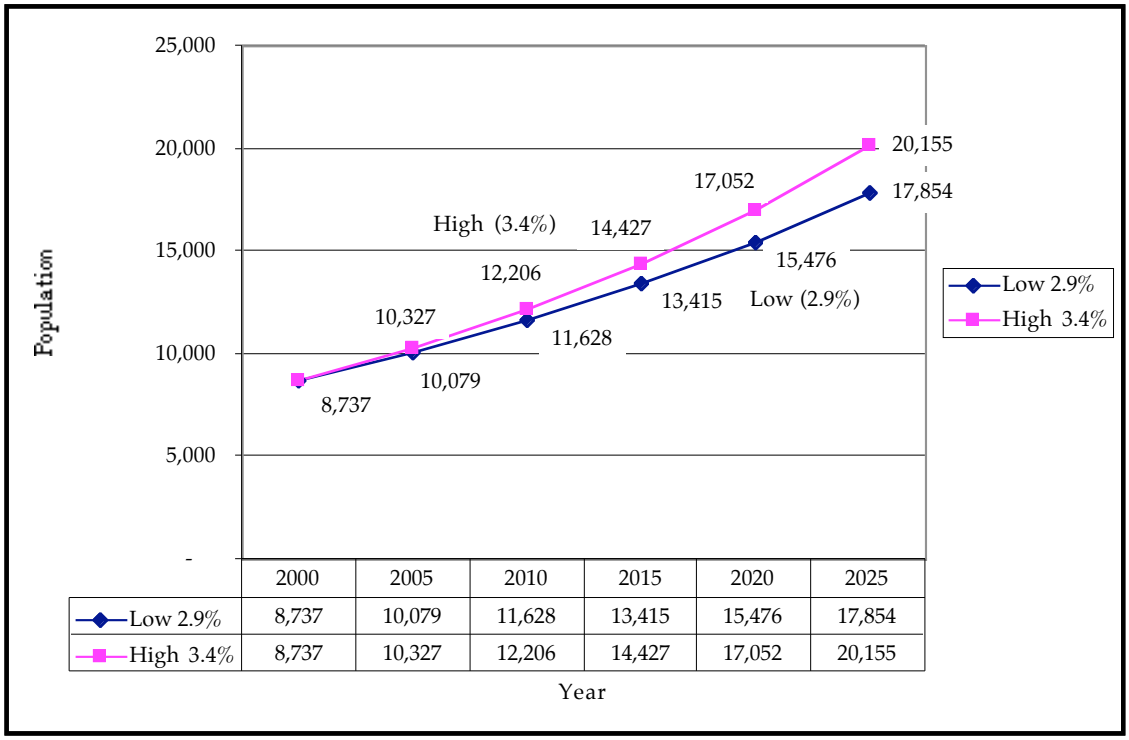
Population and Land Use Projections

Population Projections

In order to determine the amount of land needed for urban development in Farmersville over the next 23 years, 2002 to 2025, population projections are required. Two population projection scenarios (low and high) are provided in the Plan.

These population figures are projections from the base year of 2000, provided by the U.S. Census Bureau. The Plan's "low" population projection is based on Farmersville's average annual growth rate from 1980 to 2000 (2.9 percent); its "high" population projection is based on the average annual growth rate from 1990 to 2000 (3.4 percent).

Chart 2-2
Population Projections



Source: U.S. Census Bureau; State Department of Finance; Collins & Schoettler, 2000

How Much Land Will Farmersville Need to Accommodate Expected Growth?

This section provides projections of land that will be needed to accommodate expected growth of Farmersville through the year 2025. These land use projections are based on the previously discussed population projections and land use statistics.

Additional data factored into the land use projections include persons per dwelling unit, acres of parkland per 1,000 persons, residential densities, size of school sites, etc.

RESIDENTIAL LAND DEMAND, 2025

Residential land demand assumptions

- The number of persons per residential unit will be 3.66 persons (California Department of Finance, 2000).

- Future dwelling types will fall into the following categories:

    - 84% will be single family dwellings,
    - 12% will be multiple family units,
    - 4% will be mobile homes (Source: 2000 Department of Finance).

    - Single family dwellings will occur on 7,000 square foot (average) parcels
    - Multiple family development will be allowed at an average density of one unit per 2,500 square feet.
    - Mobile homes will typically be developed in mobile home parks on 3,000 square foot individual parcels.

- The residential land demands for single family housing development will be increased by a factor of 25 percent to account for land consumed by street rights-of-way, and will be increased by 15 percent for multiple family and mobile home developments.

- Farmersville has about 80 acres of existing vacant land zoned R-1 and 3.95 acres of existing vacant land zoned R-M.

Residential Land Demand, 2025

Population Growth:

17,854 (2025 projected population) - 7,701 (2000 population) =

10,153 persons

Housing Units Needed:

10,153 persons / 3.66 persons per residential unit =

2,774 residential units

Expected Housing Types:

2,774 residential units x 84 percent single family units = **2,330 units**

2,774 residential units x 12 percent multi-family units = **333 units**

2,774 residential units x 4 percent mobile home units = **111 units**

Single Family Residential:

2,330 x 7,000 square feet x 1.25 (right-of-way factor) = 468 acres - 80 existing vacant R-1 acres =

388 acres needed

Multiple Family Residential:

333 units x 2,500 square feet x 1.15 (right-of-way factor) = 22 acres - 4 existing vacant R-M acres =

18 acres needed

Mobile Homes:

111 mobile home units x 3,000 square feet x 1.15 (right-of-way factor) =

9 acres

Total Residential Acreage Needed: 415 acres

The residential land use projections indicate that 415 acres will be needed to accommodate residential growth through the year 2025.

COMMERCIAL LAND DEMAND, 2025

Commercial land demand assumptions

- Retail commercial/office uses will continue to be intermixed
- The bulk of new commercial/office developments will be one-story buildings.
- Farmersville has 44 acres of existing commercial development.
- Farmersville has 22 acres of existing vacant land zoned C-G ("General Commercial), and 12 acres of existing vacant land zoned C-S (Service Commercial).
- Compared to other Tulare County cities, Farmersville is presently grossly "underserved" by commercial development.

Commercial/office land demand, 2025

Existing Commercial "Need":

7,701 (2000 population)/44 acres of existing commercial/office development =

1 acre commercial/office per 175 persons

Future Commercial Need

1 acre commercial/office space per 175 persons / 10,153 (additional 2025 population) =

58 acres needed through the year 2025.

58 acres - 34 acres of vacant/undeveloped land zoned "Commercial" =

24 acres of commercial/office land needed through 2025.

Farmersville has a need for 24 acres of additional commercial development through the year 2025. If the city's commercial development level was on a par with other Tulare County cities, this total could be significantly higher.

INDUSTRIAL LAND DEMAND, 2025

Industrial land demand assumptions

- Industrial uses do not require the high visibility that retail commercial/office uses require.
- Farmersville has approximately 32 acres of industrial land (2000)
- Farmersville has 82 vacant acres zoned for industrial uses.
- Compared to other Tulare County cities, Farmersville is grossly "underserved" by industrial development.
- Some of Farmersville's vacant industrial land is located within a flood plain and is therefore difficult to market and develop.

Industrial land demand, 2025

Existing Industrial "Need":

7,701 (2000 population)/32 acres of existing industrial lands (2000) =

1 acre industrial use per 240 persons.

Future Industrial Need:

1 acre of industrial per 240 persons / 10,153 (additional 2020 population) =

42 acres industrial land needed.

42 acres industrial lands needed - 82 acres existing industrial uses =

-65 acres needed for industrial uses.

No additional land needed for industrial uses by 2020. However, Farmersville is very "under-developed" in the category of industrial uses. Therefore, the projected need is expected to be under-estimated.

PARK LAND DEMAND, 2025

Parkland demand assumptions

- The City of Farmersville has a standard of developing three acres of parkland for every 1,000 persons. The current (2000) population of 8,737 should be served by 23.1 acres of park land. The existing total of developed park land in 2000 is 13 acres. Therefore, Farmersville is presently deficient on park acreage by 10 acres.

- Open space on school sites will not be counted as parkland.

Parkland Demand, 2025

Three acres of parkland per 1,000 persons x 10,153 (additional 2025 population) =

30.5 additional acres of parkland needed through the year 2025.

Farmersville presently is short ten acres on parkland. Therefore, 30.5 + 10 = 40.5 acres.

40.5 acres of parkland needed by 2025

SCHOOL LAND DEMAND, 2025

School land demand assumptions

- This study assumes a general standard for elementary schools that provides for an enrollment of 600 to 700 students and a school site ranging from 10 to 12 acres. The standard for middle schools shall provide an enrollment of 750 to 900 students and a school site ranging from 18 to 20 acres. The standard for high schools shall provide an enrollment of 1,500 to 2,000 students and a school site of 40 acres or more.

School land demand, 2025

The school district has indicated a need for an additional elementary campus in the next several years.

There are currently 52 acres of land reserved for future school development, south of the existing high school. It is assumed that this land will accommodate Farmersville's school needs through the year 2025.

CONCLUSIONS

The above analysis shows that Farmersville will need the following amount of land through the year 2025.

Residential: 415 acres

Commercial: 24 acres (there are presently 33 acres commercially-zoned undeveloped land)

Industrial: 17 acres (there are presently 82 acres of agricultural and vacant land)

Parks: 41 acres

Schools: 12 acres (52 vacant acres of land designated for schools exist)

Total: 456 acres - existing vacant/ag zoned land (commercial, industrial, schools) = 190 acres - existing zoned land (commercial, industrial, schools) = 289 acres needed

The projections above indicate that a total of approximately 456 acres of "undeveloped" land will be needed to accommodate expected urban growth in Farmersville through the year 2025. Because there is already sufficient "undeveloped" land in the commercial, industrial and schools categories, the actual land demand is about 290 acres.

In order to ensure that the real estate market does not become overly restricted (artificially forcing up land prices), the land demand figure (290 acres) shall be increased by 40 percent as follows:

290 x 40% = 116 acres. 290 + 116 = 406 acres.

Farmersville's current city limits (not including the wastewater treatment plant) contain 1,181 acres. Adding 406 acres results in a total area of 1,587 acres. The existing city Urban Development Boundary contains 1,726 acres.

Therefore, this analysis indicates that there is more than enough land within the Urban Development Boundary

needed to accommodate growth to the year 2025. As noted previously, however, city officials consider Farmersville to be grossly under-developed with commercial and industrial development, as compared other Tulare County cities. As such, the land demand projections should be tempered by this realization.

Land Use Designations and Population Densities

The following land use categories are established to implement the policies of the Farmersville General Plan.

These land use categories pertain to six typical land use activities:

- Residential;
- Commercial;
- Industrial;
- Public;
- Open space and
- Agricultural/Urban Reserve.

These categories are further refined into more specific designations below. For example, the plan establishes three residential categories - these are based on the density of development, such as single family, multi-family residential, and so forth.

For residential land use designations, maximum population densities are provided, as required by State law.

Residential

Low Density - a maximum of 5 dwelling units per gross acre, or 14 persons per acre. Development in this category shall be required to install curbs, gutters, sidewalks and street lights, and connect to the city's sewer, storm drain and water systems.

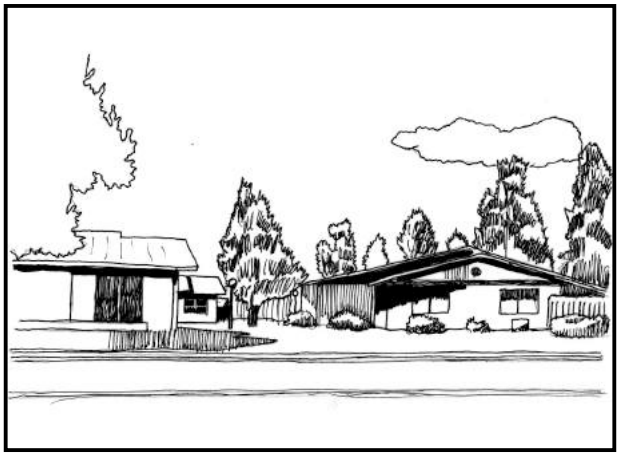
This designation shall be reserved for those lands that are appropriate for single family residential developments. Uses that are typically associated with single family neighborhoods, such as churches, day-care centers, community centers, parks, and schools, shall also be permitted, subject to appropriate permits. These lands shall generally be located in areas of the community that are free from conflicting land uses, such as industrial and service commercial uses.

Medium Density - a maximum of 15 dwelling units per gross acre, or 42 persons per acre. Development in this category shall be required to install all the same improvements that are required in the low density residential designation.

Medium density development could encompass a mix of single family and multi-family uses, including duplex, tri-plex, four-plex units and mobile home parks.

These lands shall generally be located in areas of the community that are free from conflicting land uses, such as industrial and service commercial uses.

Medium-High Density - a maximum of 29 dwelling units per gross acre, or 84 persons per acre. Development in this category could encompass apartment complexes, senior citizen projects and condominiums.



These lands shall generally be located in areas of the community that are free from conflicting land uses, are located near the center of Farmersville, and are generally situated on major street corner lots, or along major streets.

Commercial

Farmersville's current General Plan only provides for one commercial category. It is the intent of this General Plan to increase this number to four commercial categories:

- General Commercial;
- Central Commercial; and
- Service Commercial
- Highway Commercial

General commercial designations shall be reserved for properties generally located on Farmersville Blvd. and Visalia Road, outside the downtown area (which is designated Central Commercial).

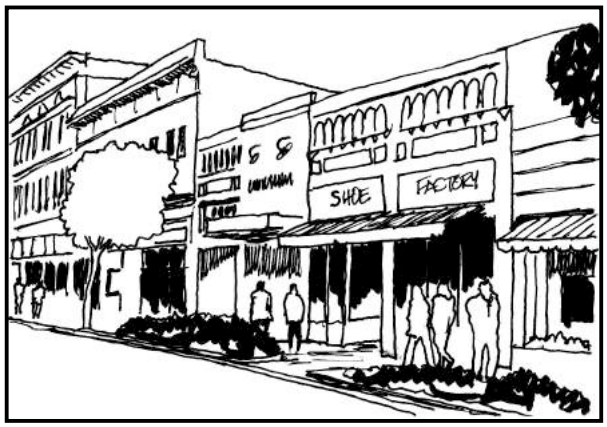
This designation shall provide for shopping centers, retail uses, and offices.

Development within this designation will have the following distinguishing features - new development will be required to be landscaped, parking shall be constructed off-street, signs shall be regulated and new uses or extensive expansion of existing uses shall require site plan review or a conditional use permit, as determined by the Farmersville Zoning Ordinance.

Service commercial is a new designation that provides for uses that include a mix of light industrial and "heavy" commercial uses. In particular, uses such as auto repair should be directed into this category.

Development with this designation will have the following distinguishing features - new development will have landscaping, parking shall be off-street, all visible equipment and storage areas shall be fenced and screened from public view, signs will be regulated and new uses or extensive expansion of existing uses shall require site plan review or a conditional use permit, as determined by the Farmersville Zoning Ordinance.

Central commercial designations shall be reserved for those properties located in the central commercial area, generally fronting along Farmersville Boulevard and Visalia Road, in the vicinity of the intersection of those two streets.



It is the goal of the General Plan to foster a downtown atmosphere of stores fronting directly on the street with display windows catering to pedestrian shopping. Parking facilities should be located to the rear or to the side of buildings.

Development with this designation will have the following distinguishing features - the buildings will generally be built to back of sidewalk, parking shall be generally located at the rear or side of the building, signs shall be regulated and shall be pedestrian-oriented, the architectural design of the building will be compatible with a downtown environment, and new uses or extensive expansion of existing uses shall require site plan review or a conditional use permit, as determined by the Farmersville Zoning Ordinance.

In order to permit design flexibility and prevent the creation of large parking lots in the downtown area (thereby eroding the pedestrian character of this area) the City should consider allowing reduced parking requirements for uses in the Central Commercial area. It is suggested that the Zoning Ordinance's parking requirements be reduced by 25% for commercial and public uses in the Central Commercial area.

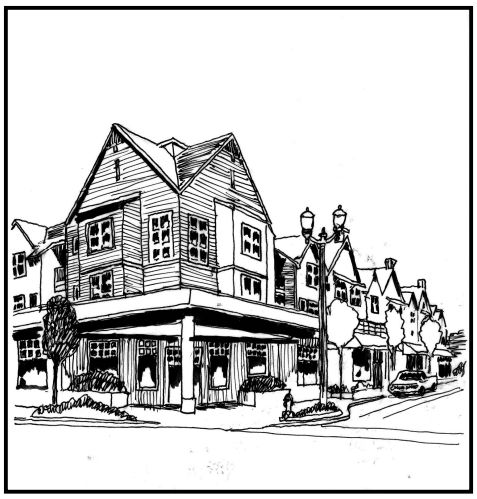
Highway Commercial

The Highway Commercial designation is intended to provide for commercial uses that cater to the travelling public along State Route 198. Highway-oriented uses should include service stations, convenience stores, restaurants and lodging establishments.

Development within this designation be required to be landscaped, parking shall be constructed off-street, signs shall be regulated and new uses or extensive expansion of existing uses shall require site plan review or a conditional use permit, as determined by the Farmersville Zoning Ordinance.

Mixed Use Overlay

This designation is intended to encourage flexibility in new development by allowing for the combination of residential, office and commercial uses on one site. The designation recognizes that before the advent of modern zoning, most cities allowed combinations of these types of uses. For instance, many communities had multi-story buildings (particularly in their downtowns) that featured



retail commercial or offices on the ground floor, and living units on upper floors. This arrangement potentially allows one to live and work in close proximity, without the need for an automobile. It also sets up a dynamic urban atmosphere where various land

uses inter-relate with one another in a unique way not possible in a typical "suburban" setting.

Projects approved with this designation shall require Conditional Use Permit approval and will be developed in accordance with a new "Mixed Use" zoning designation. This concept is further addressed in the policy section of the Land Use Element.

Industry

This designation will provide for uses that are involved in manufacturing, processing, warehousing, and certain service commercial uses.

Development with this designation will have the following distinguishing features - the subject site will be landscaped, parking lots will be constructed off-street and will be landscaped, storage areas shall be fenced and screened, signs shall be regulated and new uses or extensive expansion of existing uses shall require site plan review or a conditional use permit, as determined by the Farmersville Zoning Ordinance.

Public Facilities

This designation is reserved for facilities that are operated by public agencies, including schools, the post office, City Hall, other City-operated facilities and county offices.

New development with this designation will have the following distinguishing features - the subject site will be

landscaped, parking lots will be constructed off-street and will be landscaped, signs shall be regulated and new uses shall undergo site plan review. Schools should receive special attention in regards to pedestrian, bike and bus circulation.

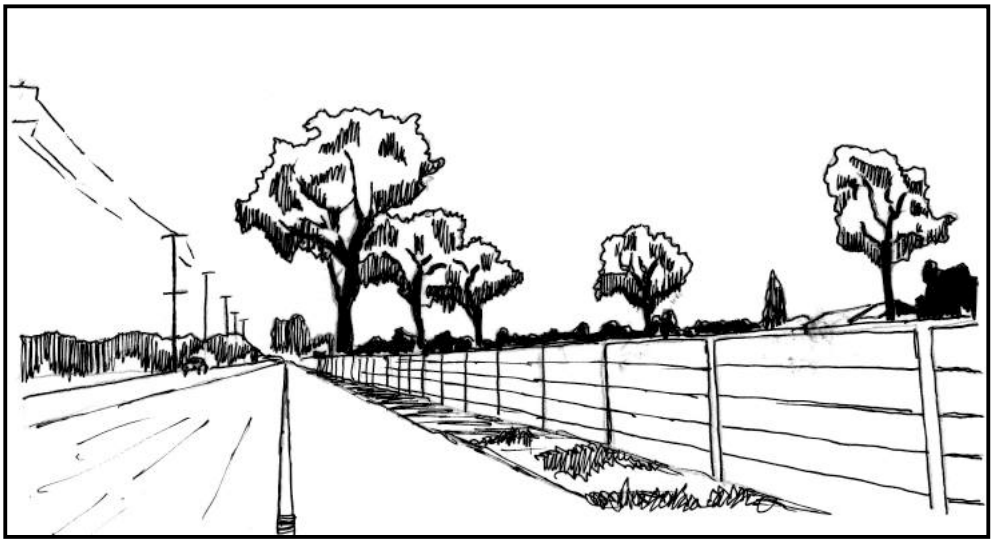
Open Space

This designation is applied to lands that will remain generally free of buildings. Uses that would receive this designation would include parks, playing fields, and golf courses.

Urban Reserve (Agriculture)

This designation is applied to lands that are being, or have the capacity to be, actively farmed but are within the planning area and proposed to be eventually developed.

Further, this designation could also be applied to lands that contain agriculturally-related uses, such as packing houses, cold storage operations or agriculturally-related businesses. The purpose of this designation is to protect agriculture from urban encroachment, maintain land in agriculture until the time is appropriate for conversion to urban uses, and to ensure that conflicts do not arise between agriculture and urban uses.



LAND USE GOALS, OBJECTIVES AND ACTION PLANS

This section of the Land Use Element establishes goals, objectives and actions, to guide Farmersville's growth through the year 2025.

Land use goals express general community values. They are the community's vision for its future. They can refer to image and appearance, economic viability, health and safety, preservation of resources or fiscal soundness, among other issues. Goals are refined into objectives and action plans. These represent concrete actions the city will take to ensure that goals are realized. Goals, objectives and action plans are organized under topical issues, including:

Land use goals express general community values. They are the community's vision for its future.

- Community Image
- Growth Management
- Agricultural Land
- Residential Neighborhoods
- Commercial Development
- Industrial Development
- Downtown
- Public Facilities
- Schools
- Economic Development
- Infrastructure
- Public Safety
- Public Participation
- Special Issues
    - Cameron Creek Colony
    - Linnel Farm Labor Center
    - State Highway 198
- Appendix A: Smart Growth Primer

ISSUE ONE: **Community Image**

Image is an important community assest in that it can influence how people feel about their city. If a community has a positive image, a strong sense of community and pride can result.

A community that is clean, well-maintained, visually appealling and properly planned will:

- Attract outside investment;
- Encourage people to maintain their property;
- Cause real estate values to appreciate; and
- Stimulate city revenues - tax increment, sales tax and transient occupancy (lodging) taxes.

Goals, Objectives, Action Plans

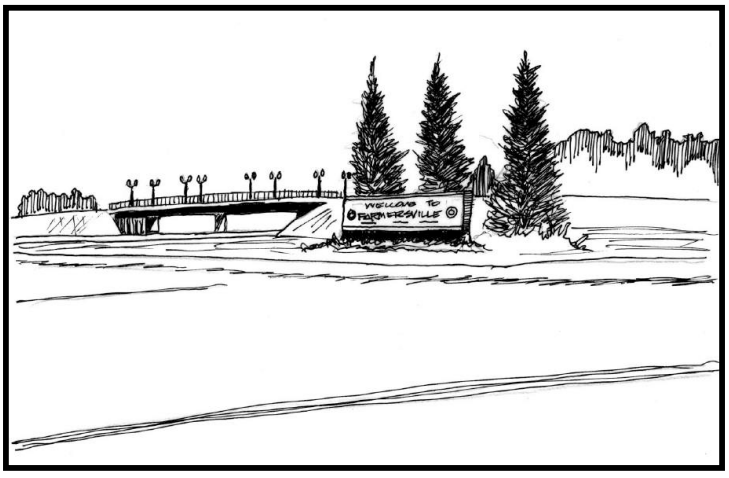
Public Improvements

I. Foster an attractive, clean and well-maintained community.

1. The City should design and install "Welcome to Farmersville" community identification signs at the Highway 198/Farmersville Boulevard interchange.

    a. The City should hold a design contest for the design of the sign. Various funding sources should be identified, including sponsorships, donations, memorials, etc. The City must coordinate with Caltrans on the design and installation of such signs.

2. The City should explore the creation of a downtown maintenance district to pay for the cost of maintaining improvements in the downtown, such as landscaping, street furniture, parking lots and lighting.



"Welcome to Farmersville" sign and landscaping at Hwy. 198 interchange

3. The City should facilitate a landscaping program in appropriate locations, such as parks, future street medians and within the downtown that promotes shading, color, and aesthetically pleasing forms.

    a. The City should seek funding to pay for landscape improvements. In addition to grant monies, the city should explore establishing a development impact fee that pays for the construction and landscaping of street medians and landscape planters.

    b. The City should apply for an urban forestry grant to pay for the planting of trees within sidewalks along major streets, including Farmersville Boulevard, Visalia Road and Walnut Avenue.

Code Enforcement/Property Maintenance

1. The City shall ensure that street sweeping, trash pickup, and the maintenance of public grounds and buildings are completed on a regular basis.

    a. Ensure these tasks are adequately funded and staffed. Consider adding a development impact fee to fund these activities.

2. The City shall actively enforce the State Housing Code, which provides a procedure for abating or rehabilitating unsafe, dilapidated residential structures.

    a. The Building Inspector shall report to the City Council on an annual basis progress on rehabilitating or removing unsafe residential structures.

    b. The Planning Department shall maintain a city map that identifies the location of unsafe residential dwellings.

    c. The Farmersville Redevelopment Agency should explore the use of state or federal funds to promote infill residential development while concurrently facilitating the rehabilitation of stubstandard dwellings

The need for property maintenance and code enforcement was frequently mentioned by the General Plan

and the removal of unsafe residential structures.

3. The City shall continue to actively enforce the city's vehicle abatement program and illegal parking on residential property.

    a. The City should create a property maintenance brochure that addresses the most common questions about property maintenance and code enforcement issues. This brochure should be mailed to all property owners periodically. The brochure could be sent along with other regular mailings, such as utility bills.

4. A truck-parking facility could be located at the to-be-expanded public works yard and/or within industrially-zoned areas. The facility should be fenced for security. The City could charge a small fee to recoup the cost of operating the facility.

The City shall explore creating a space for the overnight parking of "big rig" trucks by residents who are employed in trucking.

5. Farmersville shall continue to actively enforce the city's sign ordinance.

    a. The City shall review its Zoning Ordinance and if necessary, update its sign regulations.

    b. The City shall prepare a brochure that clearly explains the sign ordinance.

    c. The City should send the sign brochure to all businesses along with yearly business license renewals, as a reminder of the city's sign ordinance standards.

6. The City shall develop a standard public notice form that could be sent to persons who are violating the Farmersville Municipal Code as it relates to zoning violations, public nuisances or non-compliance under an approved site plan or conditional use permit.

I. The City should establish community "clean up" days where residents are encouraged to spruce up their property and dispose of unwanted trash.

This event should be held several times per year, as funds allow.

a. Partner with local organizations like the Boy Scouts, C-SET, and other youth organizations to assist residents in clean-ups.

b. Coordinate with Farmersville's solid waste contractor to supply refuse bins for the clean up.

Community Character and Identity

II. Create development that conveys a "sense of place" with architecture that reflects local history and traditions.

1. The City shall prepare and adopt a set of design guidelines that specifies "good" design strategies and architectural themes that reflect Farmersville's "sense of place"

III. Create a community that is free of land use conflicts.

1. Legal, non-conforming land uses should not be allowed to be enlarged physically or operationally (unless the expansion does not increase the degree of non-conformity).

2. The city shall actively enforce existing zoning and building regulations that preclude or eliminate uses of land or buildings that present conflicts for adjacent properties.

3. The city shall ensure that commercial uses do not operate in residential neighborhoods unless the operator of the commercial use has obtained a home occupation permit from the city.

4. The city should develop an urban growth strategy that minimizes the impact on urban uses on adjacent agricultural operations (see Growth Management, page 2-21).

   a. The Land Use map shall use roadways. ditches, railroads, creeks and other physical

BACKGROUND

Non-conforming uses are those that do not comply with zoning standards for the zone in which they are located. A frequent example is where a house located in a commercial zone. Because houses are not allowed in commercial zones, they are considered to be "non-conforming".

The presence of numerous non-conforming uses creates problems for the planning process. Residents of the dwelling may complain about noise or traffic generated by commercial uses. Non-conforming uses can hamper the city's ability to attract new development into the intended zone. Allowing a non-conforming use to expand only "entrenches" the use at its location, making future conversion of the site to another use even more difficult.

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features to separate urban uses from existing agricultural operations.

b. The City shall explore implementing a development impact fee that pays for the purchase of agricultural easements outside Farmersville urban area boundary line. Such easements would be used to form a greenbelt around the community (see Growth Management, Page 2-21).

Community Pride and Public Involvement

IV. Create a city that portrays a "sense of community".

1. The city should continue to promote public events and celebrations that bring citizens together, in its downtown and in other public places, like parks, schools and public buildings.

   a. Promote a Farmers Market in the downtown area, possibly closing a street for the event.

   b. Promote an Arts/Crafts Fair in the downtown.

   c. The City should contact the Urban Tree Foundation to seek their assistance in the development of a tree planting program in the downtown and on major streets, such as Farmersville Boulevard and Visalia Road.

2. The City should explore creating a "Museum of the Farm Worker". Such a museum would include exhibits and information documenting the history of farmworkers in Central California. This facility should be centrally located within the community, such as on the land adjacent to the railroad, west of Farmersville Boulevard. The facility should function as a multi-use site, with festivals, meetings and other events. Finally, the building should also make a positive architectural statement that is related to Central California's farming heritage.

BACKGROUND

The idea of establishing a Museum of the Farmworker was raised by participants during General Plan Committee meetings, as a way to key into Farmersville's identity.

a. The City, and Chamber of Commerce should establish a committee to pursue this goal.

3. The City shall continue to work with the Chamber of Commerce to promote community events, such as the Memorial Day Parade, and Christmas Tree Lighting Ceremony.

V. Foster a friendly community that encourages public involvement.

1. The City should form additional citizen advisory committees that report to the City Council on various topics, including beatification, recreation, circulation, etc.

   a. The to-be-formed beautification committee should work with the Urban Tree Foundation to develop a city-wide tree planting program. The city should apply for tree grants to fund this program .

2. The City should convene an annual study session with Farmersville Unified School District (F.U.S.D.) to discuss planning matters that are of mutual interest.

   a. The City Manager will coordinate with the F.U.S.D. to set a date for a joint meeting between the two agencies. The City Manager will meet with the Farmersville Schools Superintendent to prepare an agenda for the joint meeting.

3. The City Council and Planning Commission should hold biannual study sessions to discuss planning-related matters.

   a. The City Manager and City Planner will set a date and formulate an agenda for these joint meetings.

The City should convene an annual study session with Farmersville Unified School District to discuss planning matters that are of mutual interest.

VI. Create a community that portrays an image that is progressive and energetic.

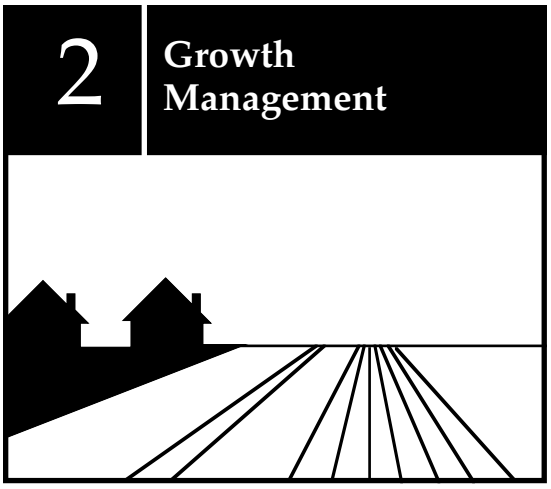
1. The City should work with other public entities and service organizations to jointly work on projects that benefit Farmersville as a whole.

    a. The City Manager and City Council should make presentations to various community organizations to solicit their help in financing, constructing and/or maintaining public art or beautification improvements, such as statues, fountains, mini-parks, specimen trees, murals or roundabouts,

ISSUE TWO: **Growth Management**

The management of Farmersville's growth - direction, rate, density and arrangement of land uses, can be beneficial from a fiscal, environmental and social perspective.

A community that is well-planned will be more attractive to potential residents, developers, companies and investors than one that is poorly planned, has numerous land use conflicts, urban sprawl, a non-viable downtown, poor ciculation patterns and disenfranchised sections of town. Furthermore, a community that is compact and is not sprawling has more efficient, cost effective infrastructure and service delivery systems than a community without these attributes.



Goals, Objectives, Action Plans

Protecting Farmersville's Boundaries

I. Maintain Farmersville as an agriculturally-oriented city surrounded by farmland.

1. To the extent possible, ensure that Farmersville is surrounded by agricultural land that is zoned for large parcel agriculture (e.g. AE-20 [20 acre minimum parcel size, or larger]).

    a. The City shall notify the County of Tulare that all land that surrounds Farmersville that is not zoned Rural Residential, Commercial or Industrial, should be zoned to the AE-20 (or larger acreage) zone. Further the City shall discourage proposals for parcelization to sizes smaller than 20 acres.

    b. Tulare County shall continue to refer applicants for urban development (subdivisions, commercial or industrial development) on lands within the Farmersville Urban Development Boundary (UDB) and Urban Area Boundary (UAB) to the City for comment and review. All development occuring within these areas must be consistent with the Farmersville General Plan.

BACKGROUND

When agricultural lands around a city are split into small parcels (such as 1/2- 2- and 5-acre "ranchettes", it erodes the viability of the land for farming. Rural residential development is also difficult to deal with when it is in the path of urban development. Rural residential residents frequently resist city efforts to grow in their direction. For these reasons, it is most advantageous for lands immediately around the city to remain in large agricultural parcels.

II. Keep Farmersville from physically merging with the cities of Visalia and Exeter.

1. The City shall meet with officials from Visalia and Exeter to explore the concept of forming a greenbelt to keep the cities from growing together

2. The City should consider a development impact fee that will be used to purchase agricultural conservation easements on lands that surround Farmersville. Such a fee could also be used to leverage additional outside grant funds.

    a. The City should work with a farmland conservation organization such as American Farmland Trust, to establish an easement program.

BACKGROUND

The need to keep Farmersville from growing together with Visalia in particular, and to a lesser extent Exeter, was voiced frequently during General Plan Committee meetings. The idea of a greenbelt to provide a buffer between the cities was supported by participants.

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New Development

III. Promote Smart Growth planning principals in order to discourage urban sprawl and the premature urbanization of agricultural land, and to create more livable neighborhoods. This issue is addressed in more detail in Appendix A: "A Smart Growth Primer".

1. The City shall amend its Zoning Ordinance to add a Smart Development District.

    a. The Smart Development District shall incorporate planning principals that promote moderate increases in residential densities, narrower streets, better connectivity in and between neighborhoods and site and architectural design that emphasizes a humanized evnironment, as opposed to an automobile-oriented environment.

    b. Smart Growth design techniques should be incorporated into Farmersville's residential and commercial zone district standards, as appropriate (see Appendix A: "A Smart Growth Primer").

2. New urban development should occur in an orderly manner with initial development

BACKGROUND

The concept of Smart Growth was explored extensively by the General Plan Committee. Appendix A contains additional information on this topic. Some of these concepts have already been embraced by area developers.

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See Appendix A: "A Smart Growth Primer"

occurring on available undeveloped properties which are closer to the existing built-up area.

a. The City should promote in-fill development and development of lands immediately adjacent to existing urbanized areas, before allowing development of outlying lands.

b. The General Plan maps designates lands further away from existing development with a "Reserve" status. Development of these lands should be delayed until land closer to the city is developed.

3. The City should promote mixed-use development where appropriate.

a. The City shall amend its Zoning Ordinance to provide for a Mixed-Use Zone District.

b. The City should identify sites in the downtown core where mixed-use development would be appropriate.

4. The City shall amend its Zoning Ordinance to permit residential development in the downtown.

a. The City shall amend the Zoning Ordinance to permit housing development in the downtown with a conditional use permit.

b. Housing units should be permitted in the upper stories of downtown buildings with a Conditional Use Permit.

BACKGROUND

Up until the mid 1940s mixed use buildings were common in American cities. Typically, shops occupied the ground floor, and residential units were situated above. The concept of separate use zones came about as a response to deplorable conditions in eastern industrial cities where people lived next to smoke-belching factories

Single use zoning has set up patterns of urban sprawl where residents must drive to make any meaningful connections in their community. This has been taken to extemes in suburban areas of California, like Orange County. Succesful mixed use development can address this situation by providing living and working places in close proximity to one another.

ISSUE THREE: **Residential Neighborhoods**

The "neighborhood" is the fundamental building block of a community. The health and quality of life of a community is best measured at the neighborhood level. If a city's neighborhoods are noisy, contain excessive traffic, unkempt, include incompatible land uses or are depreciating in value, then the community as a whole is most likely spiraling towards a condition of blight. In terms of community priorities, preservation of the neighborhood ranks as one of the its most important goals.

The ideal neighborhood should be inviting, quiet, cool in the summer, children-friendly, pedestrian oriented, achitecturally interesting and it should maintain its value over time. The neighborhood should also provide for a wide range of housing types, styles and prices.

Multi-family development (also known as apartments) is necessary in all communities. It provides housing opportunities for persons or families who do not wish to own a single family dwelling or who can not afford to rent or own one.

Improperly located, designed or maintained, multi-family development can have an adverse impact on the neighborhood and the community as a whole. To protect the health, safety and welfare of persons living adjacent to multi-family development as well as persons living in these types of units, the location, design and long-term maintenance of this type of housing must be carefully considered.

Goals, Objectives, Action Plans

Neighborhood Maintenance and Revitalization

I. Take actions to keep existing neighborhoods strong and healthy.

1. Remove substandard homes from residential neighborhoods.

    a. The City shall abate or rehabilitate substandard residential dwellings through the process established in the State Housing Code.

b. The Redevelopment Agency should consider the purchase of substandard housing in order to clear the property for new, low to moderate income housing.

2. Rehabilitate homes that have deteriorated.

a. The City should continue to apply for Community Development Block Grant (CDBG) funds to rehabilitate homes that have deteriorated.

3. Upgrade public improvements in blighted neighborhoods, including sidewalks, alleys, street trees, roadways, parkways and street lights.

a. Establish an annual objective for repairing or replacing broken curbs, gutters and sidewalks.

b. Replant vacant parkways with street trees.

c. Identify alleys that can be abandoned and initiate the process consistent with the Streets and Highways Code.

d. Upgrade alleys with pavement, where possible.

4. Encourage residential infill development in neighborhoods that are blighted.

a. Consider the reduction of development impact fees on residential infill projects.

b. Consider increasing the allowable underlying density on land that will support a residential infill project. Increased density can help make projects "pencil-out".

5. Continue to enforce the city's property maintenance ordinance.

II. The planning and building department will work together to ensure that building and zoning code violations are corrected and/or eliminated.

During the past ten years, Farmersville has rehabilitated an average of 8 homes per year, working with Self-Help Enterprises.

b. The city on a monthly basis will send out correction letters to persons who are in violation of planning or building code regulations.

6. The city will annually seek state and federal grant funds that can assist in the elimination of blight in residential neighborhoods.

   a. The City should contract with a grant writer to obtain funding.

7. The Farmersville Redevelopment Agency will use its tax increment funds and low to moderate housing income funds to eliminate conditions of blight in residential neighborhoods.

New Development

II. Promote neighborhoods that are quiet, visually pleasing, and cool.

1. The City should discourage land uses that are incompatible with residential neighborhoods.

   a. Adoption of the Land Use Element and Land Use Map will implement this policy.

III. Promote attractive, well-maintained and designed residential neighborhoods.

1. The City should develop a Smart Development Overlay Zone which promotes:

   - Narrow, tree-lined residential streets.
   - Neighborhood parks.
   - Dwellings that are architecturally reflective of historic and traditional styles used in Farmersville and the San Joaquin Valley.
   - Common areas that are maintained by Landscaping and Lighting Districts.

   a. Appendix A: "A Smart Growth Primer", includes recommendations for the creation of a Smart Growth development code.

Promote neighborhoods that are quiet, visually pleasing, and cool.

2. Encourage residential developments and adjacent land uses to be pedestrian-oriented.

    a. All residential developments with walls should provide openings for pedestrian and bike traffic.

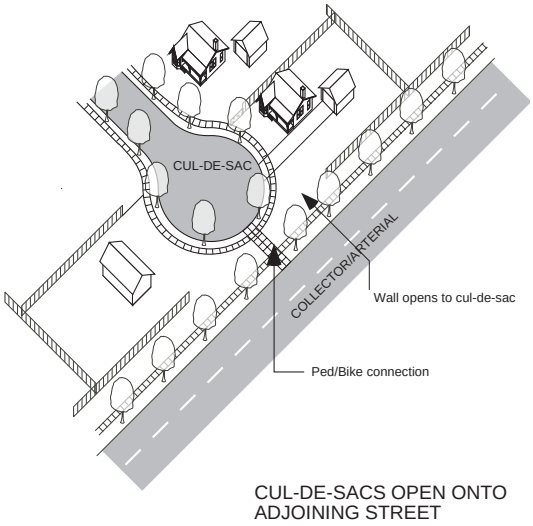
    b. Land uses adjacent to residential developments should provide for pedestrian access between the two types of developments.

    c. Permit home occupations where appropriate.

3. The City should consider promoting mixed uses in the Smart Development Overlay Zone. Examples might include a neighborhood commercial building with multi-family units next to, or above the commercial use.

IV. Protect existing neighborhoods from incompatible land uses.

1. Through the Site Plan Review and Conditional Use Permit process, ensure that the city's zoning ordinance regulations do not permit uses that will be incompatible with residential neighborhoods.



CUL-DE-SACS OPEN ONTO ADJOINING STREET

All residential developments with walls should provide openings for pedestrian and bike traffic.

<u>Multi-Family Development</u>

I. Multi-Family development shall be well-designed, well-maintained and properly sited.

1. The City shall prepare design guidelines that provide examples of good multi-family residential design.

    a. The Planning Director will work with the Planning Commission to create and adopt design guidelines (see Preliminary Guidelines, below)

2. Multi-family development shall be limited to a maximum of 40 units on any given site.

    a. The Zoning Ordinance shall be amended to incorporate this standard.

The General Plan Committee viewed numerous slide photos of different types of multi-family design. The Committee agreed that good design is possible and must be required.

The best designs were those that emulate the appearance of single family homes. Prominent design features include front doors and windows opening onto a useable front porch with railings. Parking should be situated to the rear of the building. The graphic on the following page was used to illustrate "good" multi-family residential design.

3. Multi-family developments shall be required to enter into a maintenance agreement with the City, prior to occupancy. The maintenance agreement shall be reviewed and approved by the Planning Commission.

    a. The Zoning Ordinance shall be amended to incorporate this standard.

4. The City shall explore requiring a maintenance bond be posted for new multi-family residential development.

    a. The Community Development Director and City Attorney shall research this issue and present their findings and recommendations to the City Council.

5. All multi-family residential development shall require a Conditional Use Permit.

    a. The Zoning Ordinance shall be amended to reflect this policy.

6. Duplex and triplex buildings may be integrated into single family residential subdivisions, on corner lots, through a Conditional Use Permit.

    a. The Zoning Ordinance shall be amended to incorporate this standard.

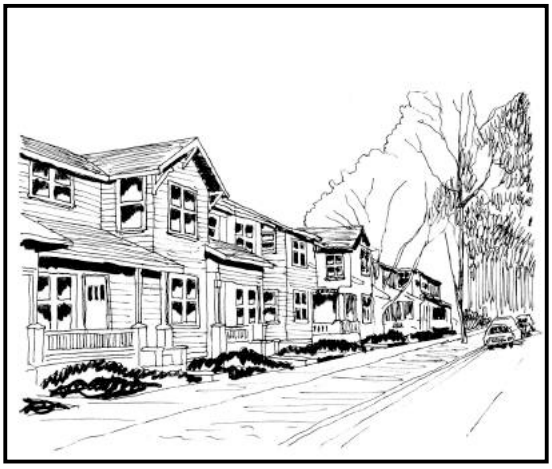
7. The City shall review the Zoning Ordinance's development standards for multi-family residential development, and amend the ordinance where deemed necessary.

    a. The Community Development Director shall review the Zoning Ordinance with the Planning Commission, who shall forward their recommendations to the City Council.

8. A traffic study shall be required for all multi-family residential projects of twenty units or greater.

    a. The Zoning Ordinance shall be amended to reflect this requirement.

The website "Affordable Housing Design Advisor" provides profiles of award-winning affordable housing projects throughout the nation, that exhibit outstanding design characteristics. Go to http://www.designadvisor.org/ for more information. Prospective affordable housing developers should be referred to this website prior to submitting plans.



Farmersville's vision for multi-family residential housing. Units face onto the street with porches, front doors and windows. This type of design improves neighborhood security by placing more "eyes" onto the street. Parking is located to the rear.

ISSUE FOUR: **Commercial Development**

The term "Commercial" Development generally refers to several types of land uses that feature businesses providing goods and services. These types of uses include:

Retail commercial - businesses whose primary activity is selling goods to the public.

Office - businesses whose primary activity is financial, insurance, real estate, information processing etc.

Service - businesses that provide a variety of physical services, such as auto repair, appliance repair, etc. These types of uses approach light industrial activities in nature and are typically encouraged to locate away from retail and office commercial activities.

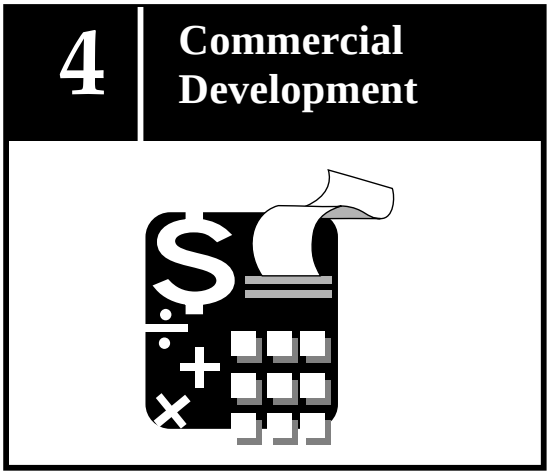
Office development is almost as important to the economic well-being of a community as industrial development. Offices support both small and large businesses, which on average, have a higher wage scale than most of the agricultural economy and some of the manufacturing/warehousing economy.

The Farmersville General Plan provides for four types of commercial land use designations:

- **Central (downtown),**
- **General**
- **Service, and**
- **Highway**

Each of these types of commercial uses is necessary if the community wishes to provide services and shopping opportunities for its citizens. Further, if a city is going to maintain its sales tax base, it is imperative that it not only retain its own shoppers but that it also attact shoppers from surrounding cities and outlying rural areas.

For each type of commercial development to be successful, it must be properly located, it must have adequate access and it should be designed so that it will attract patrons. For example, a parcel of land that is designated for general commercial uses should front onto a major roadway (with high traffic volumes), it should be designed so that it is attractive and visible from the



See also Issue 11: Economic Development

roadway and it should incorporate ample off-street parking.

Commercial developers also have a responsibility to the community to create projects that are pleasing in appearance, are well-maintained, and which are not disruptive to surrounding properties. Indeed, it is these types of uses that will form the community's image.

Goals, Objectives, Action Plans:

I. Ensure that different types of commercial development are provided for in Farmersville.

1. The General Plan Land Use map designates sufficient land to accommodate projected commercial development through the planning period.

2. Continue to monitor commercial land demand and accommodate requests to redesignate land for commercial development as demand warrants, subject to the following guidelines:

    a. The site has direct access to a major street, such as Farmersville Boulevard, Visalia Road, Walnut Avenue or the Highway 198 frontage roads.

    b. Development of the site for commercial use would not negatively impact adjacent residential uses.

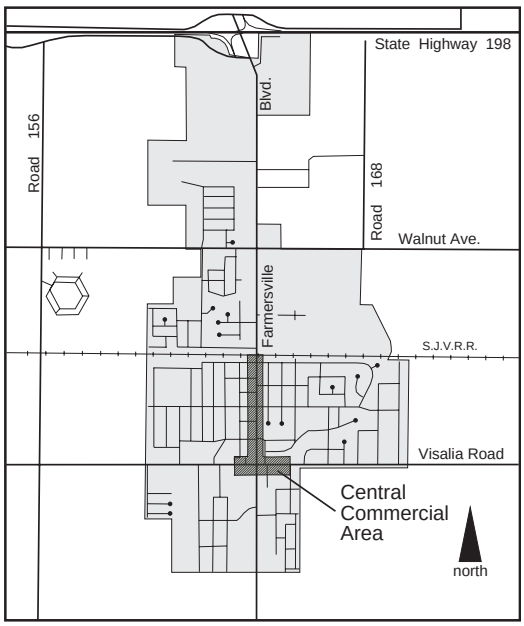
2. Allow service commercial uses to be located in Farmersville's industrial areas.

    a. Amend Farmersville's Zoning Ordinance to provide for service commercial uses in Farmersville's industrial zone district.

3. Establish a "Central Commercial" zone, for lands in the downtown area (see Map 2-1).

    a. The Zoning Ordinance should be amended to create a Central Commercial Zone. The zone should facilitate the development of a pedestrian-oriented shopping atmosphere. Buildings should be built to the back of the

Map 2-1
Central Commercial Area



sidewalk with parking located to the rear or side of structures. Shops should feature large storefront windows and pedestrian-scaled signs. Buildings should employ historic-theme architecture that reflects design traditions of Farmersville and the San Joaquin Valley. The Design Guidelines that will be established for the Redevelopment Agency's facade-rehab program can address this issue.

II. Promote commercial development that is aesthetically attractive.

1. All commercial developments shall be processed through the city's site plan review process (or Conditional Use Permit process, where required by the Zoning Ordinance).

    a. Require each commercial development to be built consistent with an architectural theme that reflects Farmersville's identity and the identity of the San Joaquin Valley.

    b. The City should establish a set of design guidelines that show graphic examples of good design.

    c. The Planning Department should work with the Planning Commission to develop and adopt the design guidelines. Guidelines should be advisory in nature.

    d. All commercial parking lots shall be landscaped and shall be provided with pedestrian-oriented circulation features. The design guidelines will provide graphic examples of these types of features.

3. Promote the development of shopping centers and complementary commercial uses that enhance the city's sales tax position.

    a. Designate adequate land for larger-scale commercial development along the northern portion of Farmersville Boulevard, and the western portion of Visalia Road.

General Plan Committee members agreed that some of Farmersville's commercial buildings set a positive tone and help to create a sense of place that is uniquely Farmersville.

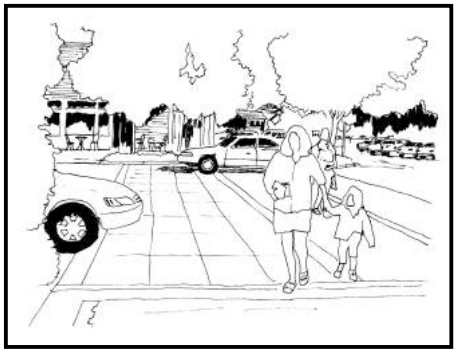
b. Ensure that the commercial zoning applied to lands along north Farmersville Boulevard and west Visalia Road allows uses that are compatible with each other, such as shopping centers, offices and fast food operations. This zoning should not include service commercial uses like auto repair (unless conducted as a subordinate part of a larger-scale retail commercial business).

III. Encourage commercial development to be pedestrian-oriented.

1. Through design, require new commercial development to be accessible by the walking public.

   a. During Farmersville's site plan review process the city will insure that the design of the commercial development will be pedestrian-oriented. The previously-mentioned design guidelines will provide examples of good pedestrian-oriented design.

   b. Encourage downtown stores to provide additional entrances to their stores from the rear.



With careful attention to details, even "suburban" shopping centers can be designed to encourage pedestrian activity.

IV. Pursue a program of economic development to create new businesses, jobs and increase Farmersville's tax revenues.

1. Strategies for economic development are addressed under Issue Eleven: Economic Development, on Page 2-48.

ISSUE FIVE: **Downtown Farmersville**

One of the main goals of any community's plan is to preserve and strengthen the downtown. Just as a person depends on their heart for survival, a good city has a downtown that pumps life and vigor into the community.

Farmersville's downtown is not as well-defined as the downtowns of most other Tulare County cities. Where most cities' downtowns feature at least several blocks of commercial use in a fairly compact area, Farmersville's commercial uses are situated in strip-fashion along Farmersville Boulevard and Visalia Road. In addition, Farmersville's downtown generally lacks the historic buildings found in most communities.

Despite these circumstances, there is potential for Farmersville to strengthen the image of its downtown and fortify it as the heart of the community. Indeed, this goal was voiced perhaps more than any other during the General Plan Committee workshops.

See also Issue 11: Economic Development

Downtown Farmersville Goals:

Character and Quality of Environment

I. Enhance Farmersville's quality of life by providing a Downtown which is inviting, friendly, clean, safe and aesthetically pleasing.

1. The Redevelopment Agency shall establish a facade improvement program whereby low- or no-interest loans are made to businesses to improve their exterior appearance. Such programs exist in Exeter and Woodlake.

    a. The Executive Director and City Planner will work together to formulate a facade rehab program.

II. Maintain the Downtown as the government, civic and retail/office center for the City.

1. The City should try to locate future government facilities in the downtown area. Future school district and county facilities should also be encouraged downtown.

2. The City should implement the recommendations of the "Farmersville Boulevard Revitalization Study", prepared by Urban Futures, Inc. in 2001. This study features a number of recommendations, listed to the right.

3. The City should prepare a Downtown Farmersville Specific Plan which outlines land use, circulation and aesthetic strategies to improve the downtown area. The City Manager will work to identify funding sources for preparation of the plan.

III. Identify and promote Downtown as the entertainment, cultural and community activity center of Farmersville.

1. The City should encourage downtown merchants to form an association or perhaps a property-based improvement district.

Housing

I. Promote multi-family and senior citizen housing in the Downtown area, to facilitate diversity, security and to extend "life of the streets" into evening hours.

1. The City should promote the downtown area as a location for future multi-family development

a. The Land Use Map identifies the downtown as a mixed use area, which permits the combination of residential and commercial land uses

II. Protect and enhance the integrity of the residential neighborhoods adjacent to the Downtown.

1. In the establishment of new uses, ensure that adequate screening and buffering are provided to protect adjacent neighboring uses. At the same time, work to establish good pedestrian connections between the downtown and adjacent neighborhoods.

a. The Site Plan Review process will focus on techniques to buffer adjacent neighborhoods

Farmersville Boulevard Revitalization Study Recommendations

- Coordinate with State of California Department of Trade and Commerce to market the downtown (and community as a whole)
- Host community events to bring people to the downtown.
- Establish a community outreach program.
- Create a business retention program.
- Create development information handouts.
- Establish a retail development program that involves financial participation by the City.
- Establish a building improvement loan program.
- Undertake a comprehensive planning effort for the downtown area.
- Work with property owners to understand their market.
- Install infrastructure improvements.
- Install signage and landscape improvements.
- Work with realtors to represent the downtown area.
- Establish design guidelines.

Source: Farmersville Boulevard Revitalization Study, 2001

from the undesirable effects of adjacent commercial development.

Circulation

I. Create a safe and comfortable environment in the Downtown where pedestrians, bicyclists, vehicular traffic and parking work in harmony.

1. The to-be-prepared Downtown Specific Plan will propose circulation improvements in the downtown area.

II. Identify the location of the Downtown for the traveling public.

1. The City should prepare unique and attractive directional signs that point the way to downtown.

Parking

I Provide sufficient, accessible parking for automobiles and bicycles.

1. The proposed Downtown Specific Plan shall analyze existing parking conditions and make recommendations to increase the supply of parking both on and off street, in the downtown area.

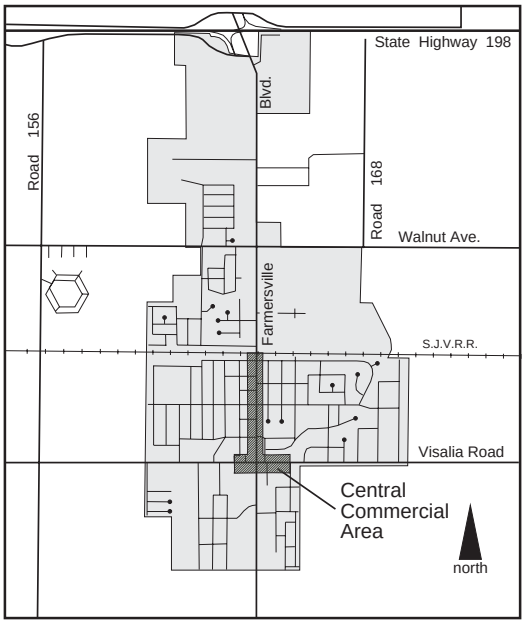
2. The City should encourage the use of shared parking agreements in the downtown area, in order to reduce the amount of land consumed for surface parking.

    a. Survey other cities that utilize shared parking agreements to determine the best method for doing this.

II. Ensure parking areas are convenient, attractive and safe. At the same time, minimize the negative visual impacts of parking lots through careful placement, landscaping and screening techniques.

III. Balance the parking downtown so there are sufficient spaces to efficiently meet shoppers' and tenants' needs for future land requirements for new building construction.

Map 2-2
Downtown Farmersville Specific Planning Area



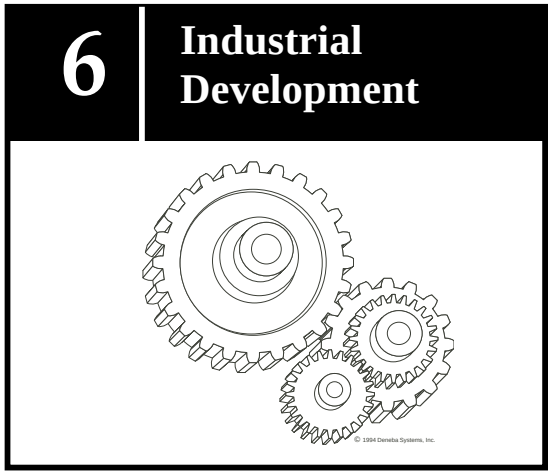
IV. Provide and maintain infrastructure to meet the needs of Downtown growth.

1. The City shall continue to monitor infrastructure needs and make repairs and upgrades as necessary. The proposed Downtown Specific Plan should identify any deficiencies in the infrastructure system and propose remedies.

ISSUE SIX: **Industrial Development**

Industrial development generally provides the economic foundation for a city in that it is a source of employment and it provides a flow of revenue into the city from outside sources - other businesses buying raw materials or finished goods from the local industry.

Industries are typically poor land use neighbors because they can generate large volumes of truck traffic, they can produce noise and odors, they may pose public health hazards and they can be unslightly. For these reasons, it is important that they be properly located in the community - away from land uses that are sensitive, such as schools, residential development and parks.



See also Issue 11: Economic Development

Goals, Objectives, Action Plans

I. Designate sufficient land to accommodate industrial development in Farmersville.

1. The Land Use map designates land to accommodate industrial development in Farmersville through the year 2025. When warranted, the City shall require the establishment of buffers, incorporating landscaping, walls or other effective measures.

II. Ensure that new industrial development does not conflict with existing or planned adjacent or nearby uses.

1. The City shall review zoning standards to ensure that adequate measures are in place to achieve this goal.

    a. When warranted, the City shall require the establishment of buffers, incorporating landscaping, walls or other effective measures.

2. The City Engineer will review each industry that wishes to locate in Farmersville to ensure that the project will not have an adverse impact on Farmersville's sewer or water systems.

    a. The City Engineer will require industries that generate high strength industrial

effluent to mitigate this impact by either pre-treating the effluent or by paying an appropriate wastewater impact fee to defray the city's cost of treating the effluent.

3. New industrial uses will be processed through Farmersville's site plan review process, or Conditional Use Permit process (as applicable) to ensure that they do not conflict with surrounding land uses or adversely impact the health and safety of the community.

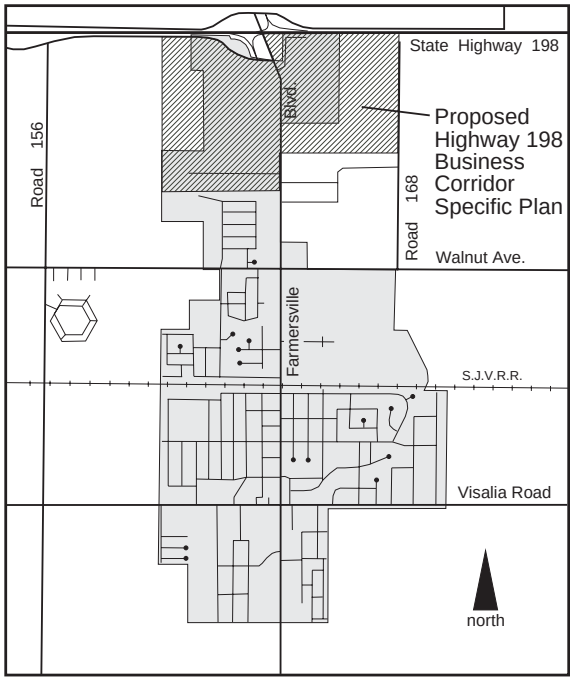
    a. The Farmersville Planning Commission will apply conditions to industrial projects that will insure that surrounding land uses and the community will not be adversely impacted.

III. Pursue a program of economic development to create new industries, jobs and increase Farmersville's tax revenues.

1. Prepare a "Highway 198 Business Corridor Specific Plan for the area in north Farmersville shown on the map to the right. The Specific Plan should detail street alignments, utilities, parcelling, development standards and funding mechanisms. While emphasis should be on encouraging industrial development, complementary commercial uses should also be permitted.

1. Strategies for industrial economic development are addressed under Issue Eleven: Economic Development, on Page 2-48.

Map 2-3
Highway 198 Business Corridor Specific Planning Area



ISSUE SEVEN: **Public Facilities**

I. The city should pursue expansion of public facilities, as needed.

1. Plan for expansion of the Public Works yard by acquiring adjacent properties and seeking funding for the expansion.

    a. The Land Use map identifies expansion of the Public Works yard.

2. Consider future relocation of the Civic Center to a more centralized location in the city's downtown area.

    a. Explore the possibility of building a new civic center in the downtown area. One possible site is the land adjacent to the railroad track, west of Farmersville Boulevard. This site could function as a multi-use facility and include the proposed Museum of the Farmworker. Given its location, an historic railroad architectural theme would be appropriate for this structure.

2. The City should work with the school district to identify building projects where the city and district could work together. These projects could include:

    - multi-purpose room
    - gymnasium
    - theater

II. Public facilities should be located in the core of the community, when possible.

1. As previously mentioned, the City should consider relocating City Hall to the site adjacent to the railroad, west of Farmersville Boulevard.

2. Other public facilities should be directed to locate in the downtown area. Existing downtown public facilities (such as the post office) should be encouraged to remain in the downtown.

See also Issue 8: Schools

III. If a public agency identifies the need to relocate, the city shall work with the agency to keep the facility in the downtown area.

III. Public facilities should make an aesthetic statement in terms of appearance and architectural style.

1. When new public buildings and facilities are developed, the City should take an opportunity to set the tone it expects for the community, in terms of quality design.

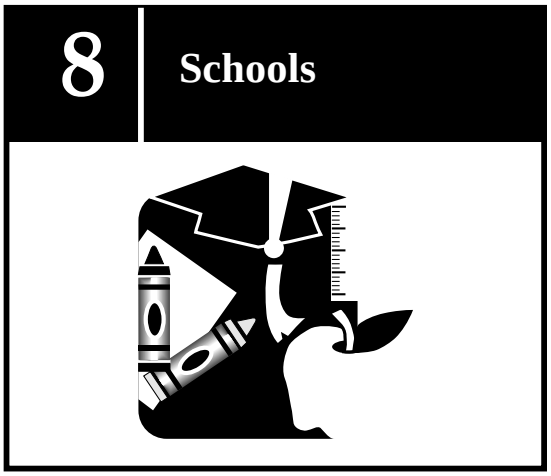
IV. Where possible, public facilities should have multi-purpose uses.

1. Construction (or) restoration of public buildings should provide for public meeting rooms.

    a. Public meeting rooms should be equipped with modern audio-visual equipment and the room should also be wired for modern telecommunications.

ISSUE EIGHT: **Schools**

Schools are the cornerstone of any community. A good school system can provide the foundation for citizens to prosper. Equally important is a good relationship between the city and local school district. Schools are major land use features in the community. The City and school district must work together to plan for future expansion of the school system and ensure the system can respond to demands of future growth.



Goals, Objectives, Action Plans

I. Promote community-based schools.

1. The City, Farmersville Unified School District and the community should all be involved in the design and location of schools.

    a. To the greatest extent possible, schools should be multi-purpose in nature.

    b. Schools (as appropriate) should be available for use by the community during non-school hours.

    c. Schools should be designed to accommodate some of the community's recreational needs, like playing fields, hard courts and running tracks.

The General Plan Committee watched a presentation about the town of Gaylord, Michigan which involved the entire community to build a multi-purpose educational center open to all residents.

II. Work to develop schools that are easily accessible and free from land use and circulation conflicts.

1. Schools should be located in areas of the community where they are easily accessible for school-aged students.

    a. Schools should be designed so that they can be easily accessed from adjacent residential developments.

    b. Schools should be designed so that students can be easily dropped off by their parents.

    c. Bus drop-off zones should be separate from where parents drop off their children.

2. The location of schools should not be on roadways that attract other types of significant traffic (e.g. commuter, industrial or commercial traffic).

    a. Elementary and middle schools should not front onto major collector or arterial roadways.

    b. Sidewalks should be installed on all streets around a school site.

    c. Schools should be connected to bike path systems.

3. To the best extent possible, schools should be centrally located in the neighborhoods they are expected to serve.

    a. Existing, centrally located schools should consider acquiring adjacent property for future expansion.

    b. The Land Use Map identifies the area south of Farmersville High School for future school development.

III. Encourage schools to establish partnerships with other public entities.

1. Farmersville Unified School District should forge a working relationship with College of Sequoias as it pertains to agricultural, technical and mechanical training courses. In addition, the City could employ summer interns in a variety of positions.

IV. Work with educational institutions to fashion a training program that teaches skills that mirror local industrial sectors, including equipment repair, irrigation technology, food processing, nurseries, and agricultural technology.

1. Farmersville Unified School District should develop training and vocational programs for students that wish to be employed in the above sectors.

IV. The School District should develop programs in cooperation with organizations such as Proteus Inc., C-Set, and the Tulare County Private Industry Council.

V. Encourage college courses to be taught in the Farmersville area.

1. Farmersville Unified School District should provide classroom space for College of Sequoias classes.

2. The School District should make its facilities available to other institutions that wish to provide instruction, training, or certification.

VI. Work to resolve school district boundary conflicts between Farmersville Unified School District and Visalia Unified School District. Farmersville U.S.D.'s boundaries should include at least the City's Urban Area Boundary.

1. The two school districts should meet regularly to resolve boundary issues. A date should be set for completion of this goal. The City may wish to participate in this activity.

ISSUE NINE: **Agricultural Lands**

Agriculture is the primary industry in the Farmersville area. This basic industry employs almost 30 percent of the city's labor force. Agriculture is a relatively stable industry when compared to other industrial sectors, like manufacturing, tourism, and the transportation industries. For this reason, agriculture should be encouraged in the Farmersville area. Further, land use policies that minimize the impacts between urban and agricultural uses should be promoted.

See also Issue 2: Growth Management

Goals, Objectives, Action Plans

I. Farmersville will ensure that its primary economic base (agriculture) is protected.

1. New subdivisions shall be located no more than 1/8 mile of existing or approved urban development.

    a. The Planning Commission and City Council shall make a finding in approving General Plan Amendments and Zone Changes, to ensure the foregoing statement is true.

2. Encourage Tulare County to maintain large-lot agricultural zoning (20 acre minimum) to land within Farmersville's Urban Area Boundary.

    a. The City of Farmersville shall oppose any county development within its Urban Area Boundary that creates parcels of land smaller than 20 acres.

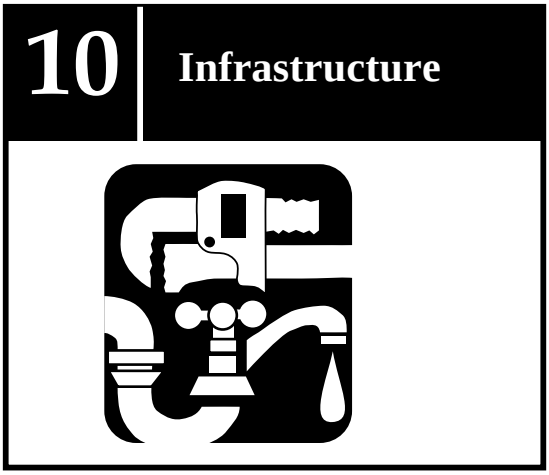
3. Moderately increase overall residential densities so that Farmersville utilizes land more efficiently.

    a. The Smart Development zone will offer moderate increases in residential density as an incentive for developers to utilize this zone district.

3. Urban uses, to the best extent possible, should be separated from agricultural uses by streets, railroads, canals or similar man-made or natural barriers.

    a. Adoption of the Land Use Element and Land Use Map will implement this policy.

ISSUE TEN: **Infrastructure**



Infrastructure generally refers to a city's utilities - water, sewer, storm drainage, gas and electric, phone and cable television services. In Farmersville, the city operates water, sewer and storm dainage systems. The other utilities are operated by private firms.

The operation and maintenance of infrastructure is of paramount importance to cities. Without these services, human health and well-being would be in jeopardy. Good infrastructure can also serve as an economic development tool. For instance, many industries require water supply, and wastewater disposal capacity. Farmersville must strive to maintain its existing infrastructure while planning for expansions to accommodate future growth and development.

See also Issue 11: Economic Development

I. Adequately finance infrastructure systems.

1. New development shall be required to install water, sewer and storm drainage improvements to serve their needs.

    a. The City Engineer shall evaluate development projects and identify infrastructure needs, in the form of conditions of approval.

2. Farmersville's water, sewer and storm drainage master plans shall be reviewed in order to ensure that they can properly and efficiently serve future development provided for by the Land Use Element.

    a. The City's water, sewer and storm drainage development impact fees shall be reviewed on an annual basis. This review should focus on the relationship between the amount of fees being collected for each of the accounts and the future capital needs of each system based on development trends in Farmersville.

    b. The modification of the City's development impact fees should be consistent with Assembly Bill 1600, which requires a clear relationship between fees and their purpose.

2. The City should continue to seek state and federal grants for the upgrading and expansion of its infrastructure systems.

II. Ensure infrastructure master plans and the general plan are consistent with one another.

1. The Land Use Element shall identify where development will occur in Farmersville through the year 2025. The Element will be fashioned so that it is generally in concert with existing master plans.

III. Maintain, rebuild and upgrade infrastructure systems.

1. The City shall update its 5-Year Capital Improvement Program to ensure that its infrastructure system can accommodate the urban growth prescribed by the Land Use Element.

2. The Redevelopment Agency should prepare a 5-Year Capital Improvement Program to assist in the maintenance, rebuilding and upgrading of Farmersville's infrastructure system, within the Redevelopment Project Area.

3. The City should work with the private sector to participate in the upgrading of the infrastructure system when it is developing in the City.

    a. From time to time, the City may wish to work with a developer to upgrade a part of the infrastructure or street system that is not part of the project being developed.

ISSUE ELEVEN: **Economic Development**

Economic development is an increasingly important issue for many cities. New and well-paying jobs must be available for residents if a community is to prosper. In addition, new development can generate revenues needed to fund local government and services. Farmersville must continue to pursue economic development to better the lives of its residents and to ensure that necessary services will be available to the community

Goals, Objectives, Action Plans

Land Resources

I. Ensure that adequate land exists for future commercial and industrial development

1. The General Plan's Land Use Map designates sufficient land to accommodate commercial and industrial land demand through the planning period.

2. The City Planner shall maintain a map that shows readily-developable lands designated for commercial and industrial development.

3. Continue to monitor local market needs and amend the land use map (as appropriate) to accommodate commercial and industrial development.

General Issues/Marketing

I. Foster a better business climate by developing communication among the business community, City Council and City administration.

1. Schedule an annual meeting between the Chamber of Commerce and City Council, to discuss business and development issues.

2. Continue to participate in efforts to market Farmersville to outside developers through the Tulare County Economic Development Commission.

See also

Issue 4: Commercial Development
Issue 5: Downtown
Issue 6: Industrial Development

a. The City Manager shall be responsible to maintain a relationship with the EDC.

II. Increase the number of businesses operating in Farmersville, in order to generate more sales, property, business and transient occupancy taxes.

1. Conduct an economic study to target development of new businesses in Farmersville.

2. The Farmersville Redevelopment Agency should financially assist, where possible, businesses wishing to locate in the Redevelopment project area. Targeted businesses should offer the "most bang for the buck" in terms of jobs created and potential tax revenues.

3. Invite a university team to conduct a project study aimed at improving Farmersville's commercial and industrial climate.

4. Seek to have Farmersville designated as an Enterprise Zone. This type of zone provides tax incentives to businesses that locate in the community.

➤ ***The City of Lindsay was designated as an Enterprise Zone in 1996***

5. Agressively pursue grants to provide the installation of infrastructure to serve new commercial and industrial development.

6. Investigate and promote the use of the railroad as a resource for industry in Farmersville.

7. Develop a web site for the City of Farmersville. The web site could be used to market the city, as well as provide essential information for residents.

➤ ***As of 2001, six of Tulare County's eight cities have a city website.***

a. The City Council should budget general funds for the development of a web site for the City of Farmersville. The City could also consider utilizing high school students to design and maintain the website.

b. The site should also provide socio-economic information on the city, information on city services, and a photo essay of the community.

8. Consider hiring an economic development specialist/grant writer, to pursue industry leads and grant funds. The City may wish to consider sharing this position with other neighboring communities, in order to reduce expenses.

III. Encourage organizations to use Farmersville as a destination for meetings, conferences, and seminars.

1. The Farmersville Chamber of Commerce should conduct an annual survey of its members to identify leads for upcoming meetings and conferences that could be held in Farmersville.

2. Opportunities for holding meetings and seminars in Farmersville should be detailed on the City's web site.

3. The City should explore opportunities to incorporate meeting space in buildings it owns. For example, meeting space could be developed at City Hall.

Business Retention/Expansion

I. Assist existing industries to expand their operations and increase employment.

1. The City and/or Chamber of Commerce should (on an annual basis) contact existing industries to determine if they have plans for expansion and if there are tasks that the city and chamber could assist them with.

2. The Farmersville Redevelopment Agency should develop an Existing Company Expansion Program where funds would be provided by the Agency to a company if they hired additional employees.

   a. The Redevelopment Agency could use redevelopment or CDBG funds to finance an existing company expansion program.

V. The Redevelopment Agency should develop an outreach/marketing program to publicize the expansion plan.

Employment

I. Diversify Farmersville's employment base

1. Prepare an Industrial Area Specific Plan for Farmersville's northern area (see Industrial Economic Development Goals).

2. Work with local community college districts to provide technical training programs for employers and employees.

    a. Encourage college courses to be taught in the Farmersville area.

    b. Farmersville Unified School District, or the City could provide classroom space for college courses.

    c. The City and school district could make meeting facilities available to other institutions that wish to provide instruction, training or certification.

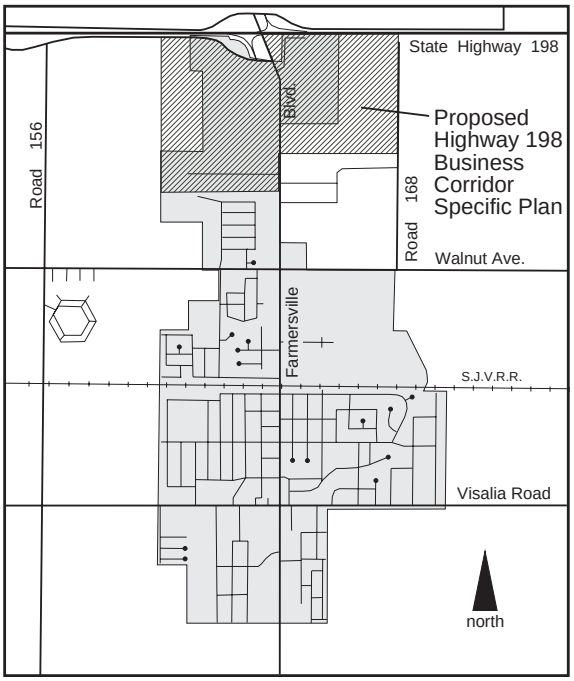
Industrial

I. Attract industries that are complementary to the existing work force, that do not adversely affect air quality, the city's waste water treatment plant or the city's water system and do not have a negative impact on the health and safety of the neighborhood or on the community as a whole.

1. Prepare a "Highway 198 Business Corridor" Specific Plan for the area in northern Farmersville designated on Map 2-4, to the right. The Specific Plan should identify future roadway alignments, land parcellization, major utility trunk lines and specify property development standards. Once completed, the Specific Plan should be used to obtain grant monies to help develop the area.

    a. The City Council should appropriate money and establish a time goal for completion of the Industrial Area Specific Plan.

Map 2-4
Highway 198 Business Corridor Area Specific Plan Planning Area



2. Seek industries that compliment the local work force, such as agricultural equipment repair and manufacturing, nurseries, warehouses and packing houses, and trucking and farm management.

II. Diversify the City's industrial base.

1. Work with the Chamber of Commerce and Tulare EDC to attract new industries to the City.

2. Utilize redevelopment funds to financially assist new companies to locate in Farmersville.

   a. Financial assistance should be based on the number of jobs being created by the new company and/or by the hourly wages paid by the company.

III. Explore the possibility of expanding the local rail line to serve Farmersville's future industrial area.

1. The City and Chamber of Commerce should work closely with the San Joaquin Valley Railroad to identify opportunities and constraints to constructing rail sidings or spur lines to serve industrial uses in Farmersville.

Fiscal Conditions

I. Facilitate a strong sales tax base.

1. The City should attempt to reverse the leakage of sales tax dollars to surrounding communities by:

   - working to attract new retail establishments to the community.

   - retaining existing businesses.

   - maintaining high standards that create an attractive business climate which is inviting to prospective new businesses.

2. The City should seek to attract moderate-sized retail stores that sell the kinds of goods presently not found in Farmersville, including appliances,

furniture, electronics, and home improvement supplies.

a. The Land Use map shall identify adequate land reserves for future retail commercial development.

3. A sales tax audit should be prepared for the city of Farmersville.

a. The City should contract with a consulting firm that provides this service.

4. Encourage an automobile dealership to locate in Farmersville.

a. The City and Chamber of Commerce should work to attract an automobile dealership to lands fronting State Highway 198.

b. Identify other types of high sales-tax generating dealerships (boats, trailers, farm equipment) that could be located in Farmersville.

Downtown

I. Promote shopping in Farmersville's downtown.

See also Issue 5: Downtown

1. Continue to identify other uses that could be located in the downtown that would be compatible with existing downtown uses, like antique stores, gift shops, restaurants, and banks.

2. Continue to work with building owners in the renovation of their building facades in order to make the storefronts more attractive.

a. The Redevelopment Agency should establish a facade rehab program that offers financial assistance to building owners willing to upgrade the exterior of the buildings, in the downtown area.

b. Develop guidelines to implement the facade rehab program.

3. Identify, design and construct downtown streetscape improvements that make the downtown a more desirable place to visit and shop, including antique lighting, landscaping planters, street trees, benches paseos, signage and accent paving.

    a. Prepare a Downtown Farmersville Specific Plan to implement the foregoing objectives.

II. Promote the conversion of residential dwellings in the downtown area into office and/or retail uses.

1. Amend the zoning ordinance to allow residential dwelling units in the downtown to be converted to office or retail uses. Also encourage the establishment of "live-work" units where residents live and work in the same building.

    a. All conversions will be processed through the city's site plan review process.

2. Promote "mixed use" development in the downtown area.

    a. The Land Use map identifies the downtown area for mixed use development.

    b. The Redevelopment Agency should assist developers interested in a mixed use project.

Mixed Use Development

Typical mixed use: Retail commercial and offices on the ground floor, apartments above.

Redevelopment

I. Enhance tax increment revenues by encouraging development to occur in the redevelopment district.

1. The City could consider the reduction of development impact fees in the redevelopment district in order to encourage infill development.

2. The City could consider encouraging higher residential densities in the redevelopment district in order to facilitate infill development.

3. The Redevelopment Agency should fashion a financial assistance program that promotes development within the District and that such a

program would have the Agency participating financially based on the number of new jobs and tax revenues being created.

4. The Redevelopment Agency should, on behalf of existing companies or companies interested in locating in Farmersville, apply for state or federal grants that assist the company with off-site improvements, purchase of land or equipment or training of employees.

    a. The Agency should identify state or federal grants that are available for the above listed costs.

    b. The Agency should send a letter to existing companies in Farmersville asking about their long-term needs in terms of expanding their operation.

    c. The Agency should provide to the Farmersville Chamber of Commerce information regarding state and federal grants that can be used to pay for the above listed costs.

Infrastructure/Public Services

I. Ensure that development impact fees pay for public improvements required by the general plan and infrastructure master plans.

See also Issue 10: Infrastructure

1. Review Farmersville's development impact fees to ensure that new uses pay their fair share of the costs of providing infrastructure and services, while remaining competitive with other communities.

    a. A new fee schedule shall be developed for Farmersville's development impact fees.

    b. The City Engineer shall review Farmersville's sewer, water and storm drainage impact fees and forward a recommendation to the City Council regarding any modification.

c. The City Planner shall review Farmersville's park impact fees and forward a recommendation to the City Council regarding any modification.

d. The City Planner shall identify any new impact fees that would be appropriate for financing other public improvements delineated by the General Plan.

3. The fees for Farmersville's planning, subdivision and zoning applications should be reviewed and amended every two years, as necessary.

   a. These fees should be developed consistent with Assembly Bill 1600, which requires a clear demonstration between the need for fees and their use.

Agriculture

I. Promote and encourage agriculturally-related industries.

See also Issue 9: Agricultural Lands

1. The City should prepare an Industrial Area Specific Plan to establish the planning framework necessary to attract agriculturally-related industries. The Plan would apply to areas in the northern portion of Farmersville designated "Industrial" on the General Plan's Land Use Map.

2. Annually, the Farmersville Chamber of Commerce should survey existing agriculturally-related businesses in the area to gather leads on other similar businesses that might wish to locate in Farmersville.

   a. Planning staff will assist the Chamber in the preparation of this survey form and in the preparation of a mailing list.

II. Attract technologies to the Farmersville area that are related to the field crop and citrus industry, including plant breeding, nurseries, integrated pest management, and agricultural chemical companies.

1. The Chamber working with the Tulare Economic Development Corporation (EDC) should develop and continuously update an information packet detailing the benefits of locating the above types of businesses in Farmersville.

III. Promote agriculturally-related tourism.

1. The City, working with the agricultural community should develop tours of various sectors of the agricultural economy, including farms, packing houses, cold storage plants and other related businesses.

    a. The City, working with the Chamber of Commerce, should form a citizen advisory committee composed of persons knowledgeable about the local agricultural economy.

2. The Farmersville Chamber of Commerce and the City should investigate the idea of creating a "Museum of the Farmworker".

    a. The City, working with the Chamber of Commerce, should form a citizen advisory committee composed of local historians, farmworkers, industry leaders and persons interested in the museum to investigate the likelihood of establishing such a museum.

    b. This group should develop a time-line, a financing plan, and a schematic plan for the museum.

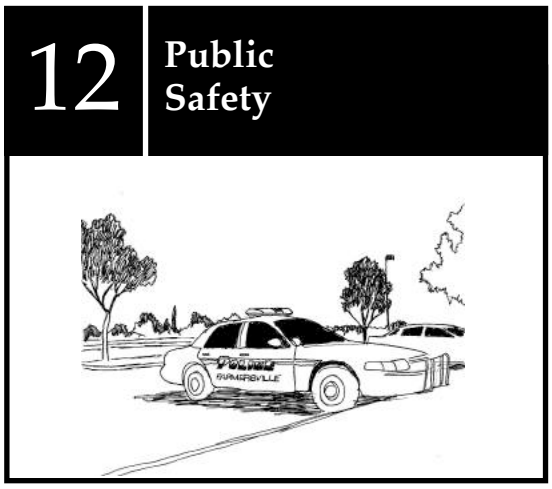
    c. The City should seek state grants, donations and foundation funding for the construction of the museum.

2. A Certified Farmers Market should be established in the downtown area once a week.

    a. The City should work with the local Chamber of Commerce to make a farmers market a reality.

    b. Consult with other communities who are currently holding farmers markets.

ISSUE TWELVE: **Public Safety**



These types of services are crucial to the public's health, safety and welfare. Public safety, which includes police and fire, ensures that the public and their possessions are protected from criminal elements and exposure to fire and hazardous materials; emergency medical services respond to calls for emergency medical response and potentially, the need to transport the victim to a local health care facility; and health care facilities, which include hospitals, medical clinics and other types of medical-related uses, provide to the public physical and psychological care and treatment.

Goals, Objectives, Action Plans:

I. Promote a safe community that is free of crime and fire hazards

1. Through the City's Site Plan Review process, new developments should be designed so that that crime and fire safety are considered in the design.

    a. Ensure that all new uses have water available to the site and that proper water pressure is also available.

    b. Buildings larger than 5,000 square feet in size should be equipped with sprinklers.

    c. Ensure that all new uses are properly equipped with on-site lighting to promote safety and security. At the same time, ensure that outdoor lighting does not become a nuisance by unnecessarily illuminating adjacent properties. Involve officials from the Police and Fire Department to ensure that safety concerns are addressed in the site design process.

2. The City shall establish a Site Plan Review committee to provide early review of development projects. This goal will ensure that communication between various departments/agencies and project applicants is maximized in the development process. The

committee should be comprised of individuals representing agencies that may serve or otherwise be affected by a project, including:

- City Planner
- City Manager (as needed)
- City Engineer
- Public Works
- Fire Department
- Police Department
- Local utility companies:
- Southern California Edison
- The Gas Company
- Cable TV
- Irrigation District (as needed)
- Farmersville Unified School District (as needed)

The project applicant/agent should also attend the committee meeting.

The City Planner shall establish a procedure for the site plan review committee that should include the following:

- Set a regular daytime meeting date/time (twice a month is recommended)
- Copies of site plans are mailed to agency representatives two weeks before the meeting.
- Agency representatives should review plans and submit comments to the City Planner at least three days prior to Site Plan Review Committee meeting.
- At the meeting, agency representatives can explain their comments and/or ask questions of the applicant, regarding the project.
- After the meeting, agency representatives should formalize their comments into conditions of approval for the project.

3. The City will continue to upgrade its water system to ensure that adequate water pressure is maintained throughout the system.

Site Plan Review Committee Proposed Process

Maximizing Understanding in the Planning Process

I. Applicant submits site plan to City Planner.

II. City Planner distributes copies of site plan to Committee members.

III. Committee members review plans and submit comments, questions, draft conditions to City Planner at least three days before Committee meeting.

IV. Committee meeting: Site Plan Review Committee meets with applicant and goes over the project.

V. After meeting, committee members formalize conditions of approval and submit them to City Planner.

VI. City Planner prepares staff report and resolution on project, incorporating conditions of approval received from committee members.

VII. Public hearing (or staff action) on project.

a. The City should amend its development impact fee schedule to provide funds for replacement of old water lines.

b. The City should amend its development impact fee schedule to provide funds for future water facilities.

4. Developments should be designed so that access is maximized.

a. The Site Plan Review process will ensure that new developments provide proper access for public safety vehicles.

II. Ensure that public safety departments are adequately financed.

1. The City should apply for state and federal grants that can provide money to supplement the city's police department revenue.

2. The Police Department should implement innovative programs that promote an efficient delivery system, such as:

- A volunteer program
- Take-home car program
- K-9 Unit Program

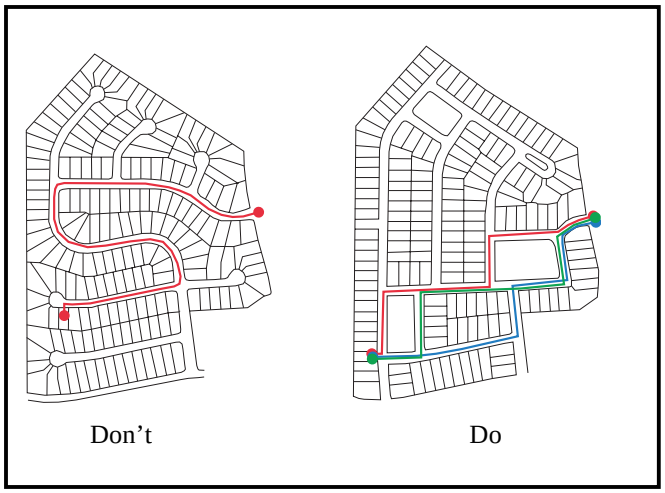
3. The Fire Department should implement innovative programs that promote an efficient delivery system, such as:

a. A volunteer program

b. Promoting sprinklers to be installed in new commercial and industrial developments

111. Promote a cooperative working relationship between city public safety departments and other agency public safety departments.

2. The City should maintain a strong working relationship with the Tulare County Fire



Developments should be designed to maximize access. This increases the effectiveness of crews in responding to emergencies.

Department to ensure that a strong system of mutual aid support continues.

Health Care

IV. Establish an efficient medical emergency delivery system

1. The City should work and maintain communication with with the Exeter Ambulance District to insure that persons in Farmersville are well served in regards to response time by ambulances.

V. Promote the continued operation and future expansion of health facilities within the community.

1. The City should work with Kaweah Delta District Hospital (K.D.D.H.) and other entities that provide medical care to provide medical services to the community, especially for low-income families.

2. The City should encourage the K.D.D.H. to provide outreach programs to Farmersville.

3. The City should seek to attract a medical clinic to the community that caters to persons without medical insurance.

ISSUE THIRTEEN: **Public Participation**

For planning to be sucessful, citizens must be involved in plan-making. A plan created without public input will more than likely fail, as residents of the community, over time, may not support the plan's goals and principles.

The City took an important step in public involvement by creating a citizen's General Plan committee to work on this General Plan. The Committee met over a period of one year to educate themselves on planning issues, and then formulate goals, objectives and action plans.

The City should continue to strive to involve citizens in the planning process. A number of strategies to do this are available.

I. Work to educate and involve Farmersville's citizens in the city planning and development process.

1. Convert the General Plan's goals, objectives and action plans into display boards that will be permanently mounted in the City Council Chambers.

2. Maintain planning maps in the City Council Chambers and in the public lobby at City Hall. Maps should include the General Plan, Zoning, existing land uses, vacant lands, flood zones and agricultural preserves.

3. Establish a web site for the City. The website should include details on the city's planning goals and procedures.

4. Develop a set of brochures to explain zoning and development standards in a user-friendly fashion.

5. Re-design planning application forms to make them more user-friendly.

6. Send staff, Planning Commissioners and City Council members to planning workshops and seminars.

    a. The City shall ensure that funds are available to implement the foregoing

objectives. For printed materials, the city should consider creating Spanish language versions.

7. Establish a beautification awards program where property owners in Farmersville are recognized for their efforts to maintain and beautify their property or businesses. Awards could be given on an annual basis for residential, commercial, industrial and public/institutional land uses.

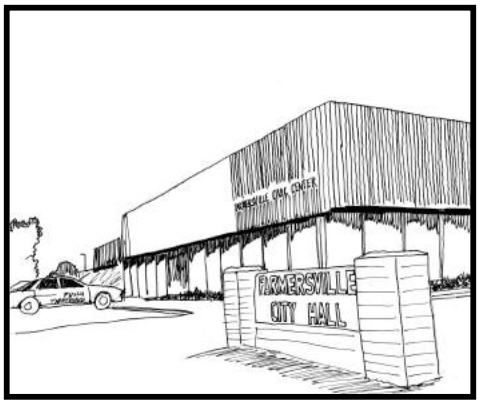
    a. The City should work with the Chamber of Commerce to form a citizen's beautification committee, which will undertake an awards program.

8. Review the General Plan every five years. State planning guidelines recommend that cities review their general plans on a five year basis. This gives the community an opportunity to determine how well the plan is functioning and whether amendments may be necessary.

    a. The Planning Director shall schedule a Planning Commission review of the General Plan, on a five year basis.

9. Require public notices be posted at development sites, announcing public hearings on the matter.

    a. The Planning Director will require applicants to post public hearing notices at their site.



ISSUE FOURTEEN: **Special Issues**

The General Plan Committee addressed several planning issues that are unique to Farmersville. These issues include:

- Linnel Farm Labor Center
- Cameron Creek Colony
- Lands along Highway 198

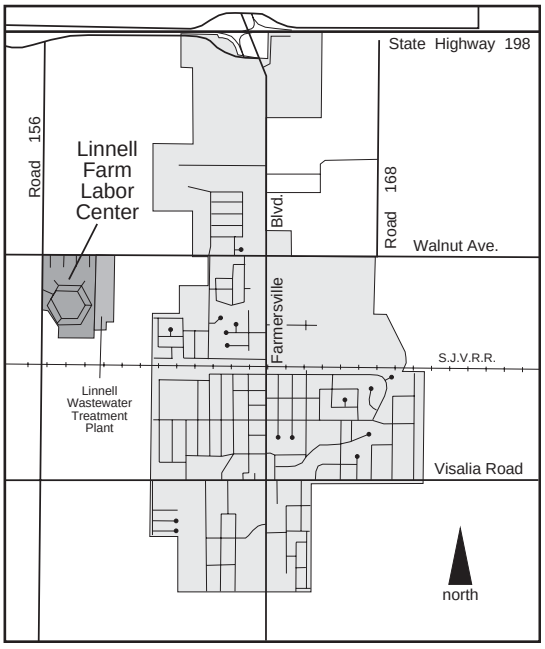
The Committee decided that these issues warrant special attention for the community's long-term planning goals.

Linnel Farm Labor Center

Linnel Farm Labor Center is a farm labor housing development operated by the Tulare County Housing Authority, on land west of Farmersville. Linnel is situated on approximately 72 acres located on the east side of Road 156 and the south side of Walnut Avenue (Avenue 288). The site was originally developed in the 1950s and includes 191 dwelling units, a community center, day care, recreational areas and manager's facility. Residency is limited to qualified low-income households.

Over the years, Farmersville has been growing towards Linnel. Recent city development is now about one-quarter mile east of Linnel. Linnel has its own wastewater treatment plant, situated on fourteen acres on the east side of the site. Farmersville is down-wind from Linnel and on occassion, odors from the plant are noticeable in the community. The presence of Linnel (and in particular its wastewater treatment plant) may negatively affect Farmersville's future growth in this area. In light of these concerns, the General Plan Committee formulated several strategies.

Map 2-5
Linnel Farm Labor Center



I. Establish a long-term framework to allow Farmersville's continued growth in the vicinity of Linnel Farm Labor Center.

1. Open a dialogue between the City and Tulare County Housing Authority (TCHA) to discuss issues of mutual interest relating to Linnel Farm Labor Center.

2. Encourage TCHA to continue to upgrade and improve the appearance of Linnel, through landscaping and routine maintenance.

3. Explore the possibility of closing Linnel's wastewater treatment plant. Identify funding to extend lines from Farmersville's sewer system to serve Linnel, and expand Farmersville's wastewater treatment plant.

    a. The City Manager shall contact officials of TCHA to set a meeting between the TCHA board of directors and the Farmersville City Council to discuss these issues.

Cameron Creek Colony

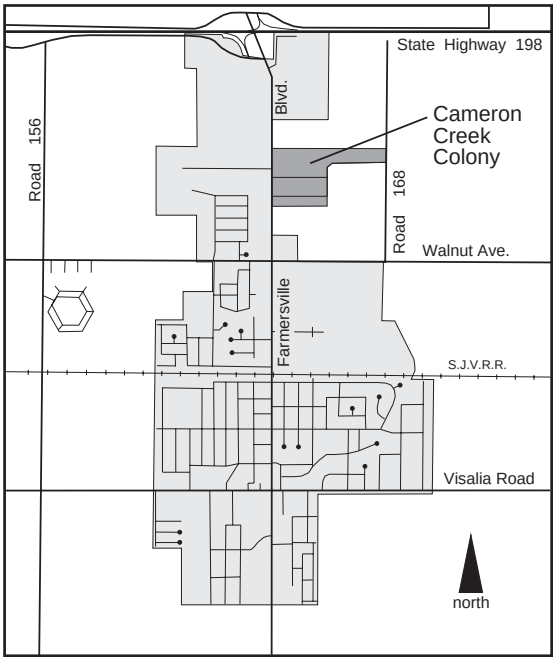
Cameron Creek Colony is a rural residential subdivision situated northeast of Farmersville, on the east side of Farmersville Boulevard, midway between Walnut Avenue and State Highway 198. Road 168 forms the eastern boundary of Cameron Creek Colony. This subdivision was developed many years ago under minimal County requirements.

Many of the dwellings are poorly maintained and appear to be substandard in terms of building and zoning codes. All of the dwellings are hooked to individual on-site septic systems and water wells. Roads are poorly maintained and were constructed without curbs, gutters, sidewalks or street lights. There are no storm drainage facilities. Some residents maintain farm animals on their property.

In 2000, Farmersville's Urban Development Boundary was expanded to include Cameron Creek Colony. This means that although presently under the jurisdiction of Tulare County, the community is ultimately in Farmersville's future growth area.

As Farmersville continues to grow toward Cameron Creek, it is expected that the City will eventually be required to annex the area. This brings a number of concerns to City and County administration, as well as residents of the area. It is likely that Cameron Creek would not be able to pay for public services that it requires, such as police and fire protection, code enforcement, recreation and planning and building

Map 2-6
Cameron Creek Colony



services. In addition, as previously mentioned, much of the subdivision does not appear to meet current city (or County) development standards. As Farmersville continues to grow towards Cameron Creek Colony, the City and County must coordinate on future planning for this area.

Goals, Objectives, Action Plans

I. Open a dialogue between the City and Tulare County officials about the future of the Cameron Creek Colony development. Interested individuals in Cameron Creek Colony should also be involved in this effort.

1. At some point, the City should annex Cameron Creek Colony.

    a. Work with Tulare County to establish a redevelopment district to generate funding to bring public and private development up to code in Cameron Creek, including streets, utilities and dwellings.

    b. The City and County should negotiate a special tax-sharing agreement that places the city in a better position to assume public services requirements for Cameron Creek.

    c. Encourage Tulare County to contract with Self-Help Enterprises to conduct a housing rehabilitation program for willing property owners.

2. Establish land use regulations that reflect the existing rural residential lifestyle in Cameron Creek Colony.

    a. The Land Use Map identifies most of Cameron Creek as “Rural Residential”.

    b. The City should establish a “Rural Residential” zone to apply to Cameron Creek Colony. The zone should mirror standards contained in the County’s existing zoning for the area. This zone should not be utilized in other portions of the planning area.

State Highway 198

Highway 198 is Farmersville's "front door" to the world. Daily, thousands of vehicles pass by Farmersville on the highway. A number of these vehicles carry international visitors bound for the scenic wonders of Sequoia National Park.

View looking east on Highway 198

As the city's front door, the City should try to create as attractive an image as possible. This goal is not only for aesthetic reasons but is also economic. Travelers do not want to stop at a location they perceive as unattractive or unsafe.

Likewise, business owners will not choose to locate their firms in a community that does not appeal to them. Establishing an attractive highway presence can help Farmersville bolster its economic development. The City can also take the opportunity to attract retail commercial businesses (such as an automobile dealership) that prefer a high visibility location along the highway. The sales tax benefits for the City could be significant.

Goals, Objectives, Action Plans

I. The City shall take actions to establish an attractive development pattern along lands fronting State Highway 198.

1. The Land Use Map designates a combination of Highway Commercial and Industrial land uses along the highway.

2. Require attractive landscape and building designs that will reflect positively on Farmersville.

    a. Establish a special "Highway 198" overlay zone that incorporates special building, landscaping, screening and signage requirements.

3. Erect "Welcome to Farmersville" signs at the interchange of Highway 198 and Farmersville Boulevard.

    a. The City, Chamber of Commerce and to-be-formed Beautification Committee should

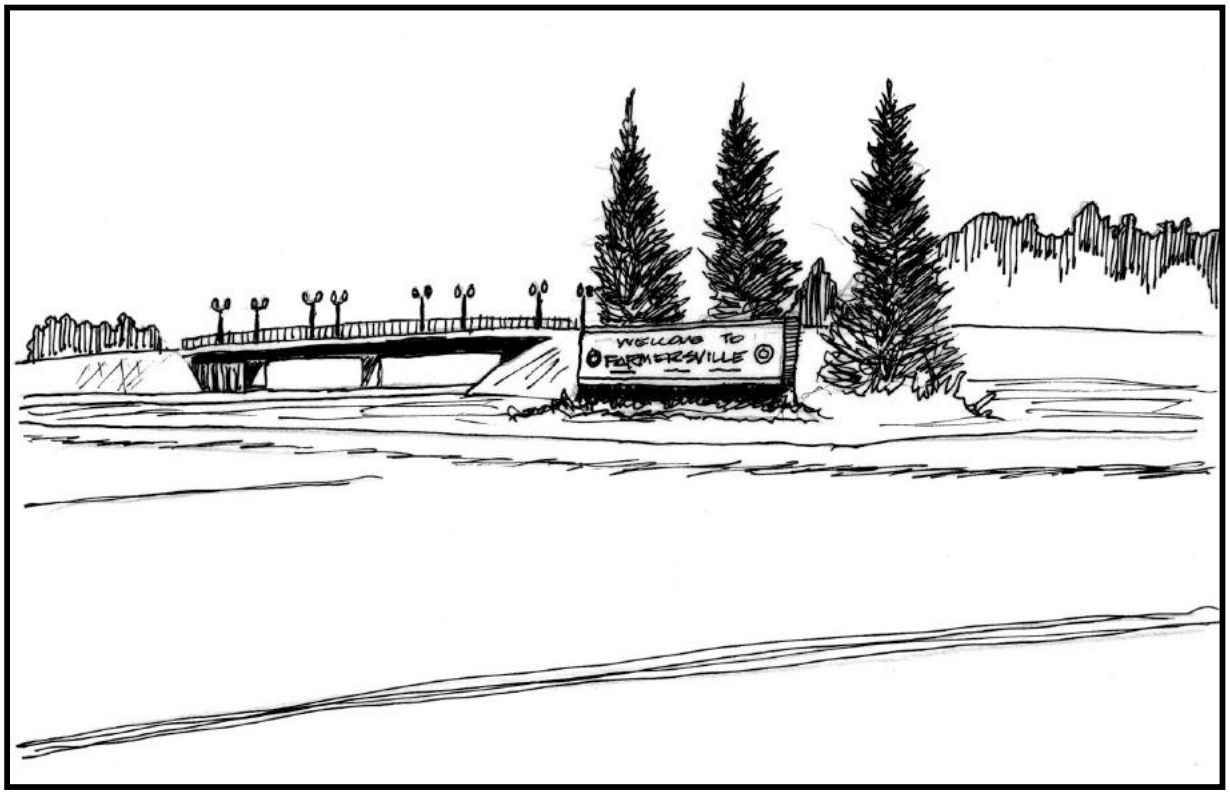
Highway 198 is Farmersville's "front door" to the world. First impressions can "make or break" a community's chances of attracting new development and revenue. . .

work together to design, raise funds and establish community identification signs.

4. Work with Caltrans to establish landscaping within the freeway right-of-way.

5. Work with Caltrans to transform the Farmersville Boulevard overpass bridge into an attractive design element. Antique light poles, black wrought-iron railing and banners could be considered.

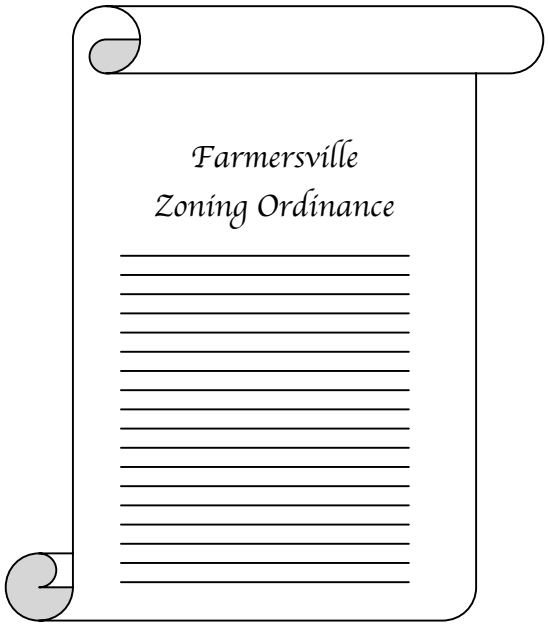
    a. The City Manager should open a line of contact with Caltrans to pursue completion of these objectives.



View of Highway 198/Farmersville Boulevard interchange shows "Welcome to Farmersville" sign, landscaping, and decorative light fixtures on the bridge.

Amendments to the Zoning Ordinance

The General Plan includes several recommendations to amend the Farmersville Zoning Ordinance. The Ordinance is one of the city's foremost tools for implementing and enforcing the recommendations of the Plan.



The primary recommendations are for the creation of several new zoning districts. These recommendations are as follows:

Rural Residential Zone (R-R)

The Plan recommends creation of this zone to apply to properties within the Cameron Creek Colony area. Presently, Farmersville does not have a Rural Residential district. The R-R zone would be applied to Cameron Creek upon its future annexation to the City. Most cities in Tulare County have a Rural Residential zone. Typical features include large lot sizes and the provision for the keeping of farm animals. Farmersville should survey other cities' zone district and choose from the best features of each to create its Rural Residential Zone.

Smart Development Zone (S-D)

One of the General Plan's primary recommendations is for Farmersville to create a zone to implement "Smart Growth" design techniques. The recommendations for this type of zone are detailed further in Appendix A.

Central Commercial Zone (C-C)

The General Plan recommends the city create a special commercial zone to apply to the downtown area. This zone is intended to help create a downtown environment where pedestrian-oriented shops front the sidewalk, and on-site parking is located to the rear or side of stores.

Highway Commercial Overlay (H-C)

This zone is intended to promote appropriate retail and service commercial uses that cater to the travelling public, in locations along or near State Route 198. Appropriate uses generally would include service stations, restaurants, lodging establishments, convenience stores and other complementary uses. This zone is to be applied along

Highway 198 and is intended to be an "overlay" zone. This means that the zone will be applied as an overlay to the existing zoning designation. The Highway Commercial zone will apply special standards to ensure that development along the highway occurs in an attractive manner, with attractively designed buildings, signs, landscaping, and screening, where desired.

Mixed-Use

As its name implies, the Mixed Use Zone is intended to facilitate the combination of various land uses on a single site or within a single building. An example would be a building that contains retail commercial businesses on the ground floor, and residential units on the upper floor. The mixed use zone should be targeted to appropriate areas of the community, such as the downtown. A mixed use designation could make parcels in the downtown more marketable as the possibilities for development are expanded.

Residential Multi-Family

It is recommended that the R-M zone be recongifured so that it is consistent with other communities in Tulare County. Two density standards should be established:

RM- 2.5: One unit per 2,500 square feet of land area

RM-4.0: One unit per 4,000 square feet of land area

Zoning Matrix

State planning law requires that the zoning on every parcel be consistent with the General Plan land use designation for that parcel. For instance, a parcel designated "Residential" in the General Plan must be zoned for residential land uses.

Table 2-2 below is a matrix that shows which land use designations are consistent with which zone districts. Land use designations are listed in the left column of the matrix while zone districts run across the top. Shaded boxes show consistency between a land use category and a zone district. For example, a parcel designated "Medium Density Residential" would be consistent with the R-1 zone. Boxes that are unshaded denote inconsistency. Per state law, zoning must always be consistent with its General Plan land use designation.

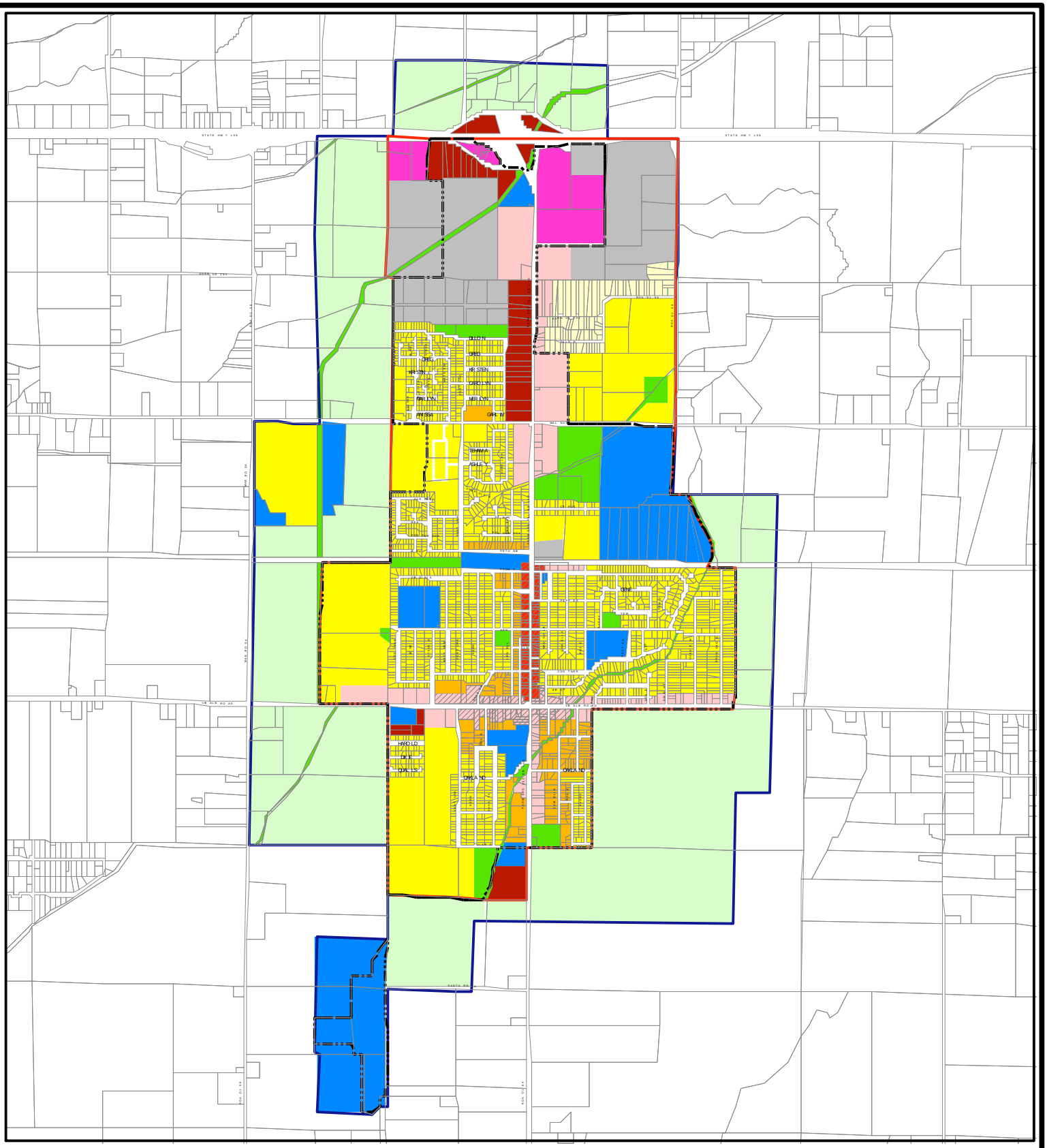
Table 2-2
Land Use/Zoning Consistency Matrix

	Zone Districts														
Land Use Categories	RR*	R-1	RM-4.0*	R-M-2.5*	P-D	S-D*	C-G	C-C*	C-S	HC*	M-U*	I	FP	OS	UR
Residential															
Low Density	■				■	■							■		
Medium Density		■	■		■	■							■		
Medium-High Density				■	■	■							■		
Commercial															
General Commercial					■	■	■			■			■		
Central Commercial					■	■		■		■			■		
Service Commercial					■	■			■	■			■		
Highway Commercial					■	■				■			■		
Mixed Use					■	■				■	■		■		
Industrial					■					■		■	■		
Public Facilities					■					■			■	■	
Open Space					■					■			■	■	
Urban Reserve					■					■			■		■

Note: Zone districts with an asterisk indicate a new district (proposed by the General Plan) or significant revisions to an existing district.

Land Use Map

Map 2-7 shows the Farmersville General Plan Land Use Map. The map delineates the ultimate use of land in and around Farmersville. It is to be read in conjunction with the land use descriptions, goals, policies and action plans detailed in the text of the Land Use Element. The Land Use map shows areas intended for Farmersville's development through the year 2025.



General Plan Land Use Designations

Legend

- City Limits
- Urban Development Boundary
- Urban Area Boundary
- Parcels
- Rd. 164 Streets

- Low Density Residential
- Medium Density Residential
- Medium-High Density Residential
- General Commercial
- Central Commercial
- Highway Commercial
- Service Commercial

- Industrial
- Public Facilities
- Open Space
- Agriculture/Urban Reserve
- Mixed Use Overlay
- Right-Of-Way

N

0 500 1,000 2,000 feet

Collins & Schoettler
PLANNING CONSULTANTS
1002 West Main Street - Visalia, CA - 93291

Base data provided by Tulare County. Created on 1/07/09 by BAK.
For reference only. Not drawn to engineering standards.

CHAPTER 3: CIRCULATION ELEMENT

Introduction

The Circulation Element is second only to the Land Use Element in terms of importance to the community. It has a significant impact on the residents of Farmersville because it delineates the routes by which people will travel within and through Farmersville. Further, the Element identifies the different types of circulation routes in the community, such as roadways, bikepaths and railroads.

Section 65302 (b) of the State Government Code indicates that the Circulation Element must disclose the general location, dimensions and physical characteristics of existing and proposed major thoroughfares, transportation routes and transportation-related facilities.

The Courts have indicated that not only must a roadway improvement must be consistent with the General Plan (Friends of "B" Street.et.al. v. City of Hayward, et. al., 106 Cal. App. 3d 988 {1980}), there must be a correlation between the circulation and land use elements. Generally, correlation is achieved by using the same population and land use projections for each element.

The Court has indicated that in addition to the finding that a roadway improvement must be consistent with the General Plan, there must be a correlation between the circulation and land use elements.

The Farmersville Circulation Element is composed of five sections. They are:

1) Existing conditions;

2) An evaluation of the existing circulation system;

3) Traffic projections and evaluations;

4) Circulation goals, policies and action programs;

5) Roadway cross-section designs; and

6) Circulation map.

Existing Conditions

In addition to the information contained in this chapter, additional circulation information is also provided in Part II: Existing Conditions, of this document.

Early Circulation System

Farmersville's road system was centered around the railroad line that runs east/west through the community. As such, the community's streets run east/west and north south. The few exceptions occurred where local waterways required a change in this pattern.

Major east west roadways include Visalia Road, Ash Street, Walnut Avenue, Highway 198 and the frontage roads that parallel the highway. Major north south roadways include Farmersville Boulevard, Road 168 and Virginia Street

Present Circulation System

Since the early 1900s, a system of roadways has been constructed in the Farmersville area that falls into one of the following categories - freeways, arterials, collectors, local streets and alleys. A profile of major roadways in the community is as follows:

State Highway 198 is an east/west highway that serves Central California. The highway stretches from U.S. 101 in central coast region, through the coastal ranges, across the San Joaquin Valley and into the foothills and mountains of the Sierra Nevada range. The highway terminates as a state route at the entrance to Sequoia National Park but continues on as a federal roadway within the park.

In the vicinity of Farmersville, the highway features two travel lanes in each direction, a median divider, paved shoulders and unlandscaped borders. The interchange with Farmersville Boulevard features on and off-ramps for traffic in both directions. The ramps connect to the frontage roads on both sides of the highway. West of Farmersville there is an interchange at Road 156 which also features on and off ramps in both directions. East of Farmersville the highway changes from a freeway with controlled access to an expressway with cross traffic.

Farmersville Boulevard is an arterial roadway that runs north/south through the center of the community. The street connects Farmersville to the State Highway 198 Freeway at the north end of the City. Within most of the community, the street features two travel lanes and one parking lane in each direction. The downtown area has some diagonal parking along the east side of the street.

North of Walnut Avenue, and south of the city limits, Farmersville Boulevard tapers to one travel lane in each direction. Shoulders are unpaved. Traffic signals exist at intersections of Visalia Road and Walnut Avenue. Four-way stop signs exist two-lane, undivided collector street that runs in an east-west direction located on the north edge of Farmersville. Existing land uses consist of agricultural uses to the north and residential facing south of the roadway.

Visalia Road is an east/west arterial that connects Farmersville to Visalia to the west, and Exeter to the east. Within city limits, the roadway generally features two travel lanes and a parking lane in each direction. The intersection of Visalia Road and Farmersville Boulevard is controlled by a traffic signal.

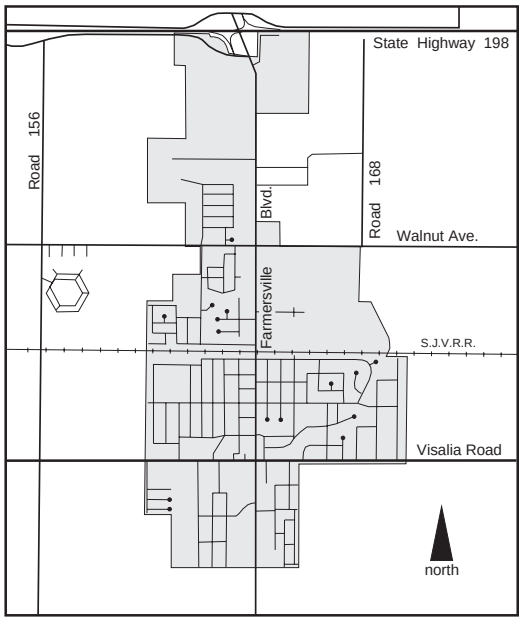
Walnut Avenue (Avenue 288) is an east/west collector road that runs midway between Visalia Road and State Highway 198. The roadway generally features one travel lane in each direction. Where recent development has occurred, the street features a parking lane with curbs, gutters and sidewalks. The intersection of Walnut and Farmersville Boulevard is controlled by a traffic signal.

The frontage roads along State Highway 198 feature one travel lane in each direction. Recent development along the southern frontage road has installed paveout, curbs and gutters. Otherwise, the roads feature unpaved shoulders.

Local Roadways

Local roadways provide for internal traffic movement within residential neighborhoods. Adjacent property has direct access to these types of roadways. Local roadways typically feature two travel lanes and two parking lanes. They have rights-of-way widths that range from 52 to 60 feet.

Map 3-1
Farmersville Street System



Alleys

Alleys provide rear access to residential dwellings in some older neighborhoods and to commercial buildings in the downtown area. Some alleys contain above- (electricity and CATV) and below-ground utilities (sewer and water lines). They also serve as a route for trash pickup. Most of the alleys are 20 feet wide and are unpaved.

Railroads

Farmersville grew up around the San Joaquin Valley Railroad, originally constructed by the Southern Pacific Railroad. The line through Farmersville connects Visalia (and points west) with Exeter (and points south). The railroad is situated within a wide right-of-way, generally 100 feet in width. Presently, there are no uses in Farmersville that utilize the railroad for transport of goods.

Public Transportation

Farmersville is the only city in Tulare County without a public transit service. There is a bus service provided by Orange Belt stages that provides access to other California cities.

The City should explore the merits of establishing a dial-a-ride service for the elderly, youth, handicapped, and others who may not have access to transportation.

Air Service

Farmersville is served by the Visalia Municipal Airport, located 15 miles west of Visalia and by Fresno-Yosemite International Airport (FYI), located in Fresno, about 50 miles northwest of the city. Both airports provide regularly scheduled freight and passenger service and furnish private and company aircraft hangers and tie-downs.

Bicycling and Walking

Presently, there are no established bike lanes in Farmersville. However, the City has been participating with the Tulare County Association of Governments in the preparation of a bike plan for Tulare County and its

cities. Within Farmersville, the plan designates bike routes on Visalia Road, Farmersville Boulevard, Walnut Avenue and the southern frontage road along State Highway 198

Evaluation of Existing Circulation System

Capacity Evaluation

The ability of a roadway to carry traffic is a function of many factors, including the number of travel lanes, the number of intersecting streets (and driveways), the presence of signals, and the existence of medians.

A roadway's traffic volume typically increases during "peak-hour" times - 7:00 to 8:30 a.m., (home to work/school commute) 12:00 to 1:00 p.m., (lunch hour) and 4:30 to 6:00 p.m. (work to home commute).

To measure the traffic capacity of a roadway, a Level of Service (LOS) rating system is used. An LOS of "A" signifies a roadway that has traffic that is free flowing, while a roadway with a LOS of "F" is very congested. Table No. 3-1 provides an interpretation of the various LOS ratings and, for comparison purposes, Table No. 3-2 provides traffic counts for various types of roadways that are operating at a LOS of "E" - a roadway that is experiencing extreme congestion (grid-lock). Typically, an LOS of "C" is considered acceptable by the driving public, however, in smaller cities, it may be too congested for the typical driver.

Table No. 3-3 shows existing average daily traffic volumes for selected roadways in Farmersville and a calculated Level of Service (LOS) rating for these roadways. Only Avenue 288 (Walnut Avenue) east of Farmersville Boulevard is operating at a Level of Service below “A”. This is likely due to traffic generated by Farmersville High School. At present, this portion of Walnut Avenue is one lane in both directions. As the street is widened and lanes are added, the capacity of the street will increase.

Intersections

Intersection analysis have been conducted at the intersections of Visalia Road/Farmersville Boulevard, Farmersville Boulevard/Walnut Avenue, and the

Table 3-1
Level of Service Table

LOS	Description	Volume/Capacity
A	Free flow, low volume, high operating speed, high maneuverability.	0.00-0.59
B	Stable flow, moderate volume, speed somewhat restricted by traffic conditions, high maneuverability.	0.60-0.69
C	Stable flow, high volume, speed and maneuverability determined by traffic conditions.	0.70-0.79
D	Unstable flow, high volumes, tolerable but fluctuating operating speed and maneuverability.	0.80-0.89
E	Unstable flow, high volumes approaching roadway capacity, limited speed, intermittent vehicle queuing.	0.90-0.99
F	Forced flow, volumes lower than capacity due to very low speeds; heavy queuing of vehicles, frequent stoppage.	above 1.0

Example: Farmersville Blvd. north of Visalia Road currently carries an average of **8,000** vehicles per day. Table 3-2 (next page) shows the ultimate capacity of the roadway is **24,000** vehicles per day. The Level of Service can be calculated by dividing volume (**8,000**) by capacity (**24,000**) = **0.33**. The table above shows that **0.33** is a Level of Service **“A”** .

Table No. 3-2
Daily Capacities for Roadways Operating at LOS E

Roadway Capacity	Level of Service "E"
4 Lane Freeway	80,000 vehicles per day
4 Lane Divided Arterial	27,000
2 Lane Divided Arterial	15,000
4 Lane Undivided Arterial	24,000
2 Lane Undivided Arterial	12,000
4 Lane Divided Collector	20,000
2 Lane Divided Collector	10,000
4 Lane Undivided Collector	18,000
2 Lane Undivided Collector	9,000

interchange of State Highway 198, Farmersville Boulevard and the two frontage roads that parallel the highway.

The intersections of Farmersville Boulevard/Visalia Road and Farmersville Boulevard/Walnut Avenue are signalized and are not expected to require upgrades during the planning period (unless a large project is proposed that may adversely affect these intersections. The intersections at the Highway 198/Farmersville Boulevard interchange were analyzed for a recent development project. These intersections will require signalization at some point during the planning period. The traffic consultant has also recommended future signalization at Farmersville Boulevard and Ash Avenue and Farmersville Boulevard and Terry Avenue.

Connectivity

There are various neighborhoods in Farmersville that would benefit from the extension of a roadway to another part of the community. Persons living in these neighborhoods would be able to travel to other parts of the community using a direct roadway route.

The railroad is a major impediment to through traffic in Farmersville. Farmersville Boulevard is the only roadway that crosses the tracks to connect the southern and northern sections of the community. This forces residents of neighborhoods on both sides of the tracks to "funnel out" onto Farmersville Boulevard to cross the community.

Improved connectivity has the benefits of reducing traffic on over-burdened streets, reducing trip lengths, reducing air pollution and fuel consumption. Further, by enhancing connectivity through Farmersville, emergency vehicles are better able to access neighborhoods, thereby ensuring better public safety protection for residents.

Traffic Safety

A roadway system that is safe and efficient - free of congestion - is a primary circulation goal of all cities. This goal also promotes a roadway system that is safe for pedestrians and bicyclists, especially younger children.

The most potentially hazardous roadways in terms of traffic safety in Farmersville are Farmersville Boulevard,

Visalia Road, and the interchange at Farmersville Boulevard and State Route 198.

Driving, riding or walking along these roadways can be hazardous depending on a variety of factors, including volume and speed of traffic, the width of the roadway, cross traffic (vehicles entering and exiting the roadway) the number of trucks or the number of pedestrians/bicyclists traveling along the roadway.

Traffic Projections and Evaluations

The traffic consultant has projected traffic volumes for roadway segments and certain intersections in the planning area. These projections are based on the following assumptions:

1. Traffic volumes on local and State roadway systems will generally increase at a rate similar to population growth rates within the planning area.

2. Persons living and working in Farmersville will continue to use cars as their primary mode of transportation.

3. Uses that generate abnormally high volumes of traffic are not expected to locate in the planning area during the planning period.

4. Current traffic flow patterns in the planning area will not change significantly.

Roadway Segment Projections

Increases in traffic volumes over the planning period for local and State roadways is going to be generated by the development of the land uses in the Farmersville area and by increases in population and development in surrounding communities.

Traffic volume projections for 2025 for selected roadways in Farmersville are delineated in Table No. 3-3. These projections are based on data from the Tulare County Association of Government's traffic model for Tulare County and for the Farmersville area.

The projections in Table 3-3 indicate that Visalia Road will be most impacted by increases in traffic. Even with

two travel lanes in each direction, the roadway will be operating at Level of Service "F". It is likely that these significant traffic loads will be as much a result of regional growth (Visalia, Exeter, etc.) as growth in Farmersville. It is possible that as new roads are developed in Farmersville, and north/south connectivity is improved, some of the traffic load could be taken off of Visalia Road.

Those roadway segments are projected for LOS levels of D, E or F during the planning period will be listed in Farmersville's Capital Improvement Program (CIP). Improvements on these roadways, which will facilitate a more acceptable LOS rating - "C" or better - will be financed by gas tax and transportation funds, redevelopment funds and development impact fees.

Intersection Projections

TPG Consulting, using projected traffic counts from the TCAG traffic model and roadway geometric and land use information, identified which intersections would require some type of signalization during the planning period. The intersections are: Farmersville Boulevard and Front Street, Farmersville Boulevard and Terry Avenue, Farmersville Boulevard and the frontage roads on both sides of State Route 198, Visalia Road and Steven Avenue, and Visalia Road and Oakview Avenue.

Improvements at these intersections, which will facilitate a more acceptable Level of Service rating, will be financed by gas tax and transportation funds, redevelopment funds and development impact fees.

Table No. 3-3
Existing Traffic Volumes and Level of Service

Existing Roadway Segment	Year 2025 Traffic Volume	Capacity	Volume / Capacity	Level of Service Rating
Visalia Road				
west of Farmersville Blvd.	12,000	24,000	0.5	A
east of Farmersville Blvd.	9,000	24,000	0.38	A
Avenue 288 (Walnut Avenue)				
west of Farmersville Blvd.	4,000	10,000	0.4	A
east of Farmersville Blvd.	7,000	10,000	0.7	C
Farmersville Blvd.				
south of Visalia Road	5,000	24,000	0.21	A
north of Visalia Road	8,000	24,000	0.33	A
north of Avenue 288	4,000	15,000	0.27	A

Table No. 3-4
Year 2025 Projected Traffic Volumes

Existing Roadway Segment	Year 2025 Traffic Volume	Capacity	Volume / Capacity	Level of Service Rating
Visalia Road				
west of Farmersville Blvd.	28,000	27,000	1.03	F
east of Farmersville Blvd.	23,000	27,000	0.85	D
Avenue 288 (Walnut Avenue)				
west of Farmersville Blvd.	11,000	18,000	0.61	B
east of Farmersville Blvd.	12,000	18,000	0.67	B
Farmersville Blvd.				
south of Visalia Road	10,000	24,000	0.42	A
north of Visalia Road	11,000	15,000	0.73	C
north of Avenue 288	14,000	24,000	0.58	A
south of Avenue 288	12,500	24,000	0.52	A

CIRCULATION GOALS, OBJECTIVES AND ACTION PLANS

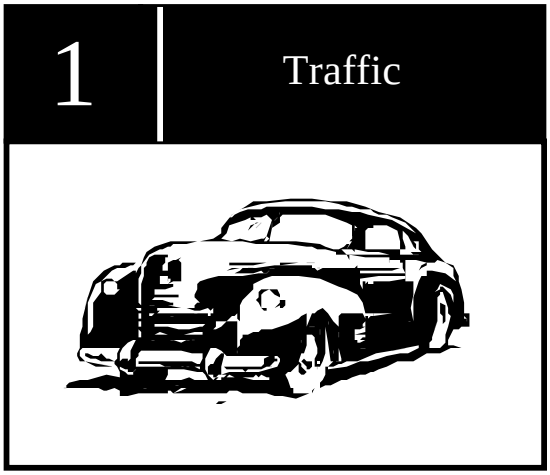
Circulation goals express general community values as they relate to travel, traffic safety, mobility and funding for maintenance, construction and reconstruction. Some of the goals listed below are the product of previously approved General Plan elements. Other goals were fashioned by Farmersville's General Plan committee, Planning Commission and City Council.

Circulation goals, objectives and action plans are organized under topical issues, including:

- Traffic
- Arterials
- Collectors
- Intersections
- Green Streets Program
- Connectivity
- Truck Traffic
- Parking
- Transit
- Bike Paths and Pedestrian Pathways
- School Routes

ISSUE ONE: **Traffic**

Even if a roadway is operating at a Level of Service (LOS) A, which means that traffic flows freely along the street with little or no congestion, people still complain that there is too much traffic on the street especially if it is their neighborhood street. While it is difficult to improve on a roadway that has a LOS of A, the city can embrace goals that will minimize traffic impacts on the community.



See also Issue 7: Connectivity

Goals, Objectives, Action Plans

I. Ensure that streets in Farmersville are not congested.

II. Ensure that traffic on Farmersville's streets operates in an efficient and safe manner.

III. Provide for long-term financing for street construction and maintenance.

1. A level of service C will be the desirable minimum service level in Farmersville at which arterial and collector segments will operate. A level of service of C will be the desirable minimum service level in Farmersville at which intersections will operate.

    a. The City will program street improvements into its 5-year capital budget that will ensure the specified LOS is not exceeded in the city limits. Funds for these street improvement projects will come from gas tax and transportation funds.

    b. The City should develop a traffic impact fee for new development in Farmersville. This fee shall be consistent with the requirements of AB 1600.

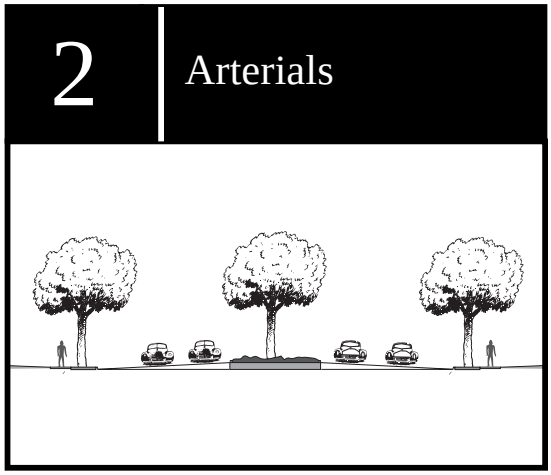
2. Land use projects which generate large amounts of traffic shall be discouraged from channeling traffic onto local roadways.

    a. The Planning Department shall recommend denial of discretionary land use projects to the Planning Commission and City Council that are inconsistent with this policy.

ISSUE TWO: **Arterials**

Arterial roadways carry the greatest amount of traffic in Farmersville. These roadways carry traffic that may be traveling at a high rate of speed and they may carry a significant amount of truck traffic, which can make these roadways noisy. Because of these characteristics, the design, location and types of land uses developed adjacent to these roadways must be carefully planned.

Most persons in Farmersville will travel on an arterial at least once a day. Travel efficiency on these roadways is important for two reasons: (1) congested traffic conditions cause the traveler to be late to their destination and (2) congestion creates greater amounts of air pollution, already a significant environmental problem in the Valley. Traffic that moves smoothly and efficiently along an arterial minimizes these two problems.



See also Issue 6: Green Streets Program

Goals, Objectives, Policies

I. Establish an arterial road system that conveys traffic in an efficient and safe manner.

1. The Circulation Element map identifies arterial roadways in the planning area.

II. Arterials should be visually pleasing, and designed to accommodate other modes of transportation, such as bicycles and pedestrians.

1. Study reconfiguring Farmersville Boulevard and Visalia Road to provide a landscaped medians, left-turn lanes and bike lanes.

    a. The City should contract with a traffic consultant to prepare a preliminary road design for these two roadways, and solicit input from property owners and business people.

    b. The City should seek state or federal funds to construct improvements along these roadways, including medians, signalization and left-turn pockets.

    a. The City should establish a landscaped median development impact fee for new

Background

Visalia Road is in the process of being upgraded during the General Plan update. This upgrade does not include landscaping. It should be a long-term objective of the city to undertake a street tree program along Visalia Road in the future.

• • • • • • • • • •

development. This fee shall be consistent with the requirements of AB 1600.

d. Arterial roadways will be constructed consistent, where possible, with street cross-section illustrations contained in Figure 3-1 of the Circulation Element.

Street design standards are shown in Figure 3-1.

2. Driveways that intersect with arterials should be kept to a minimum and, if possible, should be reduced or eliminated when redevelopment occurs along an arterial roadway.

   a. Through the site plan review process, the Planning and Engineering Departments will work to minimize the number of driveways that intersect arterial roadways.

3. Left turn lanes shall be constructed on arterials where they intersect with other arterials or collectors.

   a. The City Engineer and Public Works Department will coordinate to ensure that left turn lanes are installed as development occurs. For already-developed neighborhoods, the proposed circulation impact fee should be set to fund installation of left turn lanes.

4. Curbing at the intersections of arterial and collector streets should be painted red at least 50 feet in all directions from the corner curb radius in order to provide sufficient sight-line for traffic pulling into the intersection.

   a. The Public Works Department will ensure that curbing is properly painted.

ISSUE THREE: **Collectors**

Next to arterials, collectors carry the greatest amount of traffic in a city. Unlike arterials, collectors may traverse residential neighborhoods. It is this type of roadway that "drains" traffic from a neighborhood and conveys it towards other collector or arterial roadways. Because collectors pass through neighborhoods, their effectiveness to channel traffic can be diminished by the design of land uses adjacent to the roadway. If these uses are designed so that they haphazardly funnel traffic onto the collector, the efficiency of the collector is reduced.

Collectors that accommodate truck traffic must be located where they will not have an adverse impact on existing neighborhoods and yet be able to conduct truck traffic effectively.

Collectors, due to their location, can impact a residential neighborhood. The volume of traffic, the level of noise and a collector's appearance can influence adjacent neighborhoods. It is important to properly plan and design these roadways so that they are an asset to the community and not a detraction.

See also

Issue 6: Green Streets Program
Issue 8: Truck Traffic

Goals, Objectives, Policies

I. Provide efficient and safe circulation access to all parts of Farmersville.

1. Where possible, collector roadways should contain sufficient right-of-way for two travel lanes, two bike lanes, two parking lanes and a median/turn lane; and minor collectors should have sufficient right-of-way for two travel lanes, two parking lanes, two 6-foot parkways, and two 5-foot sidewalks.

    a. Major and minor collector roadways will be constructed consistent with street cross-section illustrations contained Figure 3-1 of the Circulation Element.

2. All street improvement projects, including widening, closing, or constructing new roadways, will be reviewed by the Planning and Engineering Departments to confirm that the

▶ *Street design standards are shown in Figure 3-1.*

project is consistent with the Circulation Element.

a. The Planning and Engineering Departments will review development projects to determine consistency with the Circulation Element during site plan and subdivision review.

3. Left turn lanes shall be constructed on collectors where they intersect with other arterials or collectors.

a. Through the site plan review process, the Planning and Engineering Departments will require this design feature.

4. Curbing at the intersections of arterial and collector streets should be painted red at least 50 feet in all directions from the corner curb radius in order to provide sufficient sight-line for traffic pulling into the intersection.

a. The Public Works Department will identify which curbs at the aforementioned intersections should be red-curbed.

5. Driveways that intersect with collectors should be kept to a minimum and, if possible, should be eliminated when redevelopment occurs along this type of roadway.

a. Through the site plan review process, the Planning and Engineering Departments will work to eliminate unnecessary driveways.

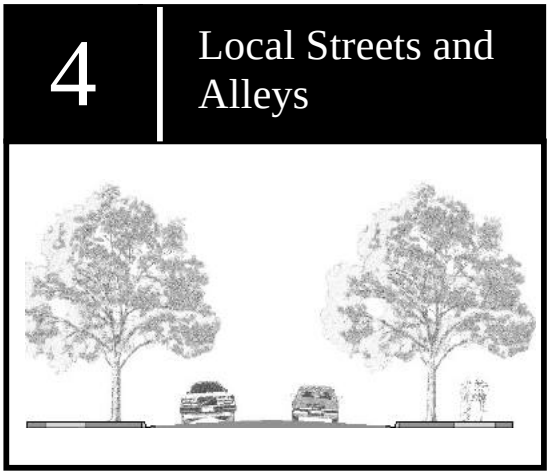
II. Establish a collector system that encourages truck traffic but not at the expense of the livability of the community or adjacent neighborhoods.

See also Issue 8: Truck Traffic

1. Designate a system of truck routes in Farmersville that minimizes negative impacts on sensitive land uses and neighborhoods

a. The Circulation Map designates truck routes.

ISSUE FOUR: **Local Streets and Alleys**



Local streets (also frequently referred to as "Residential Streets" are perhaps the most important roadways in a community. These are the streets that people live on. They form the nucleus of the neighborhood. Well designed, local streets can be an asset to the neighborhood. Poorly designed local streets can become a nuisance, and worse, a safety hazard.

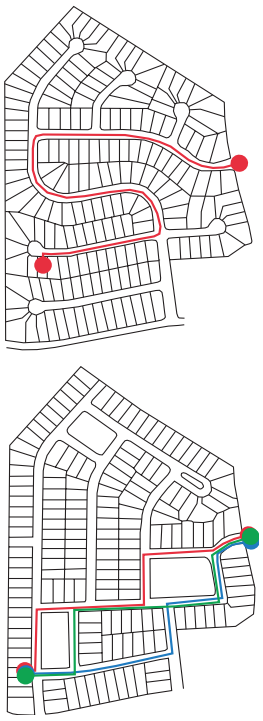
Local Street Design

Recent studies have suggested that current engineering standards are creating dangerous streets. Wide residential streets tend to encourage higher vehicle speeds, making streets less safe. Narrower streets cause drivers to slow down In addition, current standards do not require street trees. Research indicates that heavily shaded streets further cause drivers to slow down. In addition, shaded streets generate much less heat, cooling the neighborhood. Shaded pavement also tends to last longer. Finally, studies have shown that well-maintained shady streets have higher property values.

Subdivision Street Patterns

Most new subdivisions are designed with circuitous street patterns featuring numerous dead-end roads with cul-de-sacs. The purpose of these designs is to reduce through-traffic (which in turn theoretically reduces noise and improves safety). While well intentioned, these designs usually result in circuitous travel patterns that concentrate traffic onto collector and arterial roadways as well as the entry/exit streets into individual subdivisions. The end result is cities where people are tied to the automobile to make all of their trips around a community. Walking and cycling become frustratingly inconvenient.

Older neighborhoods in the original part of towns were designed almost exclusively using a grid (or modified grid) pattern. Dead-end cul-de-sac patterns and walled subdivisions were almost unknown in city design until the 1950's. Not uncoincidentally, that is about the same time that highway-based street design standards (wider streets focussed solely on moving traffic) came into wide use around the nation.



To the extent practical, road layouts shall use a grid pattern which maximize the number of connections to the surrounding collector roadway system.

Properly designed, subdivisions layed out with grid roadway patterns can improve connectivity by providing a variety of routes for motorists, pedestrians and bicycles. If the grid is fine enough, automobile traffic is diffused so that individual streets are not over-impacted by traffic. Requiring narrower, tree-lined streets can work to further slow vehicle speeds. Other mechanisms such as shorter block lengths, roundabouts, bulb-outs and stop signs can further tame neighborhood traffic.

See also Appendix A: A Smart Growth Primer, in the Land Use Element

Goals, Objectives, Action Plans

I. Revise local street standards to ensure residential streets are safe and effective.

1. Single family residential subdivisions may have local streets that have a minimum right-of-way width of 60 feet, 36 feet paved width. Tree-lined parkways shall be installed in this right-of-way. The parkway shall have a width of 7 feet; and the sidewalk 5 feet (see Figure 3-1).

   Single family residential subdivisions with streets on blocks shorter than 600 feet may have a minimum right-of-way width of 58 feet, 34 feet paved width. Tree-line parkways shall be installed in this right-of-way. The parkway shall have a width of 7 feet; the sidewalk 5 feet (see Figure 3-1).

   Subdivisions with all lot larger than 8,000 square feet are not required to install parkways.

   Parkways and street trees shall be maintained by a landscape and lighting district.

Farmersville's vision for residential streets: shady, cool, and narrow to slow traffic.

3. Alleys are permitted within residential subdivisions. Alleys shall have a rights-of-way of 24 feet and a paved width of 20 feet. A concrete vee gutter is required in the middle of the alley. The non-paved portion of the right-of-way shall be landscaped and provided with irrigation. Garbage pickup shall not be permitted in the alleys.

II. Require subdivision designs that utilize grid street patterns, reserving cul-de-sacs only where necessary.

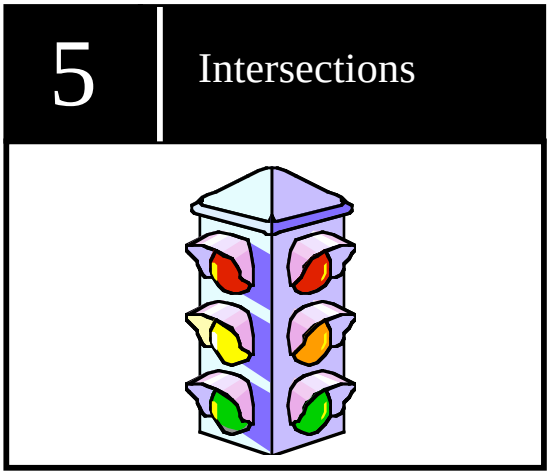
1. Subdivisions shall be designed to maximize connectivity, favoring grid street patterns over cul-de-sac heavy street patterns. The use of cul-de-sacs shall be kept to a minimum unless needed to allow more efficient utilization of oddly shaped or "leftover" portions of the parent subdivision parcel.

a. This requirement shall be implemented by the City Planner and City Engineer during project review.

Future residential streets in Farmersville should be cool and shady, as well as narrower – to tame traffic.

ISSUE FIVE: **Intersections**

Circulation at busy roadway intersections can be improved with a variety of methods. Signallization is an effective, but very expensive way to improve traffic flow. Simpler methods like adding turn lanes or stop signs can work well in a small community like Farmersville. However, signals do become necessary when traffic conditions warrant.



Another way of controlling intersections is the roundabout. For hundreds of years Europe and Mexico have used roundabouts to control traffic at intersecting streets. In addition, the interior portion of the roundabout often contains a visual feature, like landscaping, trees or even a fountain or statue. The Walnut Woods subdivision being developed in the northwest portion of the community is utilizing roundabouts. The City should encourage the use of additional roundabouts, particularly at the intersection of local streets within new development.

Goals, Objectives, Action Plans

I. Ensure that busy intersections are properly designed, thereby ensuring safe and effective traffic maneuvers.

II. Seek innovative methods of controlling traffic at busy intersections within the Farmersville planning area.

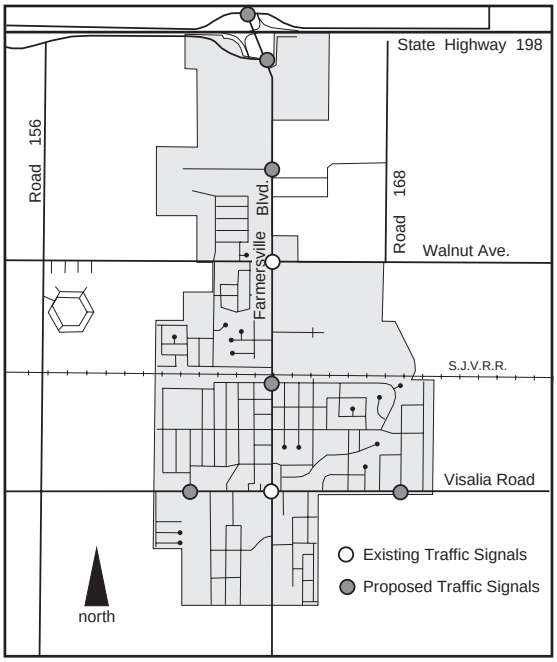
1. Future signals are designated at the following intersections (see Map 3-2):

- Farmersville Boulevard and Front Street
- Farmersville Boulevard and Terry Avenue
- Farmersville Boulevard and the frontage roads on both sides of State Route 198
- Visalia Road and Steven Avenue
- Visalia Road and Oakview Avenue

2. The City shall adopt a development impact fee that finances signalization and the proper design of intersections.

   a. The City will calculate and implement development impact fees that are consistent

Map 3-2
Proposed Traffic Signals



with the Circulation Element map and Assembly Bill 1600 (legislation that requires a nexus, or connection, between the fee being required and the improvement to be installed).

b. The City will periodically review the levels of service ratings at major intersections in Farmersville to determine when improvements should be installed.

2. The City should consider allowing roundabouts within new development.

a. The Engineering and Planning Departments will prepare the design plan for these roundabouts.

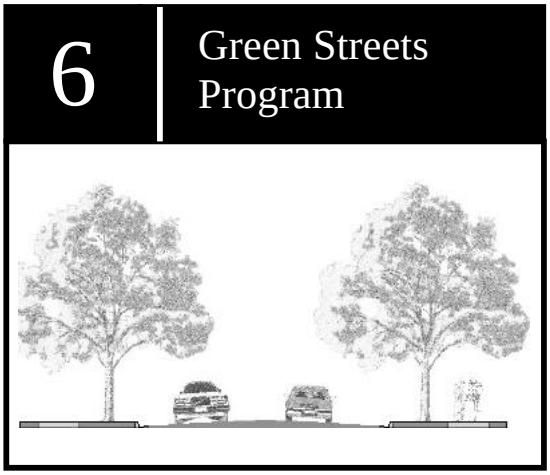
b. The City shall seek public input in regards to the interior landscape treatment of the roundabouts.

Example of a modern roundabout.

ISSUE SIX: **Green Streets Program**

Some of the great streets in the world are graced by landscaped medians or a boulevard of street trees. These features "soften" the appearance of the street, provide shade for pedestrians and establish a memorable, positive image.

Studies have shown that lands along tree-shaded streets frequently enjoy higher property values. While the cost of installing and maintaining trees is a concern, proper selection of trees can reduce long term maintenance costs. Non-profit organizations like the Urban Tree Foundation can assist Farmersville in establishing a green streets program.



I. The City should explore establishing landscaped medians and tree lined parkways on Farmersville Boulevard,Visalia Road and Walnut Avenue.

1. The City shall have prepared a streetscape design plan that will establish a 20-year improvement program for the construction of landscaped medians for Farmersville Boulevard and Visalia Road. This Plan should include details for lighting, landscaping and signing.

    a. The Engineering and Planning Departments will prepare the streetscape design plan. Funds will come from tax increment, gas tax, transportation funds and the state grant programs.

    b. The City shall apply for urban forestry grants to assist in the funding of landscaped medians.

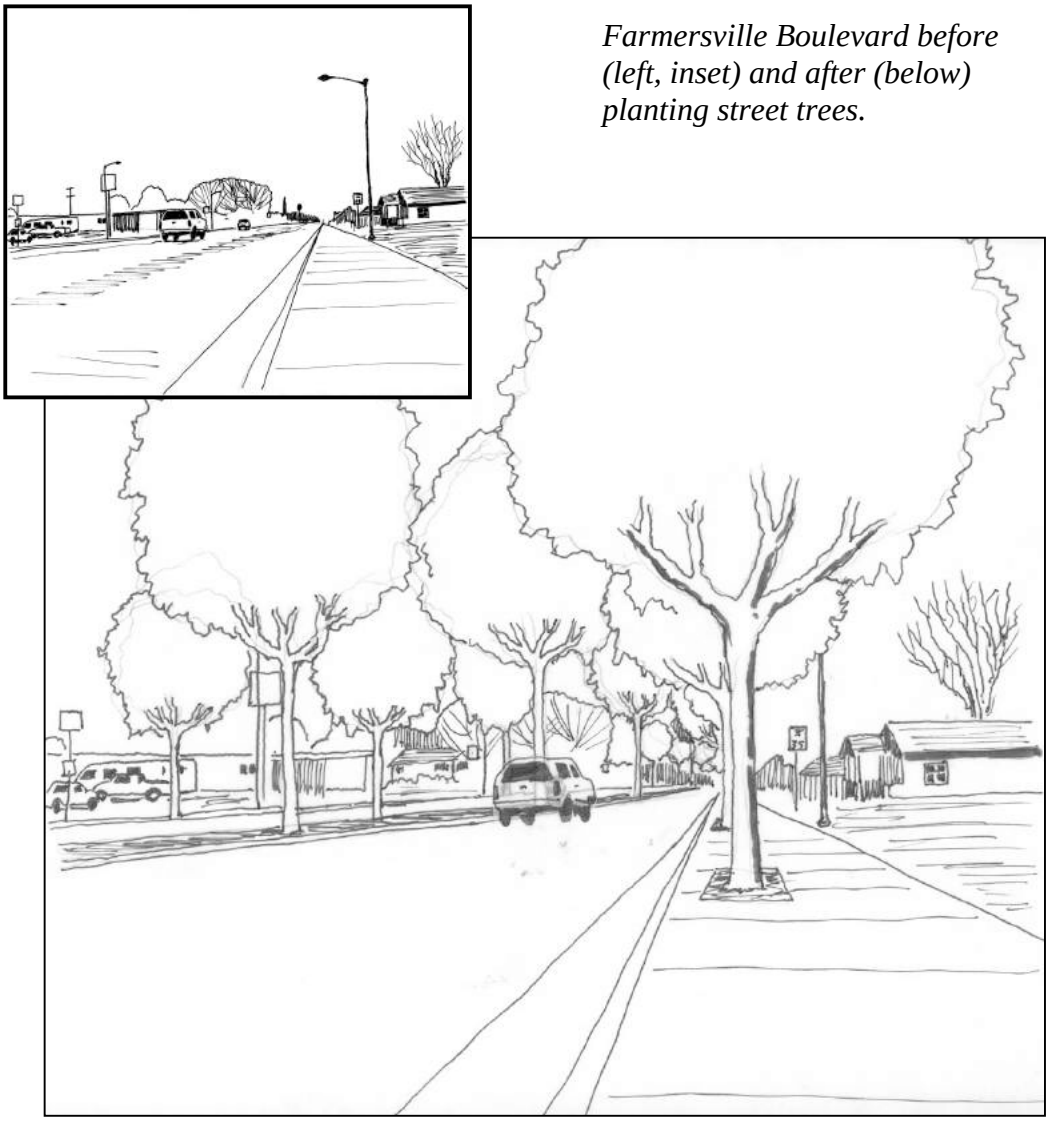
2. Existing parkways that do not contain trees should be planted with trees.

    a. The City should apply for an urban forestry grant to pay for the cost of installing street trees.

3. Parkways with trees that have broken or lifted adjacent sidewalk shall be removed and replaced with more appropriate street trees.

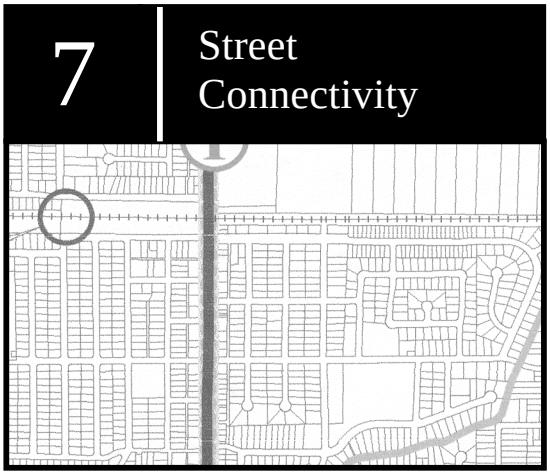
Visalia Road before (above) and after (below) conversion to a "Green Street."

4. Parkways that have been filled with pavement shall be opened up and planted with appropriate street trees.



Farmersville Boulevard before (left, inset) and after (below) planting street trees.

ISSUE SEVEN: Street Connectivity



Good connectivity is important for an effective street system. A well connected pattern of collectors and arterials ensures that no one individual street is over-burdened with traffic. Good connectivity also helps to reduce air pollution and fuel consumption, by reducing trip lengths and delays.

Connectivity in Farmersville is hampered by the railroad. Farmersville Boulevard is the only street in the entire city that crosses the tracks. This requires requires motorists to rely solely on Farmersville Boulevard to travel north/south through the community. In order to alleviate this situation, it is recommended that additional railroad crossings be established.

Goals, Objectives, Action Plans

I. Improve connectivity in Farmersville's street system

1. Establish a new railroad crossing on Ventura Avenue

    1. The City shall seek funding to establish a railroad crossing at Ventura Avenue.

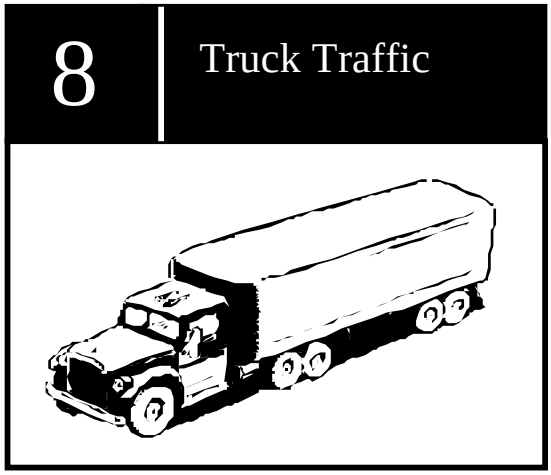
    2. Coordinate with the San Joaquin Valley Railroad in the design and timing of the crossing.

2. Explore establishing a railroad crossing east of Farmersville Boulevard. Possible crossings could be established at Rose Avenue or Brundage Avenue. Altnernately, the City could explore creating a new collector street east of the existing city limit line that connects Visalia Road to Walnut Avenue.

    a. The City Manager and City Engineer shall prepare a report on this matter for presentation to the City Council.

ISSUE EIGHT: **Truck Traffic**

Truck traffic can adversely affect a community (and specifically residential neighborhoods) because of the noise and vibrations they generate. Further, heavy trucks can damage local roadways because of their weight. However, trucks are an essential ingredient for the local economy in terms of employment and movement of goods and products. In Farmersville, the local economy would collapse if local industrial and commercial businesses could not receive trucks at their locations.



Goals, Objectives, Action Plans

I. Establish truck routes through Farmersville that are safe and not disruptive to residential neighborhoods, schools and businesses.

II. Facilitate the movement of truck traffic through and around Farmersville.

1. Identify truck routes on the Farmersville Circulation Element map.

2. Prohibit through-truck traffic on streets that are not identified as truck routes.

    a. Direct truck traffic away from residential areas and other sensitive land uses.

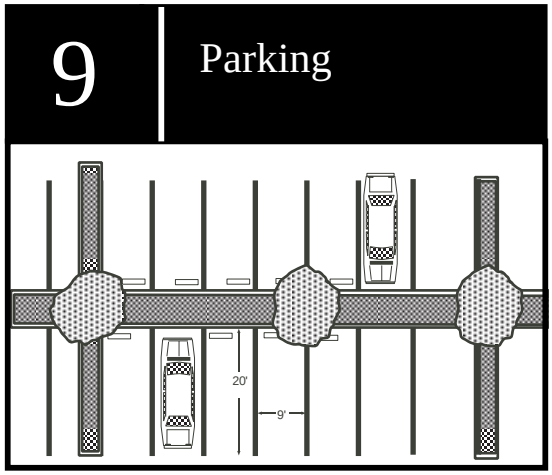
    b. The Public Works Department shall install truck route signage.

    c. Consider using county roads to divert truck traffic through or around Farmersville to avoid sensitive land uses.

See also Land Use Element – Issue 1: Community Image, for policies on truck parking.

ISSUE NINE: **Parking**

The success of commercial businesses is often dependent upon parking. Parking must be in close proximity to the business, it must be safe, and should well designed - good lighting, adequate stalls, shaded, and easy access.



For other uses, such as public facilities, churches, apartments and industries, good parking design is important so as to ensure that surrounding land uses are not adversely impacted by individuals parking their vehicles in front of other establishments or residences.

Goals, Objectives, Action Plans

I. Insure that adequate off-street parking is provided by new development.

II. Encourage the joint use of parking lots.

III. Design parking lots that are safe, visually pleasing and convenient.

IV. Provide adequate public parking in the downtown.

1. Parking lots for new uses shall include landscaping, proper lighting and shall be properly designed to ensure maneuverability of vehicles and pedestrians.

    a. Through the site plan review process, the Planning and Engineering Departments will ensure that the design of new parking lots contain these features.

    b. The Zoning Ordinance shall be amended to include parking lot design standards, including a requirement for 50 percent shading within a ten-year time frame. Rows of parking stalls shall be interrupted with tree planters.

Parking lot landscaping

1. Pedestrian pathways through parking lots shall be clearly delineated using improvements such as landscaping, lighting, trellises and special pavement material, such as textured/colored concrete.

a. This standard shall be implemented during the site plan review process.

3. Parking lots located adjacent to streets shall be screened by a low wall, berm, hedge or combination of these (see diagram to the right).

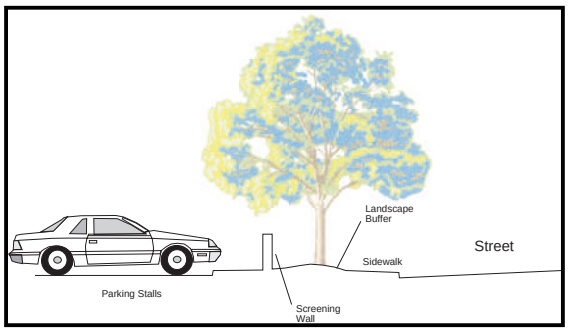
   a. The Zoning Ordinance should be amended to add this standard.

4. New parking lots along Farmersville Boulevard and Visalia Road should be designed so that the parking lot does not occupy the entire frontage of the site.

   a. Through the site plan review process, the Planning Department will ensure that the design of new parking lots will be consistent with this policy.

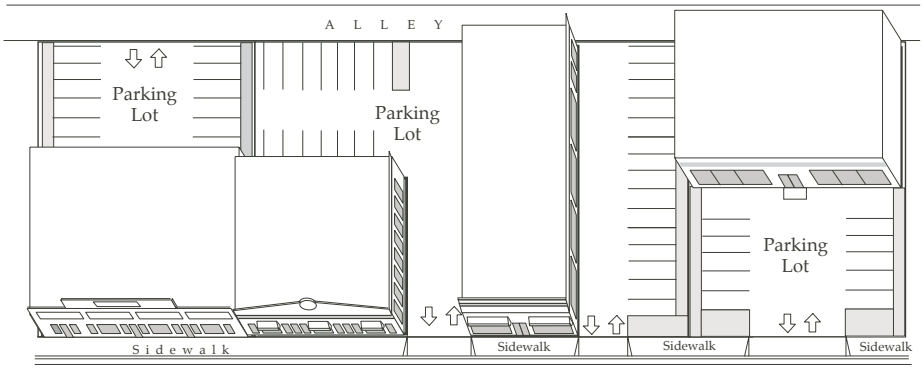
5. Off-street parking in the downtown should be located on the side or at the rear of the building(s). The City should also pursue re-designing Farmersville Boulevard to add additional diagonal parking on-street.

   a. The City and/or the Farmersville Redevelopment Agency should consider the purchase of land in the downtown for use as a public parking lot.



BACKGROUND

The downtown environment of most communities is one of pedestrian shopping where buildings come right up to the sidewalk. Storefronts feature large display windows that allow window shopping and a view of what's available. Pedestrians are able to window shop by walking past numerous businesses in a short distance. This pattern can be destroyed when a parking lot replaces a store front. For this reason, many cities require parking in the downtown area to be screened - either to the rear or to the side of a building.



CONFIGURATION #1

PREFERRED. Parking lot at rear of building. Cars take access from alley. Building at front of lot.

CONFIGURATION #2

ACCEPTABLE. Parking lot at rear of building. Cars take access from street or alley. building at front of lot.

CONFIGURATION #3

ACCEPTABLE. Parking lot at side of building. Cars take access from street or alley. Building along side of lot with front at sidewalk.

CONFIGURATION #4

STRONGLY DISCOURAGED. Parking lot at front of building. Cars take access from street. Building is at rear of the lot.

S T R E E T

The three buildings on the left have at least some street frontage. The building on the right has no street frontage and disrupts the pattern of sidewalk storefronts in the downtown district.

ISSUE TEN: **Transit**

10 Transit

Alternative modes of transportation are important to different groups of people for different reasons. For low-income, handicapped or non-driving age persons, public transit may be the only means of travel. For a person who is concerned about polluting the air, riding a bus or bike may be their way of minimizing an impact on the environment.

Farmersville is presently the only city in Tulare County that does not have some type of transit system. As the community grows, the City should explore adding at least a dial-a-ride type service. This would be a particularly valuable addition for individuals who do not have access to other modes of transportation

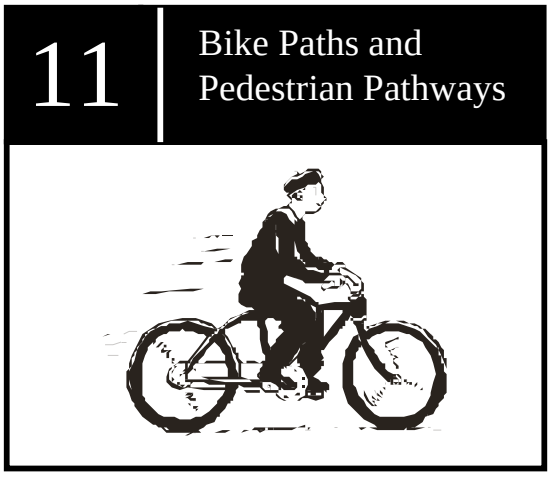
Goals, Objectives, Action Plans

I. Promote opportunities for residents to increase mobility within Farmersville.

1. Farmersville should explore the concept of establishing a local transit service, such as a dial-a-ride system

    a. The City should coordinate with the Tulare County Association of Governments to consider and operating structure and funding mechanisms necessary to establish a dial-a-ride system. Also, coordinate with neighboring communities that do operate transit service.

ISSUE ELEVEN: **Bike Paths and Pedestrian Pathways**



Bicycling is an important form of transportation. In a small community like Farmersville, bicycling can provide a realistic way to make meaningful trips around the community.

When added to the local bike traffic generated by school-aged children, it is important to properly locate and design Farmersville's bikepath system.

By encouraging persons to walk in Farmersville, personal contact is promoted. This interaction makes for a more close-knit community in addition to promoting a more healthy lifestyle.

Farmersville has been participating with the Tulare County Association of Governments in developing a county-wide bicycle route plan. As of this writing the plan is in the draft stage. The draft plan identifies four future bicycle routes in Farmersville, including Visalia Road, Farmersville Boulevard, Walnut Avenue and Avenue 296 (the frontage road along the north side of State Route 198).

Goals, Objectives, Action Plans

I. Encourage persons to ride bikes for good health as well as for environmental reasons.

II. Ensure that Farmersville's bikepath system is consistent with the Tulare County Association of Government's Countywide Bicycle Transportation Plan.

III. Encourage residents to walk in Farmersville.

1. Develop a bike path plan for the City of Farmersville. Consider other routes in addition to those identified in the regional bike plan.

    a. Design the Plan so that some of the bike path segments are not along surface streets but along the railroad right-of-way, parks and creek/canal easements.

b. Apply for state and federal funds to finance the construction of the bikepath system.

c. Ensure that subdivisions are designed so that persons riding bikes can access adjacent properties from the neighborhood.

d. Cooperate with the County of Tulare to ensure that Farmersville's Plan is linked to the County's regional bikeway network.

e. Consider implementing traffic calming designs where bike paths cross surface streets.

f. Bikepaths will be constructed consistent with the bikepath cross-section illustrated in Appendix A of the Circulation Element.

2. Provide safe and convenient pedestrian access to all areas of the city, including between neighborhoods.

a. Maintain and repair sidewalks to make them safe for pedestrians.

b. Plant existing parkways that lack trees to make the walking experience more comfortable and enjoyable.

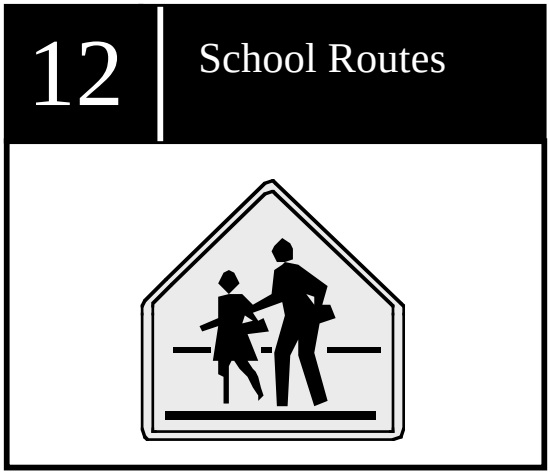
c. Provide signage for walking paths.

d. Investigate the use of creek and canal easements for walking paths.

Investigate the use of creek and canal easements for walking paths

ISSUE TWELVE: **School Routes**

School-aged children walking or riding to school should be provided with a safe route to school. There are a number of roadways in Farmersville that are used extensively by children traveling to and from school. Sidewalks should always be constructed along both sides of roadways leading to schools in Farmersville.



Goals, Objectives, Action Plans

I. Ensure that children have safe walking and bicycling routes to school.

1. Require new development to install sidewalks.

    a. The City Planner and City Engineer will ensure that sidewalks are installed as a requirement of development.

2. Seek funding to establish sidewalks in existing neighborhoods without them.

    a. The City should seek grant monies to establish sidewalks in critical locations.

3. Coordinate with Farmersville Unified School District (F.U.S.D.) to establish sidewalks along their campuses.

    a. City staff will work with F.U.S.D. to ensure sidewalks are established around school campuses.

CIRCULATION MAP

Map 3-3 delineates the different types of roadway types and routes of other types of transportation in the Farmersville planning area.

STATE HWY 198

AVENUE 288

S.J.V.R.R.

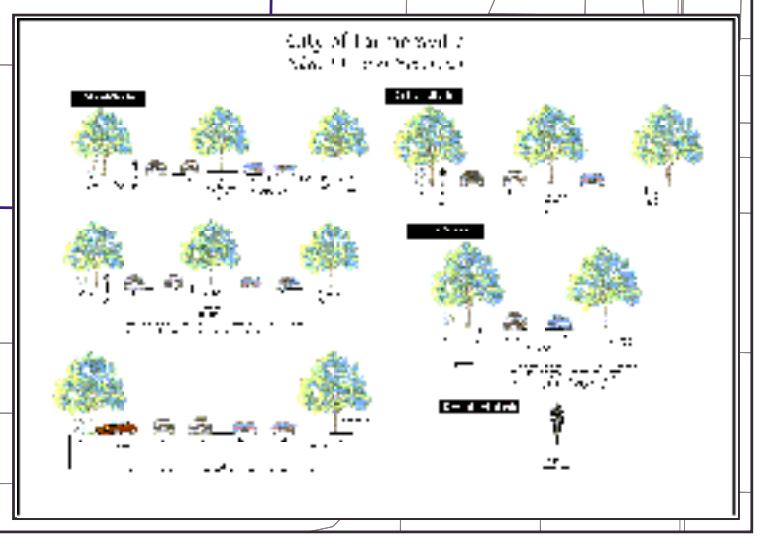
Railroad Crossing

AVENUE 280

ROAD 168

ROAD 156

ROAD 164



General Plan Circulation Designations

Legend

- City Limits
- Urban Development Boundary
- Urban Area Boundary
- Parcels
- Railroads
- Ave 180 Streets
- Collector
- Arterial
- Freeway
- Green Street
- Pedestrian Path
- Bike Route
- Industrial Collector
- T Designated Truck Route
- Traffic Signal

Farmersville

Farmersville General Plan

Map No. 3-3

N W E S

500 0 500 Feet

Collins & Schoettler

Base data provided by Tulare County. Created on 4/22/01 by Benjamin A. Kimball.
For reference only. Not drawn to engineering standards.

CHAPTER 4 • CONSERVATION, OPEN SPACE, PARKS AND RECREATION ELEMENT

Introduction

Open space, parks, and recreation facilities enhance the quality of life in a community. The conservation of these types of resources is an integral part of providing for the needs and welfare of a community.

Conservation of open space takes planning for the future. If these areas are not planned for at this time and set aside for the future, a city runs the risk of losing them to development.

Conservation of open space takes planning for the future. If these areas are not planned for at this time and set aside for the future, a city runs the risk of losing them to development.

Open space lands are undeveloped areas that provide a low density perception in an urban area, define the edge of a community, and provide the sight lines that allow long distance vistas to the Sierra Nevada, agriculture fields, or other local view-points. Most people think of open space as park areas, but a large portion of a city's open space is provided by residential yard areas and right-of-way along streets.

A park is an open area that provides an assortment of recreation and leisure opportunities for a community. A park can include community recreation parks, school playgrounds, community centers, and other publicly-owned outdoor recreation areas. Parks can supply active as well as passive recreation. Activities can range from family picnics to organized sporting events.

One of the primary purposes of parks is to contribute to Farmersville's quality of life. The City accomplishes this through the provision of convenient, well-equipped and maintained sites and facilities, conservation of natural resources, and a comprehensive and quality program of recreational activities and services for all citizens of the community.

The Element

The open space portion of this Element identifies lands that are appropriate for open space and parks acquisition as well as the development of recreation programs on these lands. The Element establishes goals, policies, action programs and standards for the conservation and treatment of open space.

Government Code Section 65560 et seq. defines **open space** as land that can be used for any of the following uses:

- Conservation of natural resources
- Managed production of resources
- Outdoor recreation
- Preservation of lands for the purpose of protecting the public's health and safety

Specific requirements of the **conservation** portion of the Element are identified in Government Code Section 65302 (d). This portion of the element includes "the conservation, development and utilization of natural resources, including water, forests, soils, rivers and other waters, wildlife, and other natural resources." Items that are addressed in this category include the conservation of:

- Agricultural lands
- Soils
- Air and water quality
- Mineral resources
- Wildlife habitat
- View opportunities

The Parks and Recreation Element is an optional element of the General Plan. This Element identifies existing and potential recreational opportunities within the community. Since it is closely related to the City's open space system, integration of the three documents into one element makes good planning sense.

Existing Conditions

Part II of the General Plan contains an in-depth profile of conditions in the Farmersville planning area. A brief summary of these conditions is provided below, as they pertain to particular topics addressed by the Element.

Air Quality

Farmersville has a moderate climate with warm summers and generally mild winters. The City is located within the San Joaquin Valley Air Basin. The closest air monitoring station is located in Visalia, where Ozone and PM-10 (Particulate Matter-10 microns or less) are measured. The San Joaquin Valley, including Farmersville, has failed to achieve state and federal standards for these pollutants and is therefore designated as a non-attainment area. There are several factors which cause this to occur. They are:

The San Joaquin Valley, including Farmersville, has failed to achieve state and federal standards for ozone and PM-10 and is therefore designated as a non-attainment area

1. The topography of the valley as a basin surrounded by mountains has the effect of trapping stagnant or polluted air.

2. The local climate (abundant sunshine and high atmospheric pressure) is favorable for the formation of smog.

3. The primary factor is the growth of population in the Valley. With more and more people moving to the valley, smog is produced by fossil fuel burning and emissions from factories and other combustion processes.

Water Resources

Farmersville currently obtains its water from underground supplies. The aquifer underlying the Cityis a good supply of water although the relative shallowness of the water table can make the supply susceptible to surface contaminants. In recent years, the water table has been as shallow as 20 feet below ground level. In order to reduce the possibility of contamination, the city's well system draws water from 240 to 400 feet below ground level.

The water table is recharged primarily by water moving downhill from the watersheds of Sierra Nevada streams, particularly the Kaweah River and its distributary system, which includes Deep Creek. Irrigation waters also help to recharge the water table. Rainfall in the Farmersville area provides only a small amount of groundwater recharge.

Deep Creek is a natural waterway which has been trenched and channelized since the arrival of European settlers. However, portions of the channel retain some "native" vegetation such as oak trees, willows and vines. The presence of these relatively undisturbed stream sections represents an important natural resource. These types of riparian areas can function as a protective travel corridor for wildlife through an otherwise "sterile" area.

In addition to Deep Creek there are other irrigation facilities in the planning area. These include channels maintained by Tulare Irrigation District (TID) and People's Ditch Company.

In 2000, the Tulare Irrigation District (TID) canal that runs along the west side of Farmersville was the subject of a proposal by TID to line the channel with concrete, in order to reduce the loss of water to percolation. Controversy centered over the loss of groundwater recharge from what was historically a natural stream channel, and also the loss of numerous large Valley Oak trees along the banks of the ditch.

The project was cancelled when an agreement was reached between TID, Kaweah Water Conservation District and the City of Visalia that set forth a mechanism whereby TID would receive payments for water lost to percolation.

Agricultural Resources

Farmersville is surrounded by thousands of acres of producing cropland. Agricultural lands have provided a strong economic base for the community as well as a rural landscape and open space "system" that surrounds the City. As Farmersville continues to grow, surrounding agricultural lands are taken out of production to accommodate residential, commercial, and industrial growth.

In 1965, California adopted the Williamson Act to address the loss of agricultural lands due to urbanization. The Williamson Act provides property owners with a reduction in their property tax if they agree to maintain their land in agriculture for a ten-year period. This ensures, at least for the near-future, that agricultural lands will remain undeveloped, thereby continuing agricultural production and enhancing the sense of open space around Farmersville. Map 4-1 shows properties within the Farmersville planning area that have a Williamson Act contract. Approximately 60 acres within Farmersville's Urban Development Boundary are in agricultural preserves under Williamson Act contracts

Mineral Resources

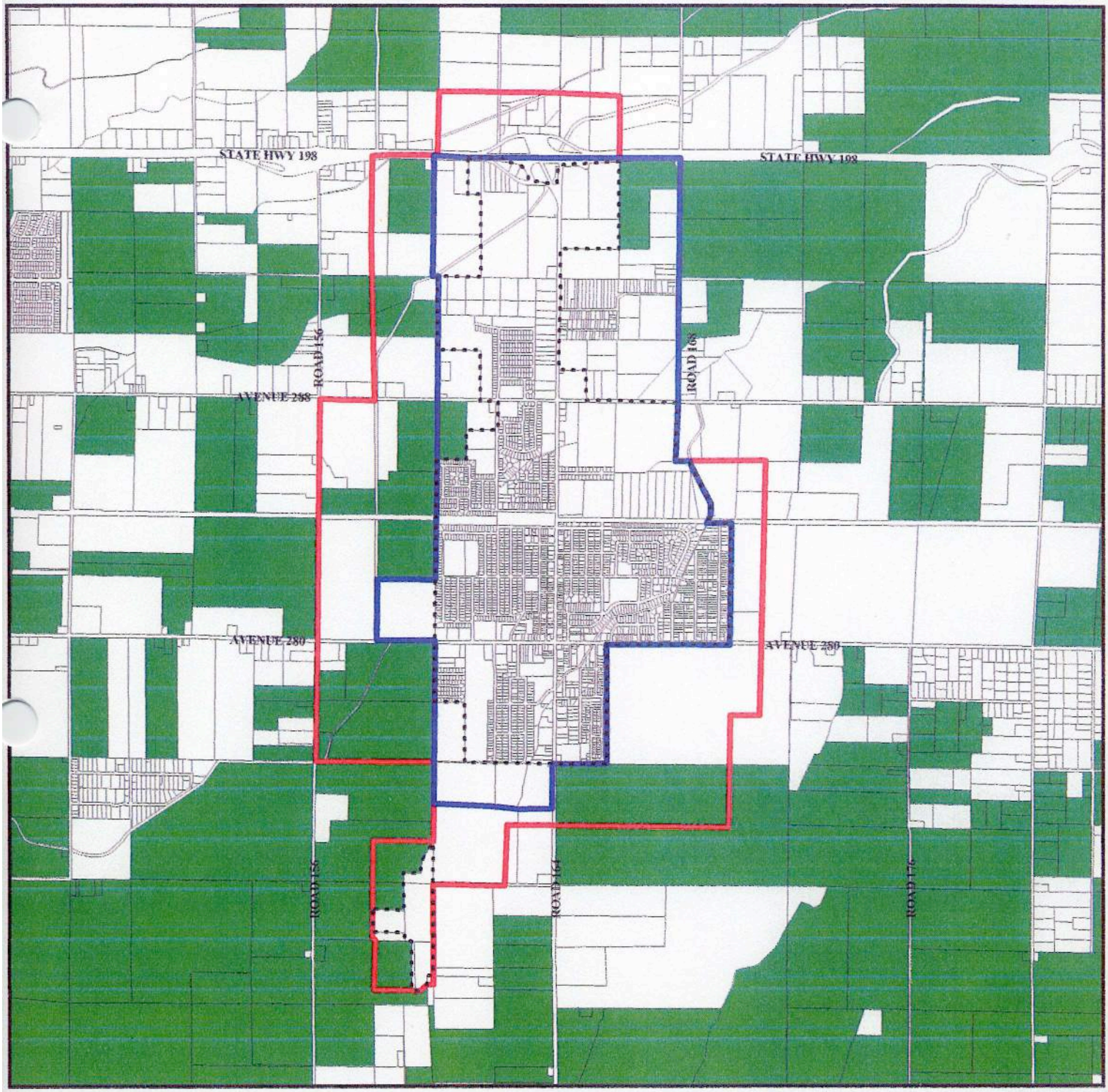
There are no known mineral resources within the planning area and no known mining of mineral resources has occurred in the planning area. The closest significant mineral resources consist of sand and gravel deposits along the Kaweah River northeast of Farmersville, near the Sierra Nevada foothills. Several open-pit sand and gravel mines operate along the river. Recent applications to expand these operations have generated controversy over their potential environmental impacts.

Soil Resources

Soils are discussed in detail in Part II: Resources. The soils in the Farmersville area are described by the Soil Survey of Central Tulare County, prepared by the Soil Conservation Service, Department of Agriculture (see Map 2-2 in Part II: Community Profile). The Soil Survey identifies three specific soils in the planning area. They are

- Grangeville sandy loam, drained, 0 - 2 % slopes;
- Nord fine sandy loam, 0 - 2% slopes;
- Tagus loam, 0 - 2% slopes.

According to the survey, these soils have few limitations for urban development. At the same time, they are considered to be prime agricultural soils.



Williamson Act Agricultural Preserve Areas

Farmersville General Plan

Map # 4-1

Legend

- City Limits
- Urban Development Boundary
- Urban Area Boundary
- Ave 180 Major Roads

Parcels Identified with a Williamson Act Number and Classified as an Agricultural Preserve.

- Ag Preserve Parcels
- Non Ag Preserve Parcels

N W E S

500 0 500 1000 Feet

Collins & Schoettler
PLANNING CONSULTANTS

1002 West Main Street • Visalia, CA • 93291

Base data provided by Tulare County. Created on 2/11/02 by Benjamin A. Kimball.
For reference only. Not drawn to engineering standards.

Biotic Resources

The Conservation Element is required to discuss the presence of native plants and animals and in particular, native species regarded as rare, threatened, or endangered. In addition to inventorying these species, the element must plan for their preservation. Additional information on biotic resources may be found in Part II: Chapter 3: Resources.

For the Farmersville area a list of sensitive species was developed based upon the list of species identified by a search of the Exeter Quadrangle in the California Natural Diversity Database, and discussions with local wildlife experts familiar with the area. A list of the plant and wildlife species addressed by field surveys is presented in Table 4-1. A total of 8 special status animal species could potentially occur in the Farmersville area. Two of the 8 species are listed as threatened or endangered by the U.S. Fish and Wildlife Service or the California Department of Fish and Game. The remaining 6 species are candidates for federal listing or listed species of special concern by the State of California. No special status plant species are likely to occur in the planning area.

A biotic survey prepared for the General Plan update indicated that the overwhelming bulk of the planning area has been severely disturbed from its natural state by urbanization and agricultural activities. The survey did note the presence of some minor areas that appear to be less disturbed including scatterred grasslands and riparian areas along Deep Creek. The survey indicated that the grasslands have a very low likelihood of supporting native rare, threatened or endangered (RTE) animal species.

The riparian areas along Deep Creek near the railroad were noted as having a higher value for habitat. These sections of waterway should be carefully considered for protection from development.

Table 4-1
Sensitive Species Potentially Occurring in the Farmersville Area

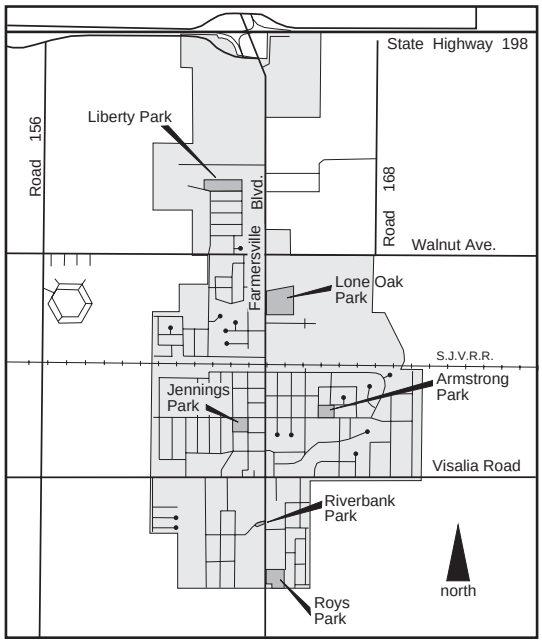
		Listing Status	
Common Name	**Scientific Name**	**Federal**	**State**
Mammals			
San Joaquin Kit Fox	*Vulpes macrotis mutica*	E	
Birds			
Cooper's Hawk	*Accipiter cooperi*	-	CSC
Sharp-shinned Hawk	*Accipiter striatus*	-	CSC
Great Blue Heron	*Ardea herodias*	-	CSC
Burrowing Owl	*Athene cunicularia*	-	CSC
Great Egret	*Casmerodius albus*	-	CSC
Black-shouldered kite	*Elanus caeruleus*	-	CSC
Invertebrates			
Valley Elderberry Longhorn Beetle	*Desmocerus californicus dimorphus*	T	

Notes:
E Federal/State endangered;
T Federal/State threatened;
R Federal/State rare
C1 Federal candidate (sufficient data to support listing)
C2 Federal candidate (insufficient data to support listing)
CSC California Species of Special Concern

Park and Recreation Resources

The City of Farmersville currently has five developed parksites and one undeveloped (city-owned) parksite (see Table 4-2 and Map 4-2

Map 4-2
Existing Parks



In addition to these existing parks the City owns a five-acre parcel on the north edge of the Sierra Woods subdivision. This site will be developed into a park featuring lawn, trees and picnic tables.

In addition to the city's parks, the athletic fields on the campuses of Farmersville Unified School District provide recrational opportunities after school hours. At this time, the City and School District do not have an official agreement for joint-use of district facilities.

Sports Programs

At this time, the City does not have an established recreation program. However, there are an organized little league, pee wee softball and pop warner football for children. Youths interested in soccer participate in

Table 4-2 • Existing Parks

- Jennings Park (2.1 acres)
  - Grass field
  - Baseball diamond
  - Handball Court
- Lone Oak Park (4.2 acres)
  - Grass field
  - Baseball Diamonds
  - Picnic tables
  - Barbecues
- Roy's Park (4.5 acres)
  - Grass field
  - Playground
  - Picnic tables
  - Barbecues
- Ash Street Park (2.2 acres)
  - Grass field
  - Soccer Field
  - Jungle gym
  - Picnic tables
- Riverbank Park (1/2 acre)
  - Grassy area on bank of Deep Creek
  - Picnic table
- Liberty Park (6 acres)
  - Picnic tables
  - Grassy play area
  - Play equipment

Visalia AYSO (American Youth Soccer League) programs. Most recently, the city has been seeking funding for after school programs.

Regional Parks Facilities

There are several regional parks that are within driving distance to Farmersville. Generally speaking, at a maximum, most people are willing to travel thirty minutes to get to a regional park facility, and possibly one hour if there was some type of event scheduled there, such as a church gathering, family reunion, or school function.

Farmersville has two regional parks operated by Tulare County within 15 minutes driving time. Cutler Park is a regional park located about 5 miles north of Farmersville. The park is situated on 50 acres along the bank of the St. Johns River and features grassy areas shaded by towering oak trees. Facilities include picnic tables and barbecues, walking paths, restrooms and passive play areas.

Mooney's Grove is a regional park located about five miles west of Farmersville, on the south side of Visalia. This park covers some 140 acres and preserves a large area of native valley oak trees. The park features a historical museum, picnic tables, restrooms and play areas, ponds, and creeks.

About two miles northeast of Farmersville is Kaweah Oaks Preserve. This 324-acre property contains the largest protected example of Great Valley valley oak riparian forest anywhere within the Kaweah River Delta. About half the property at the Preserve is an equally rare habitat called alkali meadow where bunchgrasses and other alkali-loving native plants thrive. The Preserve is frequently used as an educational resource by local school classes.

Kaweah Oaks Preserve was originally operated by the Nature Conservancy but is now owned and operated by the Sierra Los Tulares Land Trust. The trust also operates the Herbert Wetland Prairie Preserve on 725 acres about six miles south of Farmersville. This site features vernal pools scattered amid extensive grassland and is a rare example of the valley landscape before widespread agricultural and urban development.

Future Needs

A primary objective of this Element is the establishment of criteria that will guide the acquisition and development of future open space areas. These standards should be realistic and represent the actual amount of area and facilities necessary to meet the needs and desires of the community. These open spaces can be provided in a variety of ways, and do not necessarily need to be under the control of the City to meet Farmersville's needs.

State Government Code Section 66477 (b) requires a minimum of three acres of open space for every one thousand residents. Each jurisdiction can require that a maximum of five acres of open space be set aside per one thousand residents if the community feels that current standards are not meeting demands.

Presently, Farmersville has a total of 19.5 acres of developed parkland. With a year 2000 population of 8,737 persons, Farmersville only has 1.95 acres of park land per one thousand residents. At a rate of three acres per 1,000 residents, the City should have about 26 acres of parks. As such, Farmersville is currently "short" by about 6.7 acres.

Presently, Farmersville has a total of 19.5 acres of developed parkland. With a year 2000 population of 8,737 persons, Farmersville only has 1.95 acres of park land per one thousand residents. At a rate of three acres per 1,000 residents, the City should have about 26 acres of parks. As such, Farmersville is currently "short" by about 6.7 acres.

Projections of a community's open space and park needs involves many factors. Population, income, education, accessibility, and age must all be considered in determining the correct amount of open space/parks for a community.

Park aquisition must strike a balance between use and the maintenance available to sustain the park. Generally speaking, city parks cost approximately $3,500 to $4,000 per acre per year to maintain.

A city may have 10 acres of open space per 1,000 persons; however, if this acreage is not maintained properly, its value as usable open space will be greatly diminished. As Farmersville acquires more parkland, it must also dedicate the resources to adequately maintain that land.

Americans today are spending more of their time in recreation leisure activities than ever before. This emphasis has created a much higher demand than ever for

quality open space, parks and recreation facilities. In response to this, cities must designate areas for such uses, before development occurs.

Parkland

In order to determine the type, location and amount of parkland that will be required by Farmersville within the 23-year planning period, population projections are required. Two population projections (low and high) are displayed in Table 4-3. The table shows that as population increases, so does the need for park acreage.

Table 4-3 shows that Farmersville is currently "short" 6.7 acres on park land - using the standard of 3 acres per 1,000 residents. By the year 2025, the City would need to add about 34 acres to meet the standard (using an annual growth rate of 2.9% per year. Using the "high" growth rate of 3.4% per year, the City would need to add 41 acres of parkland.

Table 4-3
Parkland Demand Projections

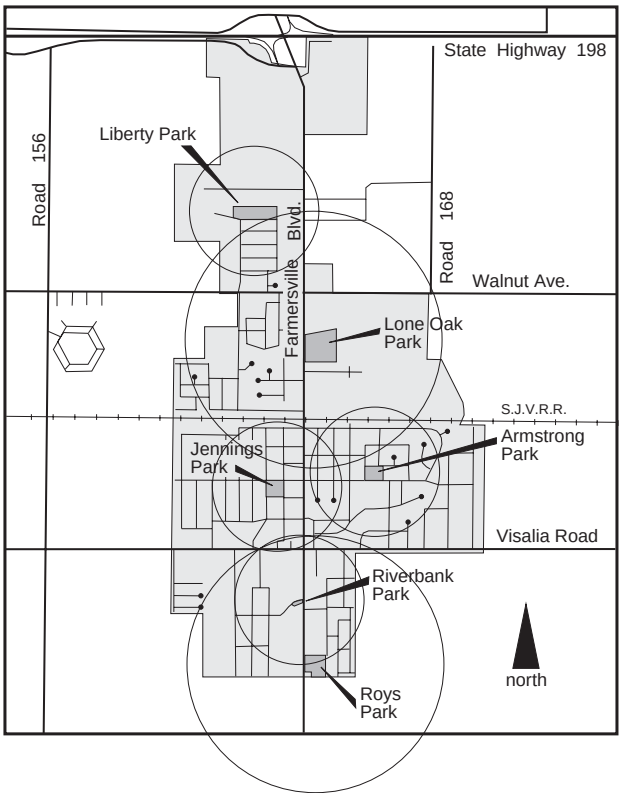
	Low Population Projection			High Population Projection		
	Population Projection (2.9% per year)	Park land need at 3 acres per 1,000 residents	Difference between existing park acreage and projected need	Population Projection (3.4% per year)	Park land need at 3 acres per 1,000 residents	Difference between existing park acreage and projected need
2000	8,737	26.2 acres	6.7 acres	8,737	26.2 acres	6.7 acres
2005	10,079	30.2	10.7	10,327	31	11.5
2010	11,628	34.9	15.4	12,206	36.6	17.1
2015	13,415	40.2	20.7	14,427	43.3	23.8
2020	15,476	46.4	26.9	17,052	51.2	31.7
2025	17,854	53.6	34.1	20,155	60.5	41

Accessibility

Another important factor in the planning of future parks is to insure that parks are accessible to all citizens of the community. For instance, although a city may currently meet the standards regarding the amount of parkland required; the existing park sites may not be easily accessible from all areas of the community.

Map 4-3 shows the location of existing City-owned park facilities and their service areas. Service area dimensions are those provided by the National Parks and Recreation Association. Generally, a community park will have a one-half mile service area, and a neighborhood park has a one-quarter mile service area. In general Farmersville has been successful in establishing a good distribution of parks throughout the community. The community will need to continue planning for park needs as new neighborhoods are developed.

Map 4-3
Park Service Areas



GOALS, OBJECTIVES AND ACTION PLANS

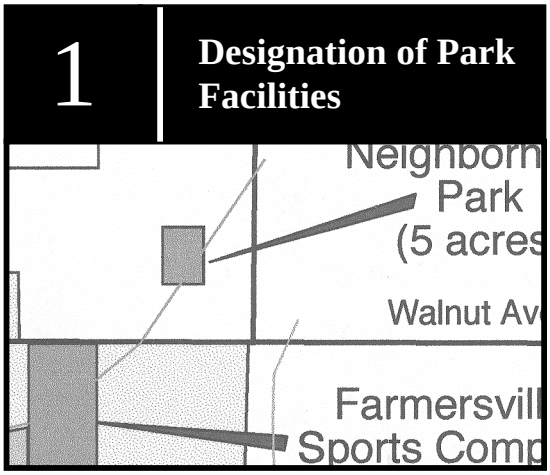
This portion of the Element establishes goals, objectives and action plans to guide to the future development of parks and recreation facilities as well as the preservation of Farmersville's natural resources.

Goals, objectives and action plans are organized under topical issues, including:

- Designation of Park Facilities
- Parks Location and Design
- Acquisition and Funding
- Urban Boundaries and Farmland Protection
- Air and Water Quality
- Energy Conservation
- Biotic Resources
- Historic/Cultural Resources

ISSUE ONE: **Designation of Park Facilities**

The City's General Plan must designate adequate recreational facilities for future development. The Land Use Element and this Element must provide locations for the future development of conservation, open space, parks and recreation facilities. If adequate sites are not designated in advance, the City will continue to grow with no property set aside for these uses.



Goals, Objectives, Action Plans

I. Plan for adequate park and recreation facilities to meet existing and future needs in Farmersville.

1. Maintain compliance with adopted City park standards now, and as the City grows.

    a. The City shall review and, if necessary, increase its park impact fees in order to ensure that it maintains its ratio of at least 3 acres of parkland per 1,000 people.

2. Provide a variety of park sites and recreational facilities to accommodate the City's diverse population.

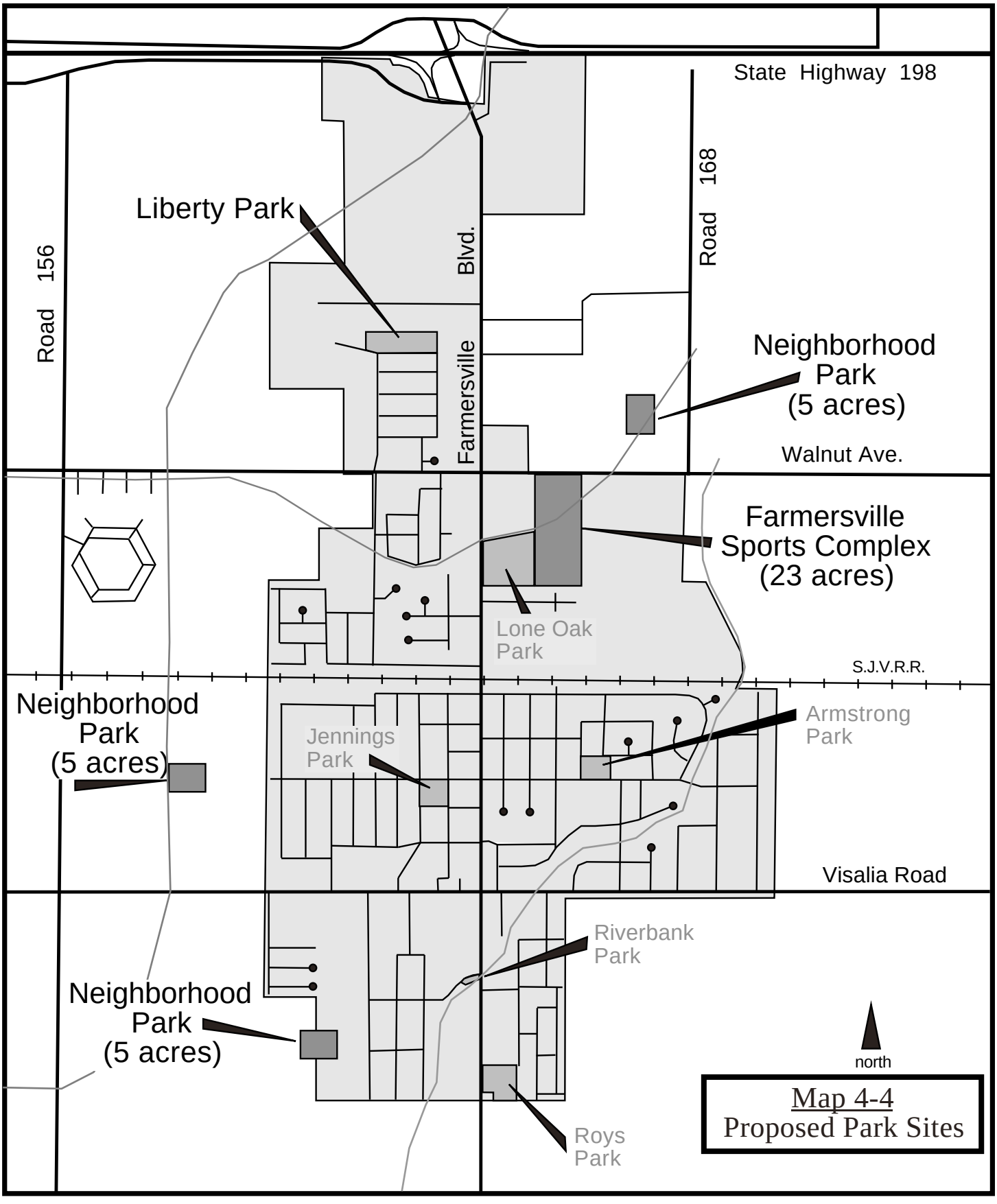
    a. Future park sites are identified on Map 4-4

3. Plan for the acquisition of parks prior to urban growth and development. These lands may be acquired and left vacant until funding for development is available.

    a. Adoption of this Element and the Land Use Element will provide implementation of this item.

4. Encourage private or commercial development of recreational opportunities such as racquetball courts, golf, commercial softball, etc., that are available to the public.

    a. The City will encourage the development of private recreation facilities.



Map 4-4
Proposed Park Sites

5. Add at least 35 acres of conservation, open space and parks and recreation area by the year 2025. This figure is based on a 2025 population of 17,854 and a standard of three acres of parkland per 1,000 residents. Farmersville currently has 18 acres of public parks.

    a. This element and the Land Use Element identify future park locations in the planning area. City Planning and Engineering Departments must ensure that developers are assessed park impact fees.

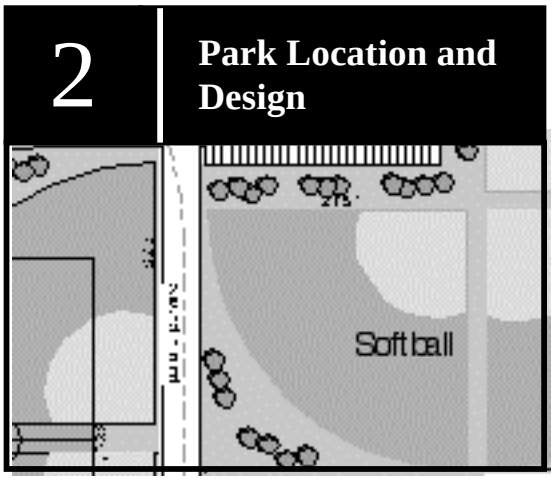
6. Creeks and canals in the planning area shall be investigated for use as public open space features, with landscaped pathways and landscaping adjacent to the waterway.

    a. Farmersville will work with local canal and irrigation districts to develop standards to incorporate local waterways as open space features. The City could require developers of adjacent lands to install a pathway and landscaping within canal easements. This could satisfy the developer's open space dedication obligation.

Investigate the use of creeks and canals for use as public open space features, with landscaped pathways and landscaping adjacent to the waterway.

ISSUE TWO: **Park Location and Design**

The City of Farmersville must work to ensure there is an adequate distribution of park and open space facilities throughout the City. Active park sites and passive open space areas should be accessible to all segments of the community.



Goals, Objectives, Action Plans

I. Establish parks in appropriate locations and ensure their design caters to the needs of the community.

1. Design park sites that fulfill the open space, passive and active recreational needs of all the citizens of Farmersville.

    a. Prior to the design of each new park, the City and Recreation Commission shall conduct public workshops to receive input from citizens regarding the design of the park.

2. Locate future parks in such a way as to be accessible and available to all the citizens of Farmersville.

    a. Adoption of this Element and the Land Use Map and its policies will provide implementation of this policy. The City must observe this policy when considering the location of new parks.

3. Locate park and recreational facilities so that they do not conflict with adjacent land uses.

    a. Adoption of this Element and its policies will provide implementation of this policy. Factors to consider include avoiding streets with high traffic, industrial uses, and noise sensitive uses.

4. Consider the design of parks that double as stormwater retention/detention facilities.

a. The Planning Department and City Engineer shall explore the feasibility of designing future parks to act as dual use facilities, incorporating recreation and storm drainage.

5. All parks shall be designed to meet the needs of the handicapped.

    a. The Building Department shall review plans for proposed facilities for compliance with handicap/accessibility requirements of the Uniform Building Code.

6. Create a new Smart Development zone district that will require new subdivisions of forty acres or more to incorporate a neighborhood subdivision park into the project. In turn for development of the park, the city could allow a moderate increase in residential density within the subdivision.

    a. The Planning Department shall develop a new zone which incorporates the above-referenced standards.

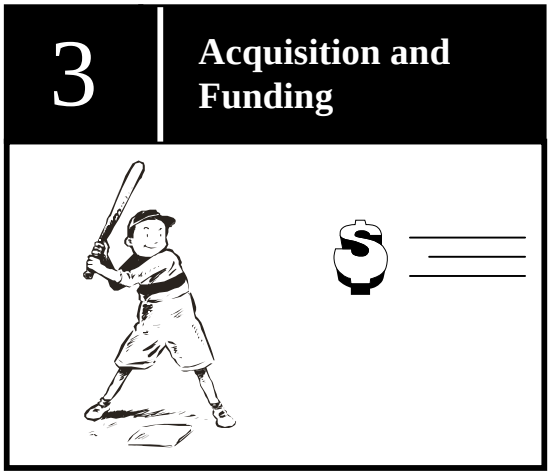
7. Parks and other facilities that may require a significant amount of night lighting, such as ball parks and tennis courts, should be designed in such a way as to minimize the impacts of lighting on the surrounding neighborhood.

    a. The Planning Department shall review lighting schemes for all projects.

8. Park design may incorporate the use of berms and small hills where appropriate to provide relief to the otherwise flat terrain of Farmersville.

    a. Grading plans for all park sites should include areas of berms and mounding, as appropriate. Earth moved from ponding basins or other construction projects can provide a ready source for berms and hills.

ISSUE THREE: **Acquisition and Funding**



Adequate funding is the key to establishing and maintaining a quality parks and recreation program. Numerous sources of funding exist, however it is not always easy to tap these sources. To be successful, the City should evaluate a variety of funding methods and sources. Strategies for doing this are provided in the following goals, objectives and action plans.

Goals, Objectives, Action Plans

I. Create and preserve open space in the Farmersville area to meet the needs of the community now, and in the future.

1. Farmersville shall continue to require developers to pay park impact fees (Quimby fees) or dedicate land in lieu thereof. The State of California adopted Section 11546 of the Business and Professional Code, which allows a jurisdiction to require the dedication of parkland by a subdivider, or in-lieu-of dedication, to pay a fee of equivalent value.

    a. The City shall annually review its fees for recreational programs, park lands and rentals to insure that they are sufficient to finance future park needs. Areas that could be considered for review include:

        - Increasing the park land dedication standard from 3 acres per 1,000 residents. State law allows cities to require up to 5 acres per 1,000 residents

        - Charging user fees for use of a facility or participation in an activity,

        - Entrance fees for admission to a large park or other developed recreation area,

        - Charging rental fees for the use of recreation equipment or property, and

        - Admission fees can be charged for special events, exhibits, or rallies.

2. Ensure that the City of Farmersville receives its full share of federal and state grant funds including matching and competitive grants. The City shall also seek out available charitable contributions for parks and open space facilities.

    a. The City shall apply for available state and federal grants as they become available. Contracting with an established grant writer should be considered.

    b. Farmersville should explore securing gifts from foundations and individuals to support special interest recreation programs or park projects.

3. Farmersville should explore the financing of park and recreational facilities through the use of tax-increment funds, generated by the sale of tax-allocation bonds.

    a. The City should conduct a feasibility study of financing park and recreation facilities by the sale of tax-allocation bonds.

4. Farmersville should explore the opportunities to enter into joint powers agreements with other agencies to share the costs of park and recreation facilities development and maintenance.

    a. The City should consider approaching the Farmersville Unified School District and Tulare County Parks Department to discuss a joint powers agreement for the sharing of park and recreation facilities.

5. Farmersville should utilize, where appropriate, landscape and lighting districts to maintain parkways, landscaped medians and neighborhood parks.

    a. Where appropriate, the City shall require proposed subdivisions to

Ensure that the City of Farmersville receives its full share of federal and state grant funds including matching and competitive grants.

establish landscape and lighting districts to maintain open space areas.

8. Develop an "adopt a park" program throughout the City.

    a. The City should implement an "adopt a park" program in which private citizens or organizations (ie; service clubs, churches, scouting groups, etc.) help with the maintenance of open space, parks, and recreation facilities. The City should contact other communities who are succesfully operating similar programs.

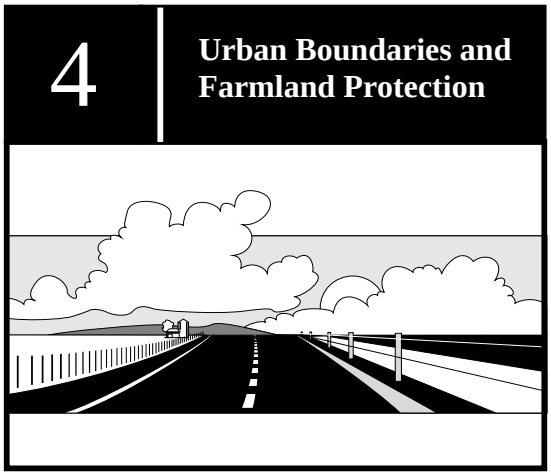
9. Encourage donations of land and/or money towards the acquisition, development or maintenance of parks and recreational facilities.

    a. The City shall seek out donations of land or money towards park facilities. The City may announce these efforts in recreation schedules, telephone book schedules, plaques or notices at existing parks, etc.

10. Coordinate efforts to acquire and develop park and recreational facilities with the Farmersville Unified School District to ensure that there is no unnecessary duplication of facilities or programs.

    a. The City of Farmersville shall coordinate the development of recreation facilities with the Farmersville Unified School District.

ISSUE FOUR: **Urban Boundaries and Farmland Protection**



The City of Farmersville and its surroundings have locally significant natural resources that must be preserved. Chief among these natural resources are the surrounding agricultural lands. As the city grows, increased pressure to develop these areas can result in conflicts, which may lead to the permanent loss of these resources. The City will adopt policies so that these precious resources can be conserved.

Goals, Objectives, Action Plans

I. Establish policies to reduce the impact of urbanization on agricultural lands, while allowing the City to grow.

1. Preserve and protect agricultural lands as a means for providing open space and for the managed production of resources.

    a. The City shall strive to ensure that new development is designed in a manner that uses land efficiently and reduces the need to expand the urban area outward onto prime agricultural lands.

    b. The Planning Department shall conduct an annual review of cancelled Williamson Act contracts and development proposals on agricultural land within the City Limits and Sphere of Influence.

2. Develop buffers and transition areas between urban uses and agricultural land to reduce incompatibility issues that are associated with cultivation, pest control and harvesting of crops.

    a. Adoption of the Land Use Element and Land Use map will provide the implementation of this policy.

    b. Work with the Cities of Visalia, Exeter and Tulare County to establish an agricultural preservation area to keep Farmersville,

Visalia, and Exeter from physically growing together.

4. Promote infilling and moderately increase overall residential densities in the City of Farmersville to reduce the rate of urbanization of surrounding agricultural lands.

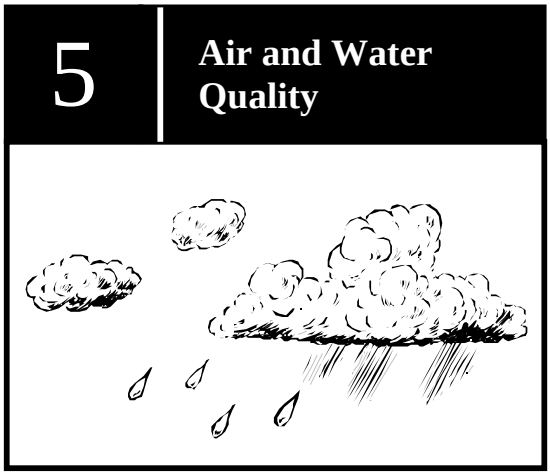
    a. Strive to create an overall community-wide residential density of five units per acre. All unit types (single and multi-family residential) shall be counted in calculating community-wide density.

5. Establish and maintain "hard edges" around Farmersville that define where urbanization stops and agricultural open space begins.

    a. In order to discourage sprawl and leapfrog development, require the Planning Commission and City Council to make a finding that new development is within 1/8 mile of existing or approved development when approving new residential, commercial, industrial or quasi-public construction projects.

    b. Where appropriate, the City will discourage zoning requests in the Sphere of Influence and surrounding County areas to permit further parcelization for development of large lot residential purposes ie; ranchettes.

ISSUE FIVE: **Air and Water Quality**



The City of Farmersville exceeds two important air pollution standards - ozone and particulate matter. As growth occurs, more smog is produced by fossil fuel burning and emissions from factories. The City must encourage development that will minimize vehicular emissions by providing an adequate circulation system.

The City of Farmersville obtains its water supply from a vast aquifer underlying the San Joaquin Valley. The quantity and quality of water appears to be adequate, however, in the future, Farmersville must provide for long-range community water needs and protect water quality and quantity. It must also maximize the efficient use and conservation of the community's water resources.

Goals, Objectives, Action Plans

I. Protect air and water quality from negative impacts.

Air Quality

1. Participate in the regional planning efforts to meet air quality goals by working to improve air quality for the entire planning area.

    a. The Planning Department will send proposed development plans to the San Joaquin Valley Unified Air Pollution Control District for review of potential air pollution impacts.

2. Consider traffic flow in the planning of residential, commercial and industrial developments.

    a. The Planning and Engineering departments will review all new projects to ensure that efficient traffic flow maintained, thereby minimizing vehicle-related air emissions.

3. Maintain adequate roadway levels of service (LOS) to avoid congestion which contributes to the air pollution problem.

a. The Planning and Engineering departments will review all proposed development projects to ensure that roadway service levels do not fall below Level C for arterials, collectors and intersections. The City will utilize gas tax and transportation funds to maintain these transportation standards.

4. Develop an organized and efficient circulation system to reduce vehicle trips in the planning area, idling time, intersection delays, and other emissions-producing activities.

   a. The Circulation Element establishes policies that will encourage increased connectivity in the City's street patterns.

5. The City shall encourage residents to use alternative modes of transportation.

   a. The City will seek funds to implement the bike path system, consistent with the Circulation Element map.

Water Quality

1. Promote a community awareness program that will educate the community in water-saving methodologies at the home and the work place.

   a. The Public Works department will provide the community with information brochures containing water-saving techniques. Further the department should prepare a Water Conservation Ordinance for adoption by the City Council.

2. Promote the use of native and drought-tolerant new landscaping in existing and future parks.

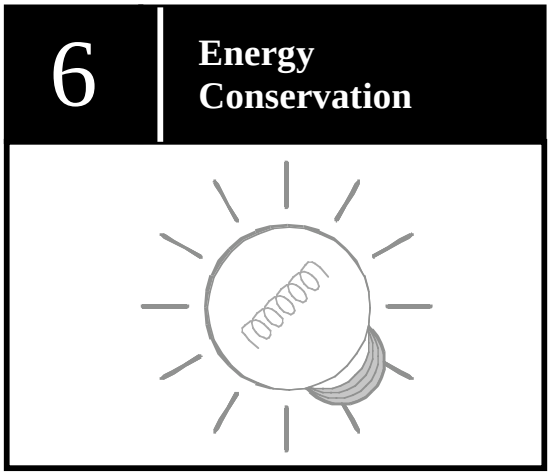
   a. The City's to-be-prepared Water Conservation Ordinance shall stress the use of native and drought-tolerant species.

3. Allow for adequate groundwater recharge by developing storm ponding and retention basins where feasible. In some areas these ponds or

basins can be incorporated into a recreational area or used as wildlife habitat area.

a. The Engineering Department shall implement the policies of this Element with regard to locations of future park/pond basins.

ISSUE SIX: **Energy Conservation**



Energy conservation is a topic of increasing importance. The State of California has experienced recent power shortages that have threatened to cripple the local economy. It is becoming increasingly difficult to tap new sources of energy, from a fiscal, political and environmental perspective. At the same time, the state continues to grow at a rapid pace.

Local governments can take a number of actions to ensure that new (and existing) development is as energy-efficient as possible. Strategies for Farmersville are outlined below.

Goals, Objectives, Action Plans

I. Consider energy conservation in the planning and design of new and existing development in Farmersville.

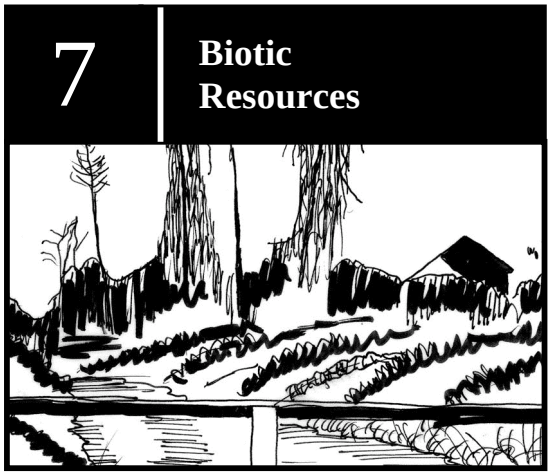
1. Development in the planning area shall be designed in a fashion that maximizes energy efficiency.

    a. Street standards shall be revised to increase shading along all future streets. Residential street widths for future streets shall be narrowed, thereby reducing the amount of pavement area - reducing heat buildup. Shade trees will also help to reduce heat buildup. For more information, see the Circulation Element.

    b. The City shall work with subdividers to design subdivisions so that a majority of dwelling units are properly oriented with respect to the sun, to take advantage of passive solar heating and cooling opportunities.

    c. The City shall work with developers to maximize the planting of deciduous shade trees around buildings and in paved areas.

***ISSUE SEVEN*: Biotic Resources**



Conservation of biotic resources generally refers to the protection of plant and animal species that have been determined to be rare, threatened or endgangered. A biotic survey prepared for the General Plan did not indicate the presence of any listed species in the planning area. The survey did note several locations in the planning area that could serve as habitat for species of concern, particularly the riparian habitat along Deep Creek along the east side of the community. While development proposed under the General Plan is not expected to have a significant impact on biotic resources, the community should do what it can to minimize these impacts.

Goals, Objectives, Action Plans

I. Minimize the impact of new development on biotic resources in the planning area.

1. Explore establishing the banks of local waterways as an open space resource.

    a. The Planning Department shall conduct an analysis of this proposal and prepare a plan of action.

2. The City shall review any attempts to line or pipe local waterways. This policy recognizes the value of local waterways as historical sources of groundwater recharge and wildlife habitat.

    a. The City shall remain vigilant in monitoring acitivities of local canal and irrigation districts and shall forward comments regarding lining or piping canals.

3. Protect areas that may serve as habitat from impacts of development.

    a. Where warranted, the City Planner shall require a biotic assessment for projects that may impact habitat areas.

4. Investigate establishment of a recreational trail along Deep Creek between Farmersville and the Kaweah Oaks Preserve.

    a. The City should coordinate with Sierra Los Tulares Land Trust, Tulare County and intervening property owners to explore this concept.

ISSUE EIGHT: **Historic/Cultural Resources**

Although the City of Farmersville does not have any structures designated as "historic" by the Tulare County Historical Society, there are some architecturally significant structures that enhance Farmersville's identity. Several buildings along Farmersville Boulevard and Visalia Road, in the central area display an interesting architectural character that create a sense of place. Spanish and western style architecture is used prominently, helping to give the community identity.

Conservation of cultural resources generally refers to the protection of historic and pre-historic artifacts. In the arena of city planning, this often pertains to buried objects (such as human remains, arrowheads, tools, and other objects left behind by previous cultures. State law requires the protection of these objects. The City is responsible for implementing these preservation laws.

Goals, Objectives, Action Plans

I. Take actions to promote Farmersville's historic identity and protect cultural resources.

1. Work with developers and architects in creating new buildings and renovating old buildings in a manner that is sensitive to the architectural character of Farmersville and the San Joaquin Valley.

    a. The City shall adopt design guidelines that promote good architectural design that reenforces Farmersville's identity and sense of place.

2. Protect cultural resources that may be impacted by new development.

    a. The Planning Department may require preparation of a cultural resources analysis where warranted. Areas along waterways are of particular concern. When cultural resources are uncovered during construction projects, all work in the vicinity of the "find" must be stopped and a qualified cultural resources expert consulted to determine appropriate protective measures.

Initial Study/Mitigated Negative Declaration

Gardenia Courtyards Development Project

Prepared for:

City of Farmersville
909 W. Visalia Road
Farmersville, California 93223
(559) 734-8737
Contact: Karl Schoettler

Prepared by:

Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
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(559) 840-4414
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October 2023

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PROJECT INFORMATION

This document is the Initial Study/Mitigated Negative Declaration on the potential environmental effects of the City of Farmersville (City) Gardenia Courtyards Development Project (Project). The City of Farmersville will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines. Copies of all materials referenced in this report are available for review in the project file during regular business hours at 909 W. Visalia Road, Farmersville, CA 93223.

Project title

Gardenia Courtyards Development Project

Lead agency name and address

City of Farmersville
909 W. Visalia Road
Farmersville, California 93223

Contact person and phone number

Karl Schoettler, City Planner
City of Farmersville: (559) 734-8737 ext. 8032

Project location

The City of Farmersville is located in Tulare County in the northern part of the San Joaquin Valley, east of the City of Visalia (see Figure 1). The approximately 9.4-acre Project site is located northeast of the intersection of Farmersville Road and East Walnut Avenue (see Figure 2) and the site would occupy Assessor's Parcel Numbers (APN) 111-290-015. State Route 198 runs east-west through Farmersville, approximately 0.75 miles north of the proposed Project site.

Figure 1 – Location Map

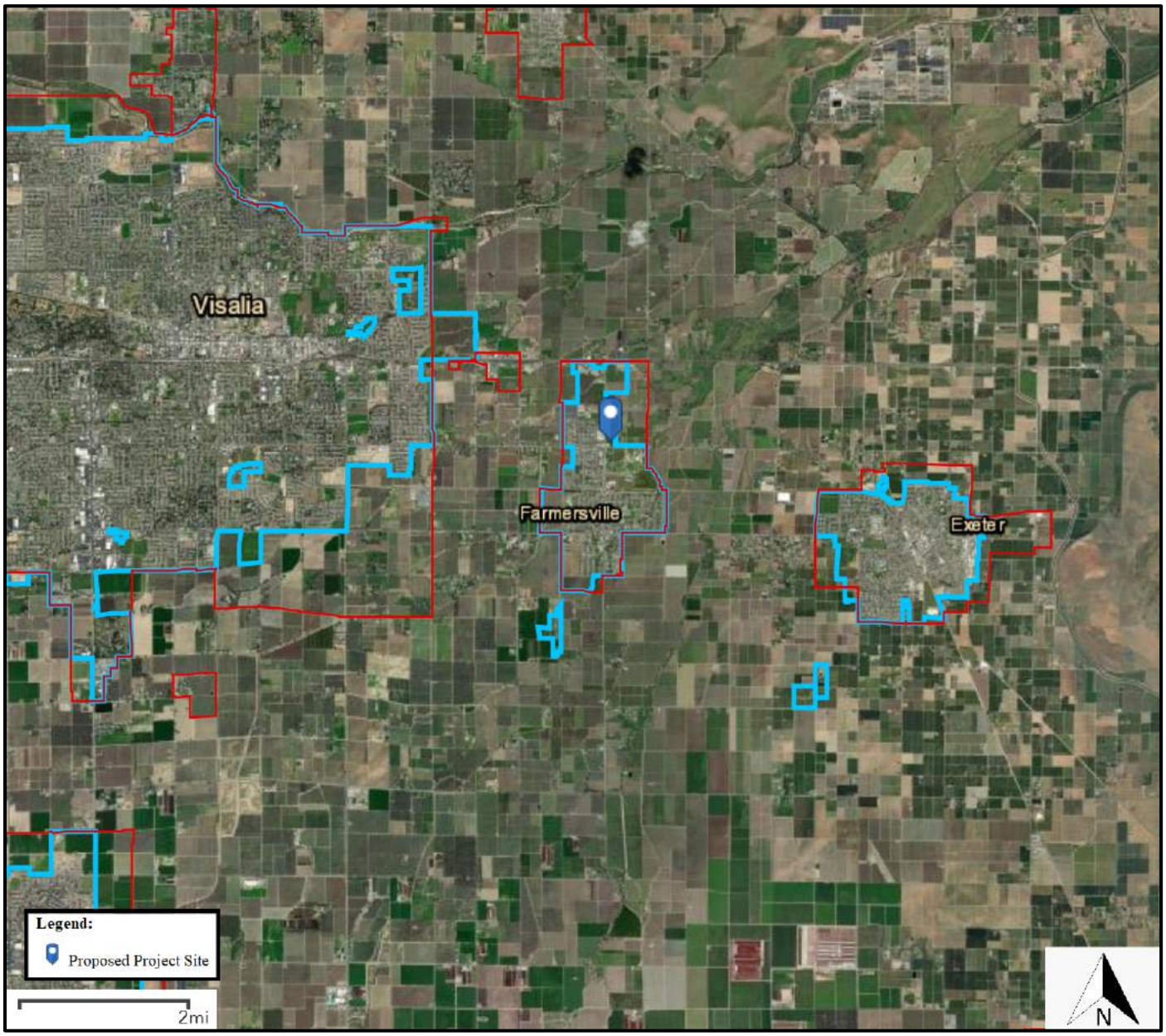
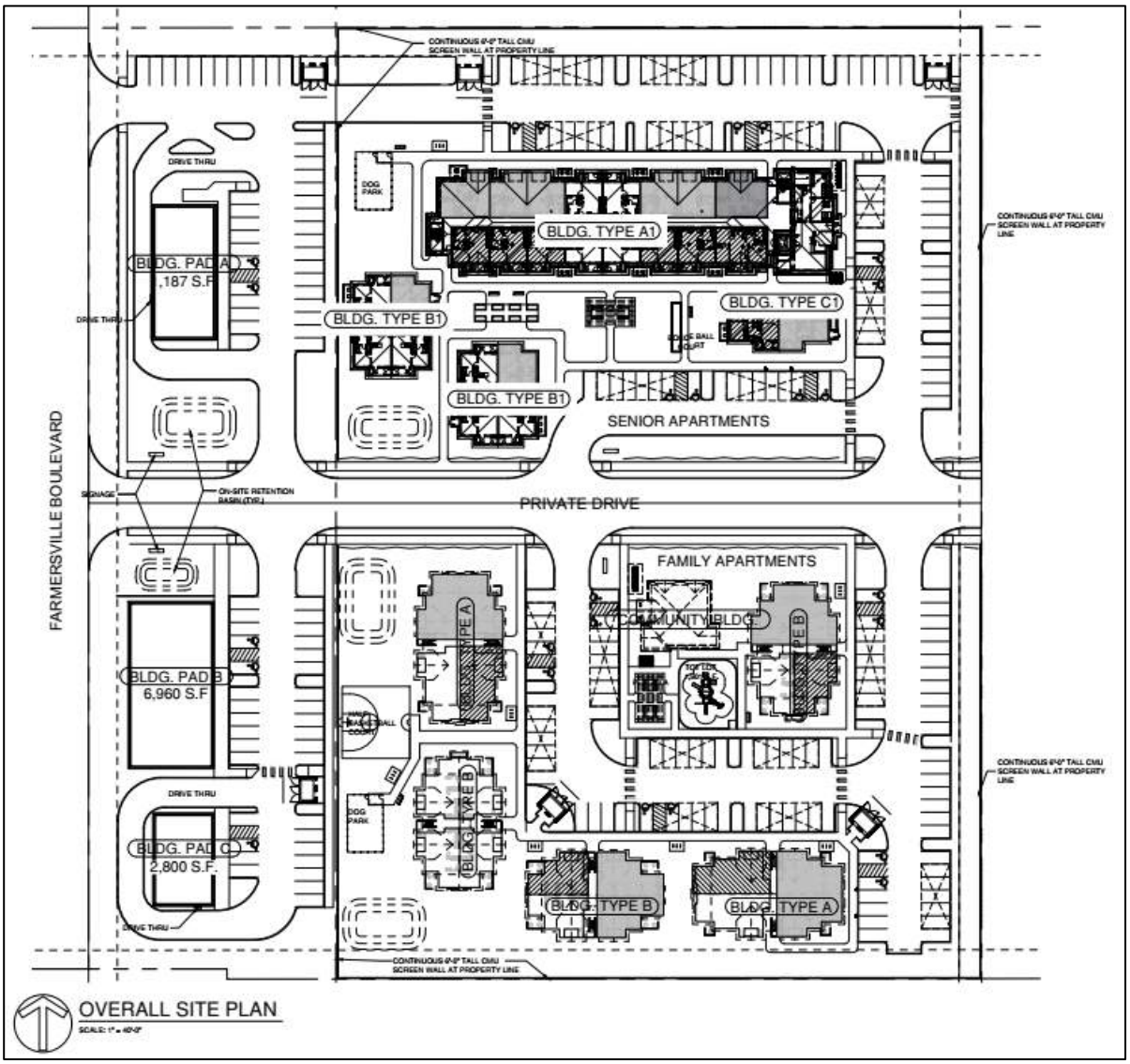


Figure 2 – Site Aerial

Figure 3 – Site Plan



Project sponsor's name/address

AMG & Associates, LLC
PO Box 260770
Encino, CA 91426

General plan designation

General Commercial

Zoning

C-G (General Commercial)

Project Description

The proposed Project would include the development of two fully affordable multi-family projects for a total of 82 residential units and up to 13,950 square feet of commercial space. The northern portion of the Project site would consist of four buildings of senior housing developments with a total of 42 units, a commercial pad, community area, fenced dog park, bocce ball court, community garden, retention basins, and 97 parking spaces. The southern portion of the Project site would consist of an apartment complex with five residential buildings consisting of a total of 40 units, a community building, two commercial/retail pads, dog park, basketball court, retention basins, and 92 parking spaces. This apartment complex would include residential units, tot lot, half-basketball court, fenced dog park, on-site laundry facility, and outdoor picnic-barbeque area. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements.

Specifically, the proposed Project includes:

- General Commercial:
    - Commercial Pads total – 13,950 sq. ft.
- Multi-family Residential:
    - Units – 40
    - Buildings - 5
- Senior Community
    - Units – 42
    - Buildings - 4

- Community Building
- Parking Spaces total – 92
- Retention Basins
- Facilities – Dog parks, basketball court, bocce ball court, on-site laundry, outdoor picnic-barbeque area
- Approve a General Plan Amendment for the General Commercial portions of the site to "Multi-Family Residential" on the Farmersville General Plan land use map.
- Approve a Zone Change from the General Commercial (C-G) portions of the site to "Multi-Family Residential (R-M)".
- Approval of a Site Plan Review

Surrounding Land Uses/Existing Conditions

The proposed Project site currently consists of vacant land with minimal vegetation. The site is highly disturbed.

Lands surrounding the proposed Project are described as follows:

- North: Residential housing.
- South: Vacant land, general commercial.
- East: Rural residences.
- West: Existing general commercial.

Other Public Agencies Involved

- The adoption of a Mitigated Negative Declaration by the City of Farmersville
- Approval of a General Plan Amendment by the City of Farmersville
- Approval of a Zone Change by the City of Farmersville
- Approval of a Site Plan Review by the City of Farmersville
- Approval of Building Permits by the City of Farmersville
- Approval of a Stormwater Pollution Prevention Plan by the Central Valley Regional Water Quality Control Board
- Dust Control Plan Approval letter from the San Joaquin Valley Air Pollution Control District

- Compliance with other federal, state and local requirements.

Tribal Consultation

The California Native American Tribes were contacted pursuant to AB 52 (Public Resources Code Section 21080.3.1, et seq.) and SB 18 on behalf of the City of Farmersville on May 30, 2023.

- Big Sandy Rancheria of Western Mono Indians
- Santa Rosa Indian Community of the Santa Rosa Rancheria
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley band
- Tubatulabals of Kern Valley
- North Fork Mono Tribe
- Big Sandy Rancheria of Western Mono Indians
- Kern Valley Indian Community

Tribes were provided 90 days, to request consultation pursuant to those statutes.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Karl Schoettler

City Planner

City of Farmersville

Date

ENVIRONMENTAL CHECKLIST

I. AESTHETICS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

RESPONSES

a. Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The proposed Project would include the development of a 9.4-acre parcel for two fully affordable multi-family projects for a total of 82 units, three commercial/retail pads and community areas. The site construction will also include parking spaces, internal access roads, lighting, site landscaping and additional related improvements.

The structures will conform to design standards set forth by the City's General Plan and Zoning Ordinance. The proposed Project site is located in an area that is largely surrounded by urban uses such as commercial and residential and will not result in a use that is visually incompatible with the surrounding area.

The City of Farmersville General Plan does not identify any scenic vistas within the Project area. A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area.

Construction activities will be visible from the adjacent roadsides; however, the construction activities will be temporary in nature and will not affect a scenic vista. The impact will be ***less than significant***.

Mitigation Measures: None are required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. There are no state designated scenic highways within the immediate proximity to the Project site. California Department of Transportation Scenic Highway Mapping System identifies SR 198 east of SR 99 as an Eligible State Scenic Highway. This is the closest highway, located approximately 0.75 miles north of the Project site; however, the Project site is both physically and visually separated from SR 198 by intervening land uses. In addition, no scenic highways or roadways are listed within the Project area in the City of Farmersville's General Plan or Tulare County's General Plan. Based on the National Register of Historic Places (NRHP) and the City's General Plan, no historic buildings exist on the Project site. The proposed Project would not damage any trees, rock outcroppings or historic buildings within a State scenic highway corridor. Any impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?

Less Than Significant Impact. Site construction will include multifamily housing consisting of 82 units and three general commercial pads, along with a community building, basketball court, bocce ball court,

dog parks, retention basins, and parking spaces. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements. The residences will be multi-family and will conform to design standards set forth by the City's General Plan and Zoning Ordinance. The proposed Project site is located in an area that is substantially surrounded by urban uses, including commercial and residential, and as such, will not result in a use that is visually incompatible with the surrounding area. The proposed Project will not substantially degrade the existing visual character or quality of the area or its surroundings. The impact will be ***less than significant***.

Mitigation Measures: None are required.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare and waste energy, and if designed incorrectly, could be considered unattractive. Light that falls beyond the intended area is referred to as "light trespass". Types of light trespass include spillover light and glare. Minimizing all these forms of obtrusive light is an important environmental consideration. A less obtrusive and well-designed energy efficient fixture would face downward, emit the correct intensity of light for the use, and incorporate energy timers.

Spillover light is light emitted by a lighting installation that falls outside the boundaries of the property on which the installation is sited. Spillover light can adversely affect light-sensitive uses, such as residential neighborhoods at nighttime. Because light dissipates as it travels from the source, the intensity of a light fixture is often increased at the source to compensate for the dissipated light. This can further increase the amount of light that illuminates adjacent uses. Spillover light can be minimized by using only the level of light necessary, and by using cutoff type fixtures or shielded light fixtures, or a combination of fixture types.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare. Glare can be reduced by design features that block direct line of sight to the light source and that direct light downward, with little or no light emitted at high (near horizontal) angles, since this light would travel long distances. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles.

Currently, the sources of light in the Project area are from streetlights, the vehicles traveling along Farmersville Road and nearby residential streets, commercial uses, and nighttime lighting from adjacent residences, mini storage and commercial store. The Project would necessitate street and residential nighttime lighting and such lighting that would be subject to City standards. Accordingly, potential impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

RESPONSES

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project site is located in an area of the City considered *Farmland of Local Importance* by the State Farmland Mapping and Monitoring Program.[1] The Project site is entirely within the Farmersville City limits and is designated General Commercial by the General Plan. Therefore, the proposed Project does not have the potential to result in the conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is ***no impact***.

Mitigation Measures: None are required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The 9.4-acre Project site is planned for urban uses and is currently zoned and designated in the General Plan as General Commercial. Upon approval of the Zone Change and General Plan Amendment, the eastern portion of the site will be Multi-family residential. The site is not under a Williamson Act Contract. There are ***no impacts.***

Mitigation Measures: None are required.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project is not zoned for forestland and does not propose any zone changes related to forest or timberland. There is ***no impact***.

Mitigation Measures: None are required.

[1] California Department of Conservation Division of Land Resource Protection. Farmland Mapping and Monitoring Program. https://maps.conservation.ca.gov/DLRP/CIFF. Accessed June 2023.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. No conversion of forestland, as defined under Public Resource Code or General Code, as referenced above, would occur as a result of the Project. There is ***no impact***.

Mitigation Measures: None are required.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. No land conversion from Farmland would occur for the Project. Surrounding land uses include residential and commercial. The proposed Project site is designated for urban development by the Farmersville General Plan and as such, does not have the potential to result in the conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is ***no impact***.

Mitigation Measures: None are required.

III. AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people)?	☐	☐	☒	☐

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed project by Johnson, Johnson & Miller Air Quality Consulting Services, report date September 22, 2023. The report can be read in its entirety in Appendix A.

RESPONSES

a. Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed Project site is located within the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures.

For projects that include stationary sources of emissions, the SJVAPCD relies on project compliance with Rule 2201—New and Modified Stationary Source Review to ensure that growth in stationary source emissions would not interfere with the applicable AQP. Projects exceeding the offset thresholds included in the rule are required to purchase offsets in the form of Emission Reduction Credits (ERCs).

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP.

Compliance with Applicable Control Measures

SJVAPCD's AQPs contain a number of control measures, which are enforceable requirements through the adoption of rules and regulations. The following rules and regulations are relevant to the Project:

Rule 4201—Particulate Matter Concentration. This rule shall apply to any source operation that emits or may emit dust, fumes, or total suspended particulate matter.

Rule 4601—Architectural Coatings. The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings. Emissions are reduced by limits on VOC content and providing requirements on coatings storage, cleanup, and labeling. Only compliant components are available for purchase in the San Joaquin Valley.

Rule 4641—Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. The purpose of this rule is to limit VOC emissions from asphalt paving and maintenance operations. If asphalt paving will be used, then the paving operations will be subject to Rule 4641. This regulation is enforced on the asphalt provider.

Rule 4702—Internal Combustion Engines. The purpose of this rule is to limit the emissions of NO_x, carbon monoxide (CO), VOC, and sulfur oxides (SO_x) from internal combustion engines. If the project includes emergency generators, the equipment is required to comply with Rule 4702.

Regulation VIII—Fugitive PM_{10} Prohibitions. This regulation is a control measure that is one main strategies from the 2006 PM_{10} for reducing the PM_{10} emissions that are part of fugitive dust. Projects over 10 acres are required to file a Dust Control Plan (DCP) containing dust control practices sufficient to comply with Regulation VIII. Rule 8021 regulates construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

Rule 9510–Indirect Source Review. This rule reduces the impact of NO_X and PM_{10} emissions from growth within the SJVAB. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site District-administered projects, or a combination of the two.

As discussed in Impact III(b) below, emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ associated with the proposed Project would not exceed the SJVAPCD's significance thresholds during the construction phase (see Table). Similarly, emissions of ROG, NO_X, CO, SO_X, $PM_{2.5}$ or PM_{10} during operations would not exceed any applicable threshold of significance (see Table 2).

The Project would comply with all applicable CARB and SJVAPCD rules and regulations. Therefore, the Project complies with this criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plan with regards to this criterion. The Project's regional operational emissions would not exceed any applicable SJVAPCD prior to the incorporation of mitigation measures (see Impact III(b)). Therefore, the Project would be considered consistent with the existing AQPs. Based on the findings above, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be ***less than significant***.

Mitigation Measures: None are required.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD's in its GAMAQI. The SJVAB is in nonattainment for ozone, PM_{10} (State only), and $PM_{2.5}$. Ozone is a secondary pollutant that can be formed miles from the source of emissions, through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. As such, the primary pollutants of concern during Project construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Since the SJVAB is nonattainment for ozone, PM_{10}, and $PM_{2.5}$, it is considered to have an existing significant cumulative health impact without the Project. When this occurs, the analysis considers whether the project's contribution to the existing violation of air quality standards is cumulatively considerable. The SJVAPCD regional thresholds for NO_X, ROG/VOC, PM_{10}, or $PM_{2.5}$ are applied as cumulative contribution thresholds. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_X, ROG, SO_X, PM_{10}, and $PM_{2.5}$. Air pollutant emissions have both regional and localized effects.

The Project's regional emissions are compared to the applicable SJVAPCD regional thresholds below to address if the Project would result in a cumulatively considerable net increase of any criteria pollutant (including ozone precursors) of concern.

Criteria Pollutant Emission Estimates

Construction Emissions (Regional)

Construction emissions associated with the development envisioned for the proposed project are shown in Table prior to the incorporation of any mitigation.

Table 1
Summary of Construction-Generated Emissions of Criteria Air Pollutants – Unmitigated

Emissions Source	Emissions (Tons/Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Construction (2025)	0.18	1.42	1.77	< 0.01	0.21	0.10
Project Construction (2026)	0.37	0.22	0.30	< 0.01	0.03	0.01
Total Construction Duration (2025-2026)						
Project Total	**0.55**	**1.64**	**2.07**	**< 0.01**	**0.24**	**0.11**
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.
Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 2023.

As shown in Table 1 above, emissions from construction activities associated with the proposed Project would fall below the significance thresholds. Therefore, regional and cumulative impacts associated with construction of the proposed Project are less than significant.

Operational Emissions (Regional)

Operational emissions occur over the lifetime of the project. The SJVAPCD considers permitted and non-permitted emission sources separately when making significance determinations. In addition, the annual operational emissions are also considered separately from construction emissions. Operational emissions associated with the proposed Project are shown in Table 2. Operational emissions were estimated using

a full buildout scenario in the earliest year of operations (2026), which provides a conservative estimate of emissions and resulting potential impacts.

Table 2
Summary of Operational Emissions of Criteria Air Pollutants – Unmitigated

Source	Emissions (tons/year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	0.49	0.03	0.49	< 0.01	0.00	0.00
Energy	0.01	0.11	0.07	< 0.01	0.01	0.01
Mobile (Automobiles)	2.48	0.92	6.71	< 0.01	0.28	0.08
Annual Total	**2.98**	**1.06**	**7.27**	**< 0.01**	**0.29**	**0.09**
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
Emissions were quantified using CalEEMod based on Project details and earliest operational year for the proposed Project.
Source: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

As shown in Table 2, operational emissions would not exceed the applicable SJVAPCD thresholds of significance for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$. Therefore, the impact from operations of the Project would be less than significant.

Conclusion

As shown in Table , the Project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds during project construction. During operations, the Project would not exceed the applicable regional criteria pollutant emissions quantitative thresholds (see Table 2). Therefore, the impact would be ***less than significant***.

Mitigation Measures: None are required.

c. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact with Mitigation. Emissions occurring at or near the Project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air

pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools.

The closest existing sensitive receptors to the Project site include residential receptors, the closest of which include existing single-family homes located within approximately 50 feet east of the Project boundary. See Appendix A (Attachment B-Construction Health Risk Assessment and Operational Health Risk Screening) for a graphical representation of the sensitive receptor locations within approximately ¼-mile of the Project site.

Localized Impacts

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO_2, SO_X, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

Construction: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_x, and NO_X

Local construction impacts would be short-term in nature lasting only during the duration of construction. As shown in

Table 3 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles

were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.

Table 3
Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_x, and NO_X for Construction - Unmitigated

Emission Source	On-site Emissions (pounds per day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Highest Daily Construction (2025)	3.39	31.75	30.51	0.05	9.78	5.27
Highest Daily Construction (2026)	33.78	10.10	14.04	0.02	1.14	0.43
Total Construction Duration						
Highest Daily Maximum	**33.78**	**31.75**	**30.51**	**0.05**	**9.78**	**5.27**
Significance Thresholds	**—**	**100**	**100**	**100**	**100**	**100**
Exceed Significance Thresholds?	**—**	**No**	**No**	**No**	**No**	**No**

Note:
Overlap of construction activities is based on the construction schedule shown in Table 2 and Attachment A of Appendix A.
Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A). Maximum daily emissions represent the maximum daily emissions between the Summer and Winter scenarios.
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 2023.

Operation: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_x, and NO_X

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. The maximum daily operational emissions would occur at Project buildout, which was modeled for the year 2026 (the earliest year of operations). Operational emissions include those generated on-site by area sources such as consumer products and landscape maintenance, energy use from natural gas combustion, and motor vehicles operation at the Project site. Motor vehicle emissions are estimated for on-site operations using trip lengths for on-site travel and ¼-mile of off-site emissions.

As shown in

Table 4 below, operational modeling of on-site emissions for the Project indicate that the Project would not exceed 100 pounds per day for each of the criteria pollutants. Therefore, based on the SJVAPCD's guidance, the operational emissions would not cause an ambient air quality standard violation. As such, impacts would be less than significant.

Table 4
Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, SO_x, and NO_X for Operations

Source	On-site Emissions (pounds per day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	2.96	0.68	0.29	0.00	0.06	0.06
Energy	0.04	0.63	0.37	0.00	0.05	0.05
Mobile (Automobiles)	15.41	5.42	42.84	0.03	1.55	0.42
Total	**18.41**	**6.73**	**43.50**	**0.03**	**1.66**	**0.53**
Significance Thresholds	**—**	**100**	**100**	**100**	**100**	**100**
Exceed Significance Thresholds?	**—**	**No**	**No**	**No**	**No**	**No**

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 2023.

Toxic Air Contaminants

Construction

Project construction would involve the use of diesel-fueled vehicles and equipment that emit DPM, which is considered a TAC. The SJVAPCD's current threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in a million (formerly 10 in a million). The SJVAPCD's 2015 GAMAQI does not currently recommend analysis of TAC emissions from project construction activities, but instead focuses on projects with operational emissions that would expose sensitive receptors over a typical lifetime of 70 years. In addition, the most intense construction activities of the Project's construction would occur during site preparation and grading phases over a short period.

There are no conditions unique to the Project site that would require more intense construction activity compared to typical development. Examples of situations that would warrant closer scrutiny may include sites that would require extensive excavation and hauling due to existing site conditions. Building construction typically requires limited amounts of diesel equipment relative to site clearing activities. Nonetheless, a construction HRA was prepared as part of this analysis. In addition, the analysis includes an evaluation of potential health impacts from construction and operations of the Project considered together, over a 70-year exposure scenario.

The results of the HRA prepared for Project construction for cancer risk and long-term chronic cancer risk are summarized below. Construction emissions were estimated assuming adherence to all applicable rules, regulations, and Project design features. The construction emissions were assumed to be distributed over the Project area with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. Health risk calculations were completed using HARP2. Detailed parameters and complete calculations are included in Appendix A. The estimated health and hazard impacts at the Maximally Exposed Receptor (MER) from the Project's construction emissions are provided in **Error! Reference source not found.**.

Table 5
Unmitigated Health Risks from Project Construction to Off-Site Receptors

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index	Acute Non-Cancer Hazard Index
Risks and Hazards at the MER			
Risks and Hazards at the MER (Construction Only)	19.47	0.02005	0.00000
Risks and Hazards at the MER (Construction Plus Operations)	29.19	0.02015	0.00000
Significance Threshold	**20**	**1**	**1**
Threshold Exceeded in Any Scenario?	**Yes**	**No**	**No**

MER = Maximally Exposed Receptor
Project MER: Receptor #509 (36°18'52.8"N 119°12'16.4"W)
Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B of Appendix A).

As shown in **Error! Reference source not found.**, estimated health risks from elevated DPM concentrations during construction of the proposed Project would not exceed the applicable health risk significance thresholds when construction is considered alone; however, construction plus operational emissions would exceed the applicable cancer risk threshold. This represents a potentially significant construction TAC exposure impact. Therefore, mitigation is required to reduce the impact during the construction period to below a level of significance.

Mitigation measure AIR-1 requires the Project applicant, project sponsor, or construction contractor to provide documentation to the City of Farmerville that all off-road diesel-powered construction equipment greater than 50 horsepower meet EPA or CARB Tier 4 Interim off-road emissions standards or will utilize Level 3 filters. **Error! Reference source not found.** shows the health risks and non-cancer hazard index for construction with implementation of mitigation measure AIR-1.

Table 6
Summary of the Health Impacts from Mitigated Construction of the Project

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index	Acute Non-Cancer Hazard Index
Risks and Hazards at the MER—Tier 4 Equipment Scenario			
Risks and Hazards at the MER (Construction Only)	4.52	0.00466	0.00000
Risks and Hazards at the MER (Construction Plus Operations)	14.24	0.00476	0.00000
Risks and Hazards at the MER—Level 3 Filters Scenario			
Risks and Hazards at the MER (Construction Only)	5.32	0.00547	0.00000
Risks and Hazards at the MER (Construction Plus Operations)	15.04	0.00557	0.00000
Highest Risks and Hazards at the MER after Incorporation of MM AIR-C1			
Risks and Hazards at the MER	15.04	0.00557	0.00000
Significance Threshold	**20**	**1**	**1**
Threshold Exceeded in Any Scenario?	**No**	**No**	**No**

MER = Maximally Exposed Receptor
Project MER: Receptor #509 (36°18'52.8"N 119°12'16.4"W)
Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B of Appendix A).

As noted in **Error! Reference source not found.**, calculated health metrics from the proposed Project's construction DPM emissions would not exceed the cancer risk significance threshold or non-cancer hazard index significance threshold at the MER with incorporation of AIR-1. Therefore, the proposed Project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Operations

Unlike warehouses or distribution centers, the daily vehicle trips generated by the proposed residential and commercial mixed-use Project would be primarily generated by passenger vehicles. Passenger vehicles typically use gasoline engines rather than the diesel engines that are found in heavy-duty trucks. Gasoline-powered vehicles do emit TACs in the form of toxic organic gases, some of which are carcinogenic. Compared to the combustion of diesel, the combustion of gasoline had relatively low emissions of TACs. Thus, residential and commercial mixed-use development Projects typically produce limited amounts of TAC emissions during operation. Nonetheless, it is anticipated that there would be some heavy-duty trucks visiting the Project site during operations. Consistent with SJVAPCD guidance, an operational prioritization screening analysis was completed for the proposed Project.

Operational DPM emissions from diesel trucks were estimated using EMFAC2021 emission factors and estimated truck travel and idling at the Project site. The emissions were entered into the SJVAPCD Prioritization Screening Tool to determine the risk scores, with complete calculations and assumptions included as part of Attachment B of Appendix A. The results of the screening analysis are provided in **Error! Reference source not found.**.

Table 7
Prioritization Tool Health Risk Screening Results

Impact Source	Cancer Risk Score	Chronic Risk Score	Acute Risk Score
Diesel Trucks	9.72	0.00010	0.00000
Total Risk from Project Operations	**9.72**	**0.00010**	**0.00000**
Screening Risk Score Threshold	**10**	**1**	**1**
Screening Thresholds Exceeded?	**No**	**No**	**No**
Source: Construction Health Risk Assessment and Operational Health Risk Screening (Attachment B of Appendix A)			

As shown in **Error! Reference source not found.**, the Project would not exceed the cancer risk or chronic hazard screening threshold levels during Project operations. The primary source of the emissions responsible for chronic risk are from diesel trucks. DPM does not have an acute risk factor. Since the Project does not exceed the applicable SJVAPCD screening thresholds for cancer risk, acute risk, or chronic risk, this impact would be less than significant.

Valley Fever

Valley fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley fever. The San Joaquin Valley is considered an endemic area for Valley fever. During 2000–2018, a total of 65,438 coccidioidomycosis cases were reported in California; median statewide annual incidence was 7.9 per 100,000 population and varied by region from 1.1 in Northern and Eastern California to 90.6 in the Southern San Joaquin Valley, with the largest increase (15-fold) occurring in the Northern San Joaquin Valley. Incidence has been consistently high in six counties in the Southern San Joaquin Valley (Fresno, Kern, Kings, Madera, Tulare,

and Merced counties) and Central Coast (San Luis Obispo County) regions.[2] California experienced 7,517 new probable or confirmed cases of Valley fever in 2022. A total of 319 suspect, probable, and confirmed Valley fever cases were reported in Tulare County in 2022.[3]

The distribution of *C. immitis* within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

1) Rodent burrows (often a favorable site for *C. immitis*, perhaps because temperatures are more moderate and humidity higher than on the ground surface)
2) Old (prehistoric) Indian campsites near fire pits
3) Areas with sparse vegetation and alkaline soils
4) Areas with high salinity soils
5) Areas adjacent to arroyos (where residual moisture may be available)
6) Packrat middens
7) Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils
8) Sandy, well-aerated soil with relatively high water-holding capacities

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

1) Cultivated field
2) Heavily vegetated areas (e.g., grassy lawns)
3) Higher elevations (above 7,000 feet)
4) Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
5) Areas that are continually wet

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[2] Centers for Disease Control and Prevention (CDC). 2020. Regional Analysis of Coccidioidomycosis Incidence—California, 2000–2018. Website: https://www.cdc.gov/mmwr/volumes/69/wr/mm6948a4.htm?s_cid=mm6948a4_e. Accessed June 16, 2023.

[3] California Department of Public Health (CDPH). 2021. Coccidioidomycosis in California Provisional Monthly Report January – April 2023 (as of April 30, 2023). Website: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCA ProvisionalMonthlyReport.pdf. Accessed June 16, 2023.

6) Paved (asphalt or concrete) or oiled areas

7) Soils containing abundant microorganisms

8) Heavily urbanized areas where there is little undisturbed virgin soil.[4]

The Project is situated on a site previously disturbed that does not provide a suitable habitat for spores. Specifically, the Project site had been previously disturbed and has some vegetation cover in the form of shrubbery. Therefore, implementation of the proposed Project would have a low probability of the site having *C. immitis* growth sites and exposure to the spores from disturbed soil.

Although conditions are not favorable, construction activities could generate fugitive dust that contains *C. immitis* spores. The Project will minimize the generation of fugitive dust during construction activities by complying with SJVAPCD's Regulation VIII. Therefore, this regulation, combined with the relatively low probability of the presence of *C. immitis* spores would reduce Valley fever impacts to less than significant.

During operations, dust emissions are anticipated to be relatively small because most of the Project area where operational activities would occur would be occupied by the proposed residential buildings, commercial buildings, landscaping, pavement, and internal streets. This condition of the Project being built-up would lessen the possibility of the Project site providing habitat suitable for *C. immitis* spores and for generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

Naturally Occurring Asbestos

Review of the map of areas where naturally occurring asbestos in California are likely to occur found no such areas in the immediate Project area. Therefore, development of the Project is not anticipated to expose receptors to naturally occurring asbestos.[5] Impacts would be less than significant.

Operations—The Project's Potential to Locate Sensitive Receptor Near Existing Sources of TACs

As a residential and commercial mixed-use development Project, the Project would locate sensitive receptors (future residents) to a site where future Project residents could be subject to existing sources of

[4] United States Geological Survey (USGS). 2000. Operational Guidelines (Version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000, Open-File Report 2000-348. Website: https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf. Accessed September, 2023.

[5] U.S. Geological Survey. 2011. Van Gosen, B.S., and Clinkenbeard, J.P. California Geological Survey Map Sheet 59. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Open-File Report 2011-1188 Website: https://pubs.usgs.gov/of/2011/1188/. Accessed May 20, 2023.

TACs at the project site. However, the California Supreme Court concluded in *California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)* that agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. Therefore, this impact will not be further addressed in this document.

Impact Analysis Summary

In summary, the Project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant. The Project is not a significant source of TAC emissions during operations and would not be a significant source of TAC emissions during construction after incorporation of MM AIR-1. The Project is not in an area with suitable habitat for Valley fever spores and is not in an area known to have naturally occurring asbestos. Therefore, the Project would result in ***less than significant*** to sensitive receptors after incorporation of mitigation.

Mitigation Measures:

MM AIR-1:

Before a construction permit is issued for the proposed Project, the Project applicant, Project sponsor, or construction contractor shall submit documentation demonstrating reasonably detailed compliance with one of the following requirements to the City of Farmersville:

Option 1) Where portable diesel engines are used during construction, all off-road equipment with engines greater than 50 horsepower shall have engines that meet or exceed either United States Environmental Protection Agency (EPA) or California Air Resources Board (CARB) Tier 4 Interim off-road emission standards except as otherwise specified herein. If engines that comply with Tier 4 Interim or Tier 4 Final off-road emission standards are not commercially available, then the construction contractor shall use the next cleanest piece of off-road equipment (e.g., Tier 3) that is commercially available. For purposes of this Project design feature, "commercially available" shall mean the equipment at issue is available taking into consideration factors such as (i) critical-path timing of construction; and (ii) geographic proximity to the Project site of equipment. If the relevant equipment is determined by the Project applicant to not be commercially available, the contractor can confirm this conclusion by providing letters from at least two rental companies for each piece of off-road equipment that is at issue.

Option 2) Prior to the issuance of any demolition, grading, or building permits (whichever occurs earliest), the project applicant and/or construction contractor shall prepare a construction operations plan that, during construction activities, requires all off-road

equipment with engines greater than 50 horsepower to meet either the particulate matter emissions standards for Tier 4 Interim engines or be equipped with Level 3 diesel particulate filters. Tier 4 Interim engines shall, at a minimum, meet EPA or CARB particulate matter emissions standards for Tier 4 Interim engines. Alternatively, use of CARB-certified Level 3 diesel particulate filters on off-road equipment with engines greater than 50 horsepower can be used in lieu of Tier 4 Interim engines or in combination with Tier 4 Interim or better engines. The construction contractor shall maintain records documenting its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information shall include, but are not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. The Project applicant and/or construction contractor shall submit the construction operations plan and records of compliance to the City of Farmersville.

d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less Than Significant Impact. Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Although the Project is less than one mile from the nearest sensitive receptor, the Project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table .

Construction

During construction, various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and intermittent, which would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the Project's site boundaries. The potential for odor impacts from construction of the proposed Project would, therefore, be less than significant.

Table 8
Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 2023.	

Operations

Project as a Potential Odor Generator

The development of the proposed Project would not substantially increase objectionable odors in the area. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, asphalt batch plants, rendering plants, and other land uses outlined in Table . The proposed residential and commercial mixed-use Project would not engage in any of these activities. Minor sources of odors that would be associated with typical residential and commercial mixed-use development Projects, such as exhaust from mobile sources (including diesel-fueled vehicles), are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the proposed Project's operational activities would not expose receptors to objectionable odor emissions. Therefore, the proposed Project would not be considered to be a generator of objectionable odors during operations. As such, impacts would be less than significant.

Project as a Receptor

With the *CBIA v. BAAQMD* ruling, analysis of odor impacts on receivers is not required for CEQA compliance unless the project would exacerbate the impact. As discussed above, the Project is a residential and commercial mixed-use Project and would not be considered a major source of odors during construction or operation. Therefore, the Project would not exacerbate an existing odor impact and no further analysis is required. The impacts will be ***less than significant.***

Mitigation Measures: None are required.

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐

e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The proposed Project site is located in a portion of the central San Joaquin Valley that has, for decades, experienced intensive agricultural and urban disturbances. Current agricultural endeavors in the region include orange groves, olive orchards and row crops.

Like most of California, the Central San Joaquin Valley experiences a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures usually exceed 90 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely raise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. According to the Farmersville General Plan Community Profile, approximately 90 percent of all rainfall in Farmersville occurs between November and April. Average rainfall measured in Visalia is 10.15 inches.[6] Nearly all precipitation falls in the form of rain and stormwater readily infiltrates the soils of the surrounding the sites.

Native plant and animal species once abundant in the region have become locally extirpated or have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

The proposed Project site is currently vacant with minimal vegetation and located in an area surrounded with urban uses including residential and commercial.

[6] Ch. 2 Physical Environmental, Farmersville General Plan Part II Community Profile, November 2002. pg 2-1. Accessed June 2023.

RESPONSES

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. The proposed Project would include the development of a 9.4-acre parcel for two fully affordable multi-family projects for a total of 82 units, three commercial pads, a community building, and community areas. The site construction will also include parking spaces, internal access roads, lighting, site landscaping and additional related improvements.

The site is currently vacant and in an area that is highly disturbed and lacking in substantial vegetation, such as trees, brush or shrubs. This factor suggests that the Project site is extremely unlikely to serve as nesting habitat for bird species or any animal or plant species. No wetlands or waters of the U.S. or water of the State were found within the Project area.

According to the Farmersville General Plan, a total of eight special status animal species could potentially occur in the Farmersville area. Two of the eight species are listed as threatened or endangered by the U.S. Fish and Wildlife Service or the California Department of Fish and Game. The remaining six species are candidates for federal listing or listed species of special concern by the State of California. No special status plant species are likely to occur in the Farmersville planning area. The two species listed as Endangered or Threatened are the San Joaquin Kit Fox and the Valley Elderberry Longhorn Beetle. A biotic survey prepared for the General Plan update indicated that the overwhelming bulk of the planning area has been severely disturbed from its natural state by urbanization and agricultural activities.[7]

Tulare County is considered to be a portion of the larger regional habitat of the San Joaquin Kit Fox, a species whose habitat extends along the Sierra Nevada foothills and down to the Coast. According to the Tulare County Planning Department, kit foxes have been observed foraging in orange groves west of Lindsay City Limits many years previous. However, it is not known if any recent sightings have been documented. The potential for San Joaquin Kit Fox occurrence in the proposed Project area is considered to be quite low given the highly disturbed and barren nature of the site and precludes the ability of the San Joaquin Kit Fox to be on-site. Impacts are ***less than significant***.

Mitigation Measures: None are required.

[7] Ch. 4 Conservation, Open Space, Parks and Recreation Element, Farmersville General Plan Part I General Plan, November 2002. Accessed June 2023.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c. Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. There are no natural waterways, sensitive natural communities, riparian habitat or protected wetlands on the Project site. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impacts with Mitigation. The Project could impede the use of nursery sites for native birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC). Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region.

Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant impact. Mitigation Measure BIO-1 (below) will reduce the potential effect to a ***less than significant*** level.

Mitigation Measures:

BIO-1: Protect nesting birds.

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.

2. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. The City of Farmersville's General Plan includes various policies for the protection of biological resources. The proposed Project would not conflict with any of the adopted policies and any impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. There are no adopted habitat conservation plans that apply to the Project site. There is no impact.

Mitigation Measures: None are required.

V. CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c.	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

RESPONSES

a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant Impact with Mitigation. A cultural records search was conducted by the Southern San Joaquin Valley Information Center (SSJVIC) on May 30, 2023 (RS 23-182, Appendix B). The records search conducted at the SSJVIC indicated that there are no recorded cultural resources within the Project area. There are three recorded resources within the one-half mile radius: P-54-003229, 004885, & 005296. These resources consist primarily of a historic era ranch, single family property, industrial building, and a canal. There are no recorded cultural resources within the Project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

There have been no previous cultural resource studies completed within the project area. There have been ten studies completed within the one-half mile radius: TU- 00121, 00134, 01033, 01144, 01171, 01179, 01499, 01718, 01783, & 01944.

While no archaeological or built environment resources were identified within the area, subsurface construction activities associated with the proposed Project could potentially damage or destroy previously undiscovered historic resources. This is considered a potentially significant impact; however,

implementation of Mitigation Measure CUL-1 will ensure that significant impacts remain ***less than significant with mitigation incorporation.***

Mitigation Measures:

CUL-1: The following measures shall be implemented:

- Before initiation of construction or ground-disturbing activities associated with the Project, the City shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources;
- The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and
- If a potentially significant historical, archaeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or other appropriate measure, as outlined in Public Resources Code section 21083.2. The City of Farmersville shall implement said measures.

b. <u>Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</u>

Less Than Significant Impact with Mitigation. The possibility exists that subsurface construction activities may encounter undiscovered archaeological resources. This would be a potentially significant impact. Implementation of Mitigation Measure CUL-1 would require inadvertently discovery practices to be implemented should previously undiscovered archeological resources be located. As such, impacts to undiscovered archeological resources would be ***less than significant with mitigation incorporation.***

c. Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation. There are no unique geological features or known fossil-bearing sediments in the vicinity of the proposed Project site. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction activities. Therefore, this would be a potentially significant impact. Mitigation is proposed requiring standard inadvertent discovery procedures to be implemented to reduce this impact to a level of ***less than significant with mitigation incorporation***.

Mitigation Measures:

CUL-2: The Project applicant shall incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the Project applicant, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

RESPONSES

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed Project by Johnson, Johnson & Miller Air Quality Consulting Services, report date September, 2023. The report can be read in its entirety in Appendix A.

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The proposed Project would be served with electricity provided by Eastside Power Authority or Southern California Edison (SCE).

Methodology

The energy requirements for the proposed Project were determined using the construction and operational estimates generated from the Air Quality Analysis (refer to Attachment A of Appendix A for related CalEEMod output files). The calculation worksheets for diesel fuel consumption rates for off-road construction equipment and on-road vehicles are provided in Attachment C (Energy Consumption Calculations) of Appendix A. Short-term construction energy consumption is discussed below.

Short-Term Construction

Off-Road Equipment

Table provides estimates of the Project's construction fuel consumption from off-road construction equipment for the entire Project, categorized by construction activity.

Table 9
Construction Off-Road Fuel Consumption

Project Component	Construction Activity	Fuel Consumption (gallons)
Gardenia Gardens Project (On-site, Off-road Equipment Use)	Site Preparation	912
	Grading	1,015
	Building Construction	9,082
	Paving	507
	Architectural Coating	59
Total Construction Off-Road Fuel Consumption		**11,575**
Source: Energy Consumption Calculations (Attachment C of Appendix A).		

As shown in Table , use of off-road equipment associated with construction of the proposed Project is estimated to consume approximately 11,575 gallons of diesel fuel over the entire construction duration. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the City of Farmersville, the larger Tulare County region, or other parts of California. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 10 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of Farmersville or the Tulare County region. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Table 10
Construction On-Road Fuel Consumption

	Project Component	Total Annual Fuel Consumption (gallons)
Gardenia Gardens Project (On-road Fuel Consumption)	Site Preparation	107
	Grading	4,323
	Building Construction	8,510

	Project Component	Total Annual Fuel Consumption (gallons)
	Paving	194
	Architectural Coating	177
Total Construction On-Road Fuel Consumption		**13,311**
Source: Energy Consumption Calculations (Attachment C of Appendix A).		

As summarized in Table and Table 10, the proposed Project would require 11,575 gallons of diesel fuel for construction off-road equipment and 13,311 gallons of gasoline and diesel for on-road vehicles during construction. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or other parts of the state. In addition, the overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region, and as such, impacts would be less than significant.

Other Energy Consumption Anticipated During Project Construction

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. The Project site is located in the City of Farmersville. As construction activities would occur primarily during daylight hours, it is anticipated that the use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 14,885 kWh during the approximate 1.07-year construction phase (Attachment C of Appendix A).

Long-Term Energy Demand

Building Energy Demand

As shown in

Table 3 and Table 4, the proposed Project is estimated to demand 902,208 kilowatt-hours (KWhr) of electricity and 2,434,546 1,000-British Thermal Units (kBTU) of natural gas, respectively, on an annual basis.

Table 3
Long-Term Electricity Usage

Land Use	Total Electricity Demand (KWhr/year)
Apartments Low Rise (Multifamily Resisential)	184,398
Health Club (Multifamily Community Center)	18,646
Retirement Community (Senior Living Housing)	193,617
Strip Mall	71,687
Fast Food Restaurant with Drive Thru	260,706
Parking Lot	173,154
Total Project Consumption	**902,208**
Source: Energy Consumption Calculations (Attachment C of Appendix A).	

Table 4
Long-Term Natural Gas Usage

Land Use	Total Natural Gas Demand (kBTU/year)
Apartments Low Rise (Multifamily Resisential)	720,004
Health Club (Multifamily Community Center)	82,265
Retirement Community (Senior Living Housing)	756,004
Strip Mall	42,055
Fast Food Restaurant with Drive Thru	834,218
Parking Lot	0
Total Project Consumption	**2,434,546**
Source: Energy Consumption Calculations (Attachment C of Appendix A).	

Buildings and infrastructure constructed pursuant to the proposed Project would comply with the versions of CCR Titles 20 and 24, including California Green Building Standards (CALGreen), that are applicable at the time that building permits are issued. The proposed Project is estimated to demand 902,208 KWhr of electricity per year and 2,434,546 kBTU of natural gas per year. As the Project site is currently undeveloped, this would represent an increase in demand for electricity and natural gas.

It would be expected that building energy consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the City of Farmersville or the larger Tulare County region. Current state regulatory requirements for new building construction contained in the 2022 CALGreen and Title 24 standards apply to both residential and non-residential buildings and would increase energy efficiency and reduce energy demand in comparison to most existing development, and therefore would reduce actual environmental effects associated with energy use from the proposed Project. Additionally, the CALGreen and Title 24 standards have increased efficiency standards through each update. The most recent 2022 standards became effective January 1, 2023 and will be updated in the next cycle that will become effective at the start of 2026. Therefore, while the proposed Project would result in increased electricity and natural gas demand, electricity and natural gas would be consumed more efficiently than most existing development due to compliance with the latest building standards.

Based on the above information, the proposed Project would not result in the inefficient or wasteful consumption of electricity or natural gas, and impacts would be ***less than significant***.

Transportation Energy Demands

Table 5 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the proposed Project. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed Project.

Table 5
Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips	Annual VMT	Average Fuel Economy (miles/ gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	46.04	5,421,903	30.14	492.8	179,875
Light Trucks (Pickups) and Medium Vehicles	43.52	5,125,467	22.05	636.8	232,446
Light-Heavy to Medium-Heavy Diesel Trucks	6.04	711,656	11.56	168.7	61,585
Heavy-heavy Trucks	1.57	184,751	5.96	84.9	30,998
Motorcycles	2.17	255,223	41.76	16.7	6,111
Other	0.66	78,207	7.56	28.4	10,348
Total	**100**	**11,777,207**	**—**	**1,428**	**521,363**

Notes:
VMT = vehicle miles traveled
Percent of Vehicle Trips and VMT provided by CalEEMod.

Vehicle Type	Percent of Vehicle Trips	Annual VMT	Average Fuel Economy (miles/ gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
"Other" consists of buses and motor homes.					
Source: Energy Consumption Calculations (Attachment C of Appendix A).					

The daily vehicular fuel consumption is estimated to be 1,428 gallons of combined gasoline and diesel fuel. Annual consumption is estimated at 521,363 gallons. In addition, the proposed Project would constitute development within an established community and would not be opening a new geographical area for development. As such, the proposed Project would not result in unusually long trip lengths for future residents, visitors, customers, employees, or deliveries to the proposed residential and commercial mixed-use development.

The property is located near residential land uses, including adjacent single-family homes to the east of the Project site and to the west of the north half of the project site. The proposed Project would be well-positioned to accommodate an existing community and provide housing and commercial uses for planned growth. Vehicles accessing the site would be typical of vehicles accessing similar residential and commercial mixed-use development uses in the City of Farmersville, Tulare County, and surrounding areas. For these reasons, vehicular fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region, and impacts would be ***less than significant***.

Mitigation Measures: None are required.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The Project proposes the construction of new residential and commercial mixed-use development that would be built in accordance with all applicable rules and regulations. Compliance with established and applicable regulations would ensure that the project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Moreover, compliance with Title 24 standards would ensure that the proposed Project would not conflict with any energy conservation policies related to the proposed Project's building envelope, mechanical systems, and indoor and outdoor lighting. Notably, the applicable Title 24 standards require the Project to include on-site renewable energy to serve the future Project occupants and residents.

In addition, the proposed Project would constitute development within an established community. Specifically, the Project site is adjacent to built-up areas of the City of Farmersville. As such, the Project

would not be opening a new geographical area for development such that it would not result in unusually long trip lengths for future project residents or visitors. In addition, the proposed residential and commercial mixed-use development is specifically designed for increased walkability, facilitated by the proposed pedestrian connectivity throughout the Project site. For the above reasons, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be ***less than significant***.

Mitigation Measures: None are required.

VII. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become	☐	☐	☒	☐

	unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d.	Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?	☐	☐	☒	☐
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

RESPONSES

a-i. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The proposed Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone.[8] Since no known surface expression of active faults are believed to cross the site, fault rupture through the site is not anticipated. ***No impacts*** would occur.

Mitigation Measures: None are required.

[8] California Earthquake Hazards Zone Application, California Department of Conservation. https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed June 2023.

a-ii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less Than Significant Impact. There are no known active earthquake faults in the City of Farmersville. The proposed Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the local soil at the site. The closest known faults likely to affect the community are the Owens Valley fault, located about 65 miles to the east along the base of the Sierra Nevada in the Owens Valley, and the San Andreas fault located about 70 miles to the southwest in the coastal range. According to the Five County Seismic Safety Element (FCSSE), Farmersville is located in the V-1 zone, defined as an area "of hard rock alluvium on valley floors". The FCSSE further states that, "the distance to either of the faults expected to be a source of shaking is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal facilities."[9] Therefore, the impact is ***less than significant***.

Mitigation Measures: None are required.

a-iii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Tulare County has extremely low seismic activity levels, although shaking may be felt from earthquakes whose epicenter lie to the south and west. The proposed Project would comply with existing building code standards or design and construction, which would minimize any impacts resulting from ground shaking or liquefaction. Due to the relatively flat topography of the proposed Project area, impacts associated with landslides are not anticipated. Impacts would be ***less than significant.***

Mitigation Measures: None are required.

a-iv. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

[9] City of Farmersville General Plan Part II Community Profile. 2002. Page 2-4.

Less Than Significant Impact. The City of Farmersville sits on the floor of the San Joaquin Valley. The City is nearly flat which precludes the occurrence of landslides. Any potential impact is ***less than significant***.

Mitigation Measures: None are required.

b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The City of Farmersville sits on top of the alluvial fans of the Kaweah River and its distributaries. The soil in the proposed Project area is characterized as very deep, well-drained, and with low shrink/swell potential.[10] The proposed Project site has a generally flat topography, is in an established urban area and does not include any Project features that would result in substantial soil erosion or loss of topsoil. Therefore, the impact is ***less than significant***.

Mitigation Measures: None are required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. The City of Farmersville is nearly flat and soils in the area are very deep, well drained with a low shrink/swell potential. See also Response a-ii. Any impacts would be ***less than significant.***

Mitigation Measures: None are required.

d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

Less Than Significant Impact. See Responses (c) and (a-ii). The impact is ***less than significant***.

Mitigation Measures: None are required.

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[10] City of Farmersville General Plan Update Community Profile. November 2002. Page 2-2.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project will tie into the City's existing wastewater system and will not require the installation of a septic tanks or alternate wastewater disposal system. There is ***no impact.***

Mitigation Measures: None are required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact With Mitigation Incorporation. As identified in the cultural evaluation performed for the Project site, there are no known paleontological resources on or near the site (See Section V. for more details). Mitigation measures have been added that will protect unknown (buried) resources during construction, including paleontological resources. There are no unique geological features on site or in the area. Mitigation measures CUL-1 and CUL-2 shall be implemented to reduce potential impacts and as such, impacts are considered ***less than significant***.

Mitigation Measures: CUL-1 and CUL-2.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The following information was provided by an Air Quality, Health Risk Analysis, Greenhouse Gas, and Energy Technical Memorandum that was performed on behalf of the proposed Project by Johnson, Johnson & Miller Air Quality Consulting Services, report date September, 2023. The report can be read in its entirety in Appendix A.

RESPONSES

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant.

Quantification of Greenhouse Gas Emissions for Informational Purposes

Construction Emissions

GHG emissions generated during all construction activities were combined and are shown in **Error! Reference source not found.**.

Table 14
Summary of Construction-Generated Greenhouse Gas Emissions

Emissions Source	MT CO_{2e} per Year
Project Construction (2025)	280
Project Construction (2026)	48
Project Construction Total	**328**
Amortized over 30 Years	**10.9**
Notes: MTCO2e = metric tons of carbon dioxide equivalent	

Source: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

Operations

Operational or long-term emissions occur over the life of the Project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as landscaping activities. Operational GHG emissions associated with the proposed Project were estimated using CalEEMod 2022.1. Please see the "Assumptions" sections of the Technical Memorandum for details regarding assumptions and methodology used to estimate emissions. Operational GHG emissions for a full buildout scenario in the earliest operation year (2026) are shown in **Error! Reference source not found.**. Complete CalEEMod output files and additional supporting information are also included in Attachment A of Appendix A.

Table 15
Project Operational Greenhouse Gas Emissions (Buildout Year Scenario)

Emission Source	Unmitigated Buildout Year Total Emissions (MT CO_2e per year)
Area	33
Energy	316
Mobile (Automobiles)	446
Refrigerants	2
Water	14
Waste	80
Amortized Construction Emissions	11
Total (MT CO_2e per year)	**902**

Source of Emissions: Modeling Assumptions and CalEEMod Output Files (Attachment A of Appendix A).

The SJVAPCD has not yet adopted BPS for development projects that could be used to streamline the GHG analysis. The 29 percent GHG reduction level is based on the target established by CARB's AB 32 Scoping Plan, approved in 2008. The GHG reduction level for the State to reach 1990 emission levels by 2020 was reduced to 21.7 percent from BAU in 2020 in the 2014 First Update to the Scoping Plan to account for slower than projected growth after the 2008 recession.[11] First occupancy at the project site is expected to occur in 2026, which is after the AB 32 target year. The SJVAPCD has not updated its guidance to address SB 32 2030 targets or AB 1279 2045 targets. Therefore, whether the Project's GHG

[11] California Air Resources Board (CARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed May 24, 2023.

emissions would result in a significant impact on the environment is determined by assessing consistency with relevant GHG reduction plans.

The City of Farmerville has not adopted a GHG reduction plan. In addition, the City has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines. The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the Project. Since no other local or regional Climate Action Plan is in place, the Project is assessed for its consistency with CARB's adopted Scoping Plans.

Consistency with CARB's Adopted Scoping Plans

Consistency with AB 32 and CARB's 2008 Scoping Plan

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Former Governor Brown, in the introduction to Executive Order B-30-15, stated "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

Consistency with SB 32 and CARB's 2017 Scoping Plan

The 2017 Climate Change Scoping Plan Update (2017 Scoping Plan) includes the strategy that the State intends to pursue to achieve the 2030 targets of Executive Order S-3-05 and SB 32. **Error! Reference source not found.** provides an analysis of the Project's consistency with the 2017 Scoping Plan Update measures.

Table 16
Consistency with SB 32 Scoping Plan

Scoping Plan Measure	Project Consistency
SB 350 50% Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33% in 2020 to 50% in 2030. *(The requirement is now 60% in 2030 per SB 100.)*	**Consistent**: The project will purchase electricity from a utility subject to the SB 350 Renewable Mandate.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent	**Not Applicable**. This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are

Scoping Plan Measure	Project Consistency
reduction from 2014 building energy usage compared to current projected 2030 levels.	expected to increase in stringency over time. New buildings (both residential and non-residential buildings) constructed as part of the proposed project would comply with the applicable Title 24 Energy Efficiency Standards in effect at the time building permits are received. The current Title 24 regulations are the 2022 Title 24 standards, which become effective January 1, 2023. The next update would become effective January 1, 2026.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Consistent**. This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the project site would be subject to the standards. Vehicles accessing the project site will use fuel containing lower carbon content as the fuel standard is implemented.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Consistent**. Future project residents, visitors, customers, and employees can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. The CALGreen Code requires electrical service in new development to be EV charger-ready. In addition, home deliveries will be made by increasing numbers of ZEV delivery trucks as the statewide fleet is expected to get cleaner over time.
Sustainable Freight Action Plan. The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Not Applicable.** The measure applies to owners and operators of trucks and freight operations. The project is residential and commercial mixed-use development and would not be considered an industrial land use or a large freight operator. However, home and business deliveries are expected to be made by increasing numbers of ZEV delivery trucks as technology continues to improve accessibility to ZEV vehicles and as regulations are phased in over time.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Consistent**. The project is not expected to include fireplaces. However, any hearths that would be installed will only include natural gas hearths that produce very little black carbon compared with wood burning fireplaces and heaters in line with the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts mitigation measures.[1]
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	**Consistent**. The project will provide residential and commercial mixed-use development in the region that is consistent with the Regional Transportation Plan/Sustainable Communities Strategy (SCS) strategy to increase development densities to reduce VMT.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large	**Consistent.** The post-2020 Cap-and-Trade Program indirectly affects people who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are

Scoping Plan Measure	Project Consistency
industrial sources such as power plants, refineries, and cement manufacturers.	transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program's first compliance period.
Natural and Working Lands Action Plan. CARB is working in coordination with several other agencies at the federal, state, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not Applicable**. The project is a residential and commercial mixed-use development and will not be considered natural or working lands.
Source: California Air Resources Board (CARB). 2017. The 2017 Climate Change Scoping Plan Update. January 20. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed September 2023. [1] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMA. Accessed September 2023.	

As described in **Error! Reference source not found.**, the proposed Project would be consistent with applicable 2017 Scoping Plan Update measures and would not obstruct the implementation of others that are not applicable. The State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS (Low Carbon Fuel Standard) that applies to all fuel sold in California, and the Renewable Portfolio Standard and Renewable Energy Standard under SB 100 that apply to utilities providing electricity to all California end users.

Moreover, the Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors that are the primary sources related to development projects and lower than average reductions from other sources such as agriculture. The proposed residential and commercial mixed-use development Project's operational GHG emissions would principally be generated from electricity consumption and vehicle use, which are directly under the purview of the Scoping Plan strategy and have experienced reductions above the State average reduction. Considering the information

summarized above, the proposed Project would be consistent with the State's AB 32 and SB 32 GHG reduction goals.

Consistency Regarding GHG Reduction Goals for 2050 under Executive Order S-3-05 and GHG Reduction Goals for 2045 under CARB's 2022 Scoping Plan

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the proposed Project would comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the First Scoping Plan Update; however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately."

CARB recognized that AB 32 established an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, CARB's First Update "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by CARB would serve to reduce the proposed Project's post-2020 emissions level to the extent applicable by law:

- **Energy Sector:** Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the project's emissions level.

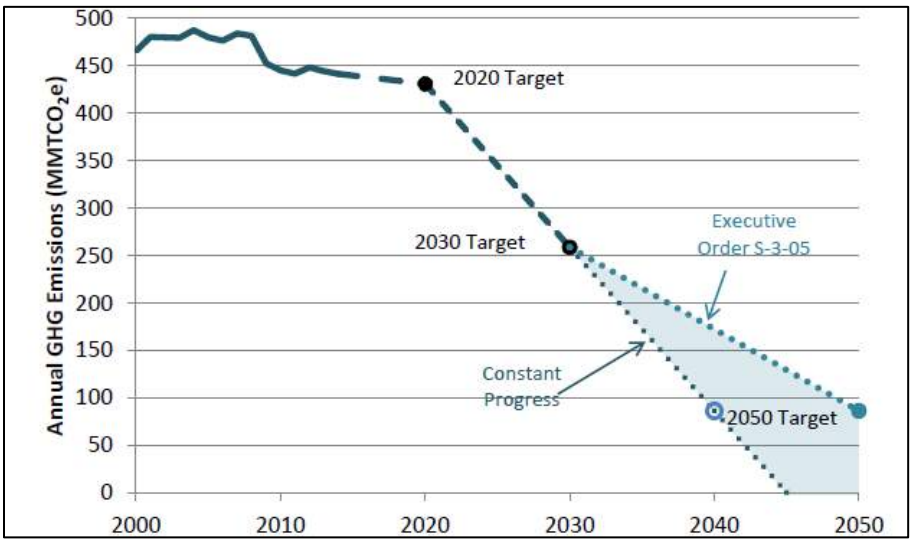
- **Transportation Sector:** Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project's emissions level.

- **Water Sector:** The project's emissions level will be reduced as a result of further desired enhancements to water conservation technologies.

- **Waste Management Sector:** Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project's emissions level.

For the reasons described above, the Project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets. The trajectory required to achieve the post-2020 targets is shown in Figure 4.

Figure 4
California's Path to Achieving the 2050 Target



Source: CARB 2017 Scoping Plan Update

In his January 2015 inaugural address, former Governor Brown expressed a commitment to achieve "three ambitious goals" that he would like to see accomplished by 2030 to reduce the State's GHG emissions:

- Increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the state agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change. Studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain

very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed Project's future emissions trajectory is expected to follow a declining trend, consistent with the 2030, 2045, and 2050 targets.

The 2017 Scoping Plan provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target. In addition, the 2022 Scoping Plan outlines objectives, regulations, planning efforts, and investments in clean technologies and infrastructure that outlines how the State can achieve carbon-neutrality by 2045. Accordingly, taking into account the proposed Project's design features and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the proposed Project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, carbon neutral by 2045, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment.

Summary

As described above, the proposed Project would be consistent with State GHG Plans and would not obstruct the State's ability to meet its goals of reducing GHG emissions 40 percent below 1990 levels by 2030, carbon neutral by 2045, and 80 percent below 1990 levels by 2050. Therefore, the Project's generation of GHG emissions would result in a ***less than significant impact*** on the environment.

Mitigation Measures: None are required.

b. <u>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</u>

Less Than Significant. As discussed under Impact VIII(a), neither the City of Farmersville nor the County of Tulare have adopted a GHG reduction plan that would be applicable to the proposed Project. In addition, the City of Farmersville has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions

contained in the CEQA Guidelines. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the Project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the Project. The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County and would not be appliable to the proposed Project. Since no other local or regional Climate Action Plan is in place, the Project is assessed for its consistency with CARB's adopted Scoping Plans. This assessment is included under Impact VIII(a) above. As demonstrated above, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce the emissions of greenhouse gases. This impact would be ***less than significant***.

Mitigation Measures: None required.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency	☐	☐	☐	☒

	response plan or emergency evacuation plan?				
g.	Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

RESPONSES

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. The proposed Project would include the development of two fully affordable multi-family projects for a total of 82 units and three commercial pads. The development also includes a community building, basketball court, bocce ball court, dog parks, retention basins, and parking spaces. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements.

Proposed Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program through the submission and implementation of a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the project site. Therefore, no significant impacts would occur during construction activities.

The operational phase of the proposed Project would occur after construction is completed and employees and residents move in to occupy the structures on a day-to-day basis. The proposed Project includes land uses that are considered compatible with the surrounding uses upon approval of the General Plan Amendment and Zone Change Approval. None of these land uses routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common commercial grade hazardous materials such as household and commercial cleaners, paint, etc. The proposed Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, nor would a significant hazard to the public or to the environment through the reasonably foreseeable upset and accidental conditions involving the

likely release of hazardous materials into the environment occur. Therefore, the proposed Project will not create a significant hazard to the public or the environment and any impacts would be ***less than significant***.

Mitigation Measures: None are required.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. See Response a. above. Any accumulated hazardous construction or operational wastes will be collected and transported away from the site in compliance with all federal, state and local regulations. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Farmersville High School is approximately 0.3 miles southeast of the proposed Project site. Construction-related activities will be intermittent, temporary, and short-term, and are not anticipated to result in the release of hazardous emissions, involve hazardous materials, or create a hazard to the school. As noted earlier, the proposed Project includes the development of general commercial and multi-family residences, hence it is not reasonably foreseeable that the Project will cause a significant impact by emitting hazardous waste or bringing hazardous materials. General commercial and residential land uses do not generate, store, or dispose of significant quantities of hazardous materials. Such uses also do not normally involve dangerous activities that could expose persons onsite or in the surrounding areas to large quantities of hazardous materials. See also Responses a. and b. regarding hazardous material handling. The impact is ***less than significant.***

Mitigation Measures: None are required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed Project site is not located on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Geotracker[12] and DTSC Envirostor[13] databases – accessed in July 2023). There are no hazardous materials sites that impact the Project. As such, ***no impacts*** would occur that would create a significant hazard to the public or the environment.

Mitigation Measures: None are required.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed Project site is approximately 5.7 miles northwest of the Exeter Airport and the airport's safety zones do not extend into the City of Farmersville. There is ***no impact***.

Mitigation Measures: None are required.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project will not interfere with any adopted emergency response or evacuation plan. Construction activities will take place within right-of-ways of existing roadways. Construction activities will be temporary in nature and will not cause any road closures that could interfere with any adopted emergency response or evacuation plan. The construction contractor will be required to work with the City and County (public works, police/fire, etc.) if and when roadway diversions are required to ensure that adequate access is maintained for residents and emergency vehicles. There is ***less than significant impact.***

Mitigation Measures: None are required.

[12] GeoTracker, State Water Resources Control Board. https://geotracker.waterboards.ca.gov/. Accessed July 2023.

[13] EnviroStor, Department of Toxic Substances Control. https://www.envirostor.dtsc.ca.gov/public/. Accessed July 2023.

g. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The site is surrounded by urban uses and as such, there are no wildlands on or near the Project site. There is ***no impact***.

Mitigation Measures: None are required.

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off- site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

According to the City's Comprehensive Infrastructure Management Plan (CIMP), eight well sites are located in the City's water distribution system. On average, the wells can each produce around 700 gallons per minute (gpm), and are considered fairly shallow, with groundwater depths encountered approximately 60 feet below ground surface. [14]

The Kaweah Basin is the source of all drinking water supply for the City of Farmersville and surrounding communities. The Kaweah Delta Water Conservation District (KDWCD) manages the Basin. KDWCD and other irrigation districts and companies have historically managed groundwater through the conjunctive use of surface water. KDWCD regularly provides programs that benefit local agricultural customers by making available additional surface water supplies for irrigation. These programs effectively reduce the withdrawals of groundwater resulting in in-lieu recharge of the aquifer. Groundwater is normally used by agriculture as an alternate source when surface supplies are not available and is the sole source in areas within KDWCD jurisdiction that do not have access to surface water.

RESPONSES

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

[14] Comprehensive Infrastructure Management Plan, City of Farmersville. November 2012. Pg 4-2

Less Than Significant Impact.

Construction

Grading, excavation and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed project are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, "good housekeeping" procedures can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. In addition, grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. These Best Management Practices (BMPs) would be required in the Stormwater Pollution Prevention Plan (SWPPP) to be prepared prior to commencement of Project construction. When properly designed and implemented, these "good-housekeeping" practices are expected to reduce short-term construction-related impacts to less than significant.

In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, the Project will be required to comply with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB) has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

Operation

The proposed Project includes the construction and operation of a multifamily housing consisting of 82 units, community areas and three commercial/retail pads including parking spaces, internal access roads,

lighting, site landscaping, and other improvements. The Project will tie into the existing City water and wastewater systems.

The proposed Project will result in wastewater from residential units and commercial structures that will be discharged into the City's existing wastewater treatment system. The wastewater will be typical of other urban/residential developments consisting of bathrooms, kitchen drains and other similar features. The Project will not discharge any unusual or atypical wastewater. Site buildout has been planned for and anticipated in the City's planning documents. Therefore, the proposed Project will not result in additional production of wastewater that was not already accounted for in the City's infrastructure planning documents.

The Project will comply with all City ordinances and standards to assure proper grading and drainage. Compliance with all local, state, and federal regulations will prevent violation of water quality standards or waste discharge requirements. The proposed Project will be required to prepare a grading and drainage plan for review and approval by the City Engineer, prior to issuance of building permits.

Additionally, there will be no discharge to any surface or groundwater source. As such, the proposed Project will not violate any water quality standards and will not impact waste discharge requirements. The impact will be ***less than significant***.

Mitigation Measures: None are required.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The City of Farmersville will provide water services upon development. The City of Farmersville's water supply comes from groundwater extraction. The City of Farmersville is located in the Kaweah Subbasin area and falls under the Greater Kaweah Groundwater Sustainability Agency (GKGSA). The Kaweah Subbasin is classified as high-priority, according to California Water Code § 10933 (b) and has been designated a critically overdrafted by the California Department of Water Resources (DWR).[15] GKGSA acknowledges a continuing decline in groundwater levels of the aquifer system below the Farmersville area.

[15] Executive Summary, Greater Kaweah Groundwater Sustainability Agency Groundwater Sustainability Plan. January 2020. https://greaterkaweahgsa.org/resources/.

The City of Farmersville General Plan has designated the site for urban development as an such, site development has been included and planned for in the City's infrastructure planning documentation. To assist in mitigating the groundwater decline, the City of Farmersville has established fees that are charged to new development, which will fund groundwater recharge and other water resource projects within the City. Project implementation would not affect groundwater supplies beyond what has already been accounted for. Impacts would be ***less than significant.***

Mitigation Measures: None are required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i. result in substantial erosion or siltation on- or offsite;

   ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

   iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

   iv. impede or redirect flood flows?

Less Than Significant Impact. The site is currently vacant with minimal vegetation. The proposed Project will change drainage patterns of the site through the installation of impervious surfaces and structures (apartment complex, commercial pads, driveways, parking areas, streets, etc.) and will be required by the City to be graded to facilitate proper stormwater drainage into the stormwater basin included with the Project. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP will be retained on-site during construction.

The commercial buildings and residential dwellings will be built in accordance with the current California Building Code and the on-site retention basins have been appropriately sized to accommodate potential flood waters. Accordingly, the chance of flooding (and therefore the release of pollutants due to flooding) at the site is remote. Impacts are ***less than significant.***

Mitigation Measures: None are required.

d. In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The proposed Project site is located within Zone X, which experiences minimal flood hazards, as indicated by FEMA flood hazard map 06107C0954E, effective 6/15/2009.[16] The site development includes retention basins and will be designed for adequate storm drainage and will be required to prepare and submit a water quality control plan to be implemented during construction, as required by the National Pollutant Discharge Elimination System. This plan must be reviewed and approved by the City Engineer prior to the start of construction.

There are no inland water bodies that could be potentially susceptible to a seiche in the Project vicinity. This precludes the possibility of a seiche inundating the Project site. The Project site is more than 100 miles from the Pacific Ocean, a condition that precludes the possibility of inundation by tsunami. There are no steep slopes that would be susceptible to a mudflow in the Project vicinity, nor are there any volcanically active features that could produce a mudflow in the City of Farmersville. This precludes the possibility of a mudflow inundating the Project site. Any impacts are ***less than significant***.

Mitigation Measures: None are required.

LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

[16] National Flood Hazard Layer (NFHL) Viewer, FEMA. https://www.fema.gov/flood-maps/national-flood-hazard-layer. Accessed August 2023.

RESPONSES

a. Physically divide an established community?

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project would include the development of two fully affordable multi-family projects for a total of 82 residential units and up to 13,950 square feet of commercial space. The northern portion of the Project site would consist of four buildings of senior housing developments with a total of 42 units, a commercial pad, community area, fenced dog park, bocce ball court, community garden, retention basins, and 97 parking spaces. The southern portion of the Project site would consist of an apartment complex with five residential buildings consisting of a total of 40 units, a community building, two commercial/retail pads, dog park, basketball court, retention basins, and 92 parking spaces. This apartment complex would include residential units, tot lot, half-basketball court, fenced dog park, on-site laundry facility, and outdoor picnic-barbeque area. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements.

The proposed Project is located in the northeastern portion of the City of Farmersville within city limits, in an area of suburban residential and commercial land uses. The proposed Project site covers approximately 9.4 acres and consists of vacant land with minimal vegetation. The site is zoned General Commercial (C-G) and is also designated General Commercial by the Farmersville General Plan. The proposed Project includes a General Plan Amendment for the land use change of the eastern portion of the site to "Multi-Family Residential", and a Zone Change to "Multi-Family Residential (R-M)". Upon approval the Project will be in compliance with the General Plan and zoning ordinance.

The proposed Project will extend an existing community in the region. The Project has no characteristics that would physically divide the City of Farmersville. Access to the existing surrounding areas will be improved. ***No impacts*** would occur as a result of this Project.

Mitigation Measures: None are required.

XII. MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

RESPONSES

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The most economically important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas. The four streams that have provided the main source of high-quality sand and gravel in Tulare County to make Portland cement concrete and asphaltic concrete are the Kaweah River, Lewis Creek, Deer Creek and the Tule River[17].

[17] Tulare County General Plan 2030 Update Recirculated Draft EIR. February 2010. Page 3.7-9.

The proposed Project area is not included in a State classified mineral resource zone[18], and the Kaweah River is approximately 1.7 miles northwest of the Project site. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

XIII. NOISE

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

RESPONSES

a. <u>Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</u>

[18] Ibid. Page 3.7-10.

b. Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The City of Farmersville General Plan does not include a noise element, but rather states that the City has adopted Tulare County's Noise Element. The County of Tulare Noise Element of the General Plan (August 2012) establishes noise level criteria in terms of the Day-Night Average Level (Ldn) metric. The Ldn is the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The Ldn represents cumulative exposure to noise over an extended period of time and is therefore calculated based upon *annual average* conditions.

Site development may increase ambient noise levels in the Project vicinity beyond those already present on the site from the residential activity. In the short term, noise levels would be raised during construction of the Project phases by the operation of heavy equipment and other associated activities. Because construction noise would generally occur intermittently on Monday through Saturdays during daylight hours, per the Farmersville Noise Ordinance, the impact of noise in surrounding land uses is not expected to be significant.

In the long term, any development would add traffic and other sources of noise that will somewhat increase the ambient noise levels in the vicinity. However, these noise levels should be relatively consistent with those experienced in the area and other existing developed areas of Farmersville.

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project includes the construction of multifamily housing consisting of 48 units along with grocery store, oil change/car wash, fueling station, convenience store with drive-thru, and general commercial. The site construction will also include internal access roads, lighting, site landscaping and additional related improvements.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day. Table 17 describes the typical construction equipment vibration levels.

Table 17
Typical Construction Vibration Levels

Equipment	VdB at 25 ft
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities will be temporary and not exceed the Federal Transit Administration (FTA) threshold for the nearest residences which are located adjacent to the project site on the eastern boundary. As such, any impacts resulting from an increase in ambient noise levels or excessive groundborne vibration will be ***less than significant.***

c. For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project is not located within an airport land use plan. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

XIV. POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

RESPONSES

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed Project would include the development of a 9.4-acre parcel for two fully affordable multi-family projects for a total of 82 units, three commercial/retail pads and community areas. The site construction will also include parking spaces, internal access roads, lighting, site landscaping and additional related improvements. The 9.4-acre site is currently designated and zoned for general commercial. The eastern portion of the site is proposed for the General Plan Amendment and Zone Change to Multi-family Residential to accommodate the Project.

According to the current Tulare County Regional Housing Needs Assessment (RHNA), the City of Farmersville needs a total of 654 net new housing units between the 8.5-year projection period (June 30, 2023 – December 31, 2031).[19] As part of the total RHNA Allocation, 218 units will be needed as part of

[19] Final Regional Housing Needs Plan, Cycle 6. August 2022. Tulare County Associated of Governments. https://tularecog.org/sites/tcag/assets/FINAL%20RHNP%20-%20COMBINED.pdf. Accessed June 2023.

Affordable Allocation (Combined Very Low + Low Income groups). Estimates as of 1/1/2023 shows the City has 2,783 housing units with an average of 3.75 people per household.[20]

The proposed Project includes construction of up to 82 fully affordable multi-family residential units. Based on the per-unit average of 3.75 persons for the City, the proposed Project would provide housing for approximately 308 people. The proposed Project would assist the City in reaching its RHNA goal, and as such, the site is planned for development. The City of Farmersville has sufficient labor force in the area to support many other types of industries. As such, any impacts are ***less than significant***.

Mitigation Measures: None are required.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant. There are no residential structures currently on-site. As noted earlier, the Project intends to add multi-family housing to the community. The Project will not displace any housing and therefore there is ***less than significant***.

Mitigation Measures: None are required.

[20] E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023. May 2023. State of California Department of Finance. https://dof.ca.gov/Forecasting/Demographics/Estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. Accessed June 2023.

XV. PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

RESPONSES

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

Less Than Significant Impact. The Farmersville Fire Department is located at 909 W Visalia Road Farmersville, CA 93223, approximately 1.3 miles southwest of the Project site. The Department maintains a fleet of specialized fire apparatus including a 4-wheel drive Brush Fire Patrol Unit, a Quick Attack

Squad Unit (250 GPM Pumper), an Engine (1,500 GPM Pumper), a 55 Ft. Ladder Truck (1,500 GPM Pumper), and several Command/Utility Vehicles.

The Project site is already serviced by the Fire Department. The proposed Project at full buildout will add to the number of "customers" served, however, the Fire Department has capacity for the additional service need. No additional fire equipment, personnel, or services will be required by Project implementation. In addition, the Project applicant will be required to pay all associated impact fees related to public services. As such, any impacts would be less ***than significant***.

Police Protection?

Less Than Significant Impact. The proposed Project includes the construction of 82 multi-family residential units, which will accommodate approximately 308 persons, and up to 13,950 sq.ft. of commercial/retail space. The proposed Project site will continue to be served by the City of Farmersville Police Department, located at 909 W Visalia Road, Farmersville, CA 93223. Implementation of the proposed Project would result in an increase in demand for police services; however, this increase would be minimal compared to the number of officers currently employed by the Farmersville Police Department and would not trigger the need for new or physically altered police facilities. No additional police personnel or equipment is anticipated. In addition, each residential unit will be assessed a public safety impact fee by the City that is used to make capital improvements for the Police Department. The impact is ***less than significant.***

Schools?

Less Than Significant Impact. The proposed Project site is located within the Farmersville Unified School District. Farmerville High School and Freedom Elementary School are both located approximately 0.3 miles and 0.4 miles southeast of the Project site respectively. Other schools in the District include Deep Creek Academy, Farmersville Jr. High School, Hester Elementary School, Snowden Elementary School, and Farmersville Adult School. Pursuant to California Education Code Section 17620(a)(1), the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district for the purpose of funding the construction or reconstruction of school facilities. The Project applicant would be required to pay such fees to reduce any impacts of new residential development of school services. Payment of the developer fees will offset the addition of school-age children within the district. As such, any impacts would be ***less than significant.***

Parks?

Less Than Significant Impact. The City of Farmersville has six developed park sites, including Armstrong Park (4 acres), Jennings Park (2.1 acres), Liberty Park (6 acres), Riverbank Park (0.5 acres), Roy's Park (4.5 acres), Veterans Memorial Park (4.33 acres), Veterans Memorial Sports Park (11.82 acres).

To ensure sufficient recreational opportunities, the City has established a Park Impact Fee, implemented by Chapter 4, Development Fees, of the Municipal Code. Municipal Code states that parks must be constructed or expanded commensurate with growth of the City. The City Council determined that a park impact fee is required to assist in the financing of these public park improvements and to pay for new development's fair share of the acquisition and development costs of these improvements. The Project applicant would be required to comply with the Municipal Code. As such, any impacts would remain ***less than significant.***

Other public facilities?

Less Than Significant Impact. The proposed Project is within growth projections identified in the City's General Plan and other infrastructure studies. As such, the Project would not result in increased demand on other public facilities such as library services that has not already been planned for. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

XVI. RECREATION

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

RESPONSES

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. As described in Impact XIV(a), the City has established a Park Impact Fee through the Municipal Code, which states that parks must be constructed or expanded commensurate with growth of the City. The Project applicant will be required to comply with that Municipal Code, as well as any fees that apply, and as such, any impacts will be ***less than significant***.

Mitigation Measures: None are required.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. The proposed Project does includes the construction of community areas with recreation facilities. The Project development consists of a community area, a community building, fenced dog parks, bocce ball court, community garden, tot lot, half-basketball court, and outdoor picnic-barbeque area. As determined by the analysis contained within this document, ***less than significant impacts*** would occur.

Mitigation Measures: None are required.

XVII. TRANSPORTATION/TRAFFIC

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐
b.	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☒	☐	☐
c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d.	Result in inadequate emergency access?	☐	☐	☒	☐

A Traffic Analysis was performed on behalf of the proposed Project by Ruettgers & Schuler Civil Engineers (Appendix C). The following discussion and impact analysis are directly referencing this technical report.

RESPONSES

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact with Mitigation. The City of Farmersville General Plan Circulation Element contains Goals, Objectives and Action Plans to Ensure that streets in Farmersville are not congested and that the traffic on Farmersville's streets operates in an efficient and safe manner.

The Project site is situated on approximately 9.4 gross acres of undeveloped vacant land. The property is zoned Central Commercial. The proposed development would include 40 multi-family dwelling units, 42 multi-family senior adult housing, and up to 13,950 square feet of commercial development. Access to the site will be along Farmersville Boulevard.

Trip Generation

The Project trip generation volumes shown in Table 18 were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.[21] Trip rates, equations, and directional splits for ITE Land Use Codes 220 (Multifamily Housing-Low Rise), 252, (Senior Adult Housing-Multifamily), 822 (Strip Retail <40k), and 934 (Fast-Food Restaurant with Drive-Through) were used to estimate Project trips for weekday peak hour of adjacent street traffic.

Table 18
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
220	Multifamily Housing (Low Rise)	40 Dwelling Units	eq	332	eq	24% 8	76% 27	eq	63% 24	37% 14
252	Senior Adult Housing - Multifamily	42 Dwelling Units	eq	146	eq	34% 3	66% 6	eq	56% 6	44% 5
822	Strip Retail (<40k)	6.96 1000 sq.ft. GLA	eq	523	eq	60% 14	40% 9	eq	50% 30	50% 30
934	Fast-Food Restaurant with Drive-Through	4.19 1000 sq.ft. GLA	467.48	1959	44.61	51% 95	49% 92	33.03	52% 72	48% 66
934	Fast-Food Restaurant with Drive-Through	2.8 1000 sq.ft. GLA	467.48	1309	44.61	51% 64	49% 61	33.03	52% 48	48% 44
Sub-total				4269		184	195		180	159
Adjustments										
Capture		5%		213		9	8		8	7
Pass-by		15%		640		26	24		23	21
Total				**3416**		**149**	**163**		**150**	**131**

Trip Distribution and Assignment

[21] Traffic Study- Gardenia Courtyard, City of Farmersville. Ruettgers & Schuler Civil Engineers. September 2023. Appendix C.

The distribution of Project peak hour trips is shown in Table 19 and represents the movement of traffic accessing the project site by direction. The Project trip distribution was developed based on site location and travel patterns anticipated for the proposed land uses.

Table 19
Project Trip Distribution

Direction	Percent
North	10
East	35
South	10
West	45

Project peak hour trips were assigned to the study intersections as shown in Figure 4 of Appendix C. Project trip assignment was developed based on trip generation, trip distribution and likely travel routes for traffic accessing the Project site.

Existing and Future Traffic

Existing peak hour turning movement counts were obtained in March and July 2022. Average annual growth rates ranging between 0.5 and 2.53 percent were applied to the 2023 peak hour volumes to estimate peak hour volumes for the year 2043. These growth rates were developed based on a review of historical count data and output from TCAG's regional travel demand model as well as a discussion with the City of Farmersville Planning Consultant. Cumulative volumes were estimated based on information provided by the City of Farmersville regarding build year, land use, size and location for each pending development. See Appendix C for figures.[22]

Intersection Analysis

A capacity analysis of the study intersections was conducted using Synchro software from Trafficware, as detailed in Appendix C. The analysis was performed for each of the following traffic scenarios.

- Existing (2023)
- Existing (2023) + Project
- Future Cumulative (2043)

[22] Ibid, pg 7.

- Future Cumulative (2043) + Project

Level of service (LOS) criteria for unsignalized and signalized intersections, as defined in HCM 2010, are presented in the tables below. The City of Farmersville's Circulation Element designates LOS C as the minimum acceptable intersection peak hour level of service.

Table 20
Level of Service Criteria - Unsignalized Intersection

Level of Service	Average Control Delay (sec/veh)	Expected Delay to Minor Street Traffic
A	≤ 10	Little or no delay
B	> 10 and ≤ 15	Short delays
C	> 15 and ≤ 25	Average delays
D	> 25 and ≤ 35	Long delays
E	> 35 and ≤ 50	Very long delays
F	> 50	Extreme delays

Table 21
Level of Service Criteria - Signalized Intersections

Level of Service	Average Control Delay (sec/veh)	Volume-to-Capacity Ratio
A	≤ 10	< 0.60
B	> 10 and ≤ 20	0.61 - 0.70
C	> 20 and ≤ 35	0.71 - 0.80
D	> 35 and ≤ 55	0.81 - 0.90
E	> 55 and ≤ 80	0.91 - 1.00
F	> 80	> 1.00

Peak hour level of service for the study intersections is presented in Tables 22 and 23.[23] Intersection delay in seconds per vehicle is shown within parentheses for intersections operating below LOS C.

[23] Ibid, page 14.

Table 22
Intersection Level of Service - Weekday PM Peak Hour

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	Farmersville Blvd & Ave 296	AWSC	B	B	C	C	-
2	SR 198 EB Ramps & Ave 296	NB	B	B	C	C	-
3	SR 198 EB Ramps & Ave 295	Roundabout	A	A	B	B	-
4	Farmersville Blvd & Ave 295	Roundabout	A	A	C	C	-
5	Farmersville Blvd & Walnut Ave/W Walnut Ave	Signal	C	C	C	C	-
6	Farmersville Blvd & Front St	AWSC	C	C	E (49.2)	E (49.5)	A

Note:
[1] *See Table 28 for mitigation measures.*

Table 23
Intersection Level of Service - Weekday AM Peak Hour

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project	2043+ Project w/Mitigation[1]
1	Farmersville Blvd & Ave 296	AWSC	B	B	C	C	-
2	SR 198 EB Ramps & Ave 296	NB	B	C	C	C	-
3	SR 198 EB Ramps & Ave 295	Roundabout	A	A	A	A	-
4	Farmersville Blvd & Ave 295	Roundabout	A	A	C	C	-
5	Farmersville Blvd & Walnut Ave/W Walnut Ave	Signal	C	C	C	C	-
6	Farmersville Blvd & Front St	AWSC	C	C	F (50.5)	F (51.0)	B

Note:
[1] *See Table 28 for mitigation measures.*

Traffic Signal Warrant Analysis

Peak hour signal warrants were evaluated for the unsignalized intersections within the study based on the 2014 California Manual on Uniform Traffic Control Devices (2014 CA MUTCD). Peak hour signal

warrants assess delay to traffic on minor street approaches when entering or crossing a major street. Signal warrant analysis results are shown in Tables 24 and 25.[24]

Table 24
Traffic Signal Warrants - Weekday PM Peak Hour

		2023			2023+Project			2043			2043+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Farmersville Blvd at Ave 296	397	173	NO	409	173	NO	595	253	YES	607	253	YES
2	SR 198 EB Ramps at Ave 296	539	54	NO	551	74	NO	754	91	NO	766	111	NO
3	SR 198 EB Ramps at Ave 295	399	213	NO	418	213	NO	587	286	YES	606	297	YES
4	Farmersville Blvd at Ave 295	556	475	YES	599	494	YES	962	724	YES	1005	743	YES
6	Farmersville Blvd at Front St	1105	131	YES	1113	131	YES	1730	182	YES	1738	182	YES

Table 25
Traffic Signal Warrants - Weekday PM Peak Hour

		2023			2023+Project			2043			2043+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Farmersville Blvd at Ave 296	439	141	NO	459	147	NO	620	197	NO	640	203	NO
2	SR 198 EB Ramps at Ave 296	592	61	NO	612	67	NO	788	90	NO	808	96	NO
3	SR 198 EB Ramps at Ave 295	344	193	NO	363	199	NO	495	349	YES	514	355	YES
4	Farmersville Blvd at Ave 295	607	235	YES	652	241	YES	993	375	YES	1038	381	YES
6	Farmersville Blvd at Front St	954	210	YES	961	210	YES	1470	289	YES	1477	289	YES

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified. It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service or operate below an acceptable level of service and not meet signal warrant criteria.

Roadway Analysis

A capacity analysis of the study roadways was conducted using Table 4 in the State of Florida Department of Transportation *Quality/Level of Service Handbook* dated June 2020 (see Appendix). The City of Farmersville Circulation Element states that the peak hour level of service for roadways shall be no

[24] Ibid, page 15.

lower than LOS "C" for urban areas. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2023)
- Existing (2023) + Project
- Future Cumulative (2043)
- Future Cumulative (2043) + Project

Table 26
PM Roadway Level of Service

Street	2023 Two-Way LOS		2023+Project Two-Way LOS		2043 Two-Way LOS		2043+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
Farmersville Blvd to SR 198 WB Ramps	518	C	550	C	782	C	814	C
Ave 295: SR 198 EB Ramps to Farmersville Rd	648	C	678	C	1009	C	1039	C
Farmersville Blvd: Font St to Walnut St	955	C	1003	C	1394	C	1402	C
Farmersville Blvd: Walnut St to Ave 295	821	C	877	C	1412	C	1468	C
Farmersville Blvd: Ave 295 to Ave 296	609	C	641	C	951	C	983	C

Table 27
AM Roadway Level of Service

Street	2022 Two-Way LOS		2022+Project Two-Way LOS		2042 Two-Way LOS		2042+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS	VOL	LOS
Farmersville Blvd to SR 198 WB Ramps	544	C	570	C	772	C	798	C
Ave 295: SR 198 EB Ramps to Farmersville Rd	428	C	453	C	704	C	729	C
Farmersville Blvd: Font St to Walnut St	954	C	961	C	1318	C	1325	C
Farmersville Blvd: Walnut St to Ave 295	663	C	714	C	1138	C	1189	C
Farmersville Blvd: Ave 295 to Ave 296	602	C	628	C	922	C	948	C

Intersection Improvements

Intersection improvements needed by the year 2043 to maintain or improve the operational level of service of the street system in the vicinity of the Project are presented in Table 28.[25]

Table 28
Future Intersection Improvements

#	Intersection	Total Improvements Required by 2043	Project Share
6	Farmersville Rd & Front St	Signal	1.1%

Project percent share is calculated using the following formula:

$$\% \text{ Share} = \frac{\text{Project Traffic}}{\text{(Future+Project Traffic) - Existing Traffic}} \times 100\%$$

In summary, all six study intersections currently operate at or above LOS C during peak hours prior to and with the addition of Project traffic. In 2043, it is anticipated that Farmersville Boulevard & Front Street will operate below an acceptable level of service prior to the addition of Project traffic. All roadway segments within the scope of the study currently operate above LOS C during peak hours prior to, and with the addition of Project traffic in both 2023 and 2043. With the addition of the mitigation measure identified in Table 28, all intersections will operate at acceptable levels.

As such, potential impacts will be ***less than significant with mitigation incorporation.***

Mitigation Measures:

TRA-1

> The Applicant shall pay the City of Farmersville for their Fair Share Portion of the intersection improvements described in Table 28, in order to maintain or improve the operational level of service of the street system in the Project vicinity.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact with Mitigation. An evaluation of vehicle miles traveled (VMT) for project traffic was conducted in accordance with California Environmental Quality Act (CEQA) requirements.

[25] Ibid, pg 17.

The City of Farmersville has adopted the "County of Tulare SB 743 Guidelines", dated June 8, 2020, which contain recommendations regarding VMT assessment, significance thresholds and mitigation measures.

Baseline VMT was determined utilizing data from the California Statewide Travel Demand Model (CSTDM). The proposed residential Project is located in Traffic Analysis Zone (TAZ) 2757, which has an average VMT/capita of 11.27 miles. The proposed residential Project is considered a typical Project within the TAZ and therefore the Project would be expected to have the same VMT per capita. There are no special considerations with the Project to assume the Project would produce a VMT/capita lower than the average for the TAZ. The threshold of significance for residential Project VMT/capita is if the Project VMT is below the average in the TAZ where the Project is located. Since VMT/capita is assumed to be equal to the average for the aforementioned zone, it is anticipated that the proposed Project will have a significant transportation impact prior to mitigation. The proposed Project includes locally-serving retail as well as residential dwelling units. Locally-serving retail is defined by a retail development that is less than 50,000 square feet. The locally-serving retail "screens out" of VMT analysis and therefore, only the vehicle trips generated by the residential dwelling units is used in the VMT mitigation.

The Tulare County guidelines include detailed instructions for mitigation if a project has significant impacts. The guidelines state "The preferred method of VMT mitigation in Tulare County is for project applicants to provide transportation improvements that facilitate travel by walking, bicycling, or transit." In accordance with these guidelines, a survey was conducted within a half mile of the Project to determine any pedestrian, bicycle or transit facilities deficiencies exist. After review, three ADA compliant wheelchair ramps are proposed to be constructed at the following location: Farmersville Boulevard & Walnut Avenue. The proposed mitigation measures are shown in Figure 5.

The guidelines include a minimum cost for mitigation of $20 per daily trip generated by the Project or 0.5% of the total construction cost of the Project (not including land acquisition). As shown in Table 1, the Project excluding the locally-serving retail is anticipated to generate 478 daily trips, which equates to a target value of improvements of $9,560. The total mitigation cost is estimated at approximately $10,800 with a 20% contingency.

Pursuant to the guidelines, if a project provides mitigation which meets the minimum threshold listed above, the project can presume a 1% reduction in VMT. The assumed VMT/capita reduction is 1% of 11.27 or 0.11. The resulting VMT/capita after mitigation is 11.16 which is below the average VMT/capita in the TAZ which the Project is located.

Project VMT analysis showed a VMT which was equal to the existing local VMT in the area, which indicates a transportation impact under CEQA. With implementation of the mitigation measure TRA-2

identified above for reduction of VMT, the Project will have a ***less than significant transportation impact***.

Mitigation Measures:

TRA-2

The applicant shall install ADA compliant wheelchair ramps at the following locations:

- Farmersville Road & Walnut Avenue (3 ramps)

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The proposed Project has been designed for ease of access, adequate circulation/movement, and is typical of residential developments in the City of Farmersville. On-site circulation patterns do not involve high speeds, sharp curves or dangerous intersections. Although there will be an increase in the volume of vehicles accessing the site and surrounding areas, the proposed Project will not present a substantial increase in hazards. Any impacts are considered ***less than significant.***

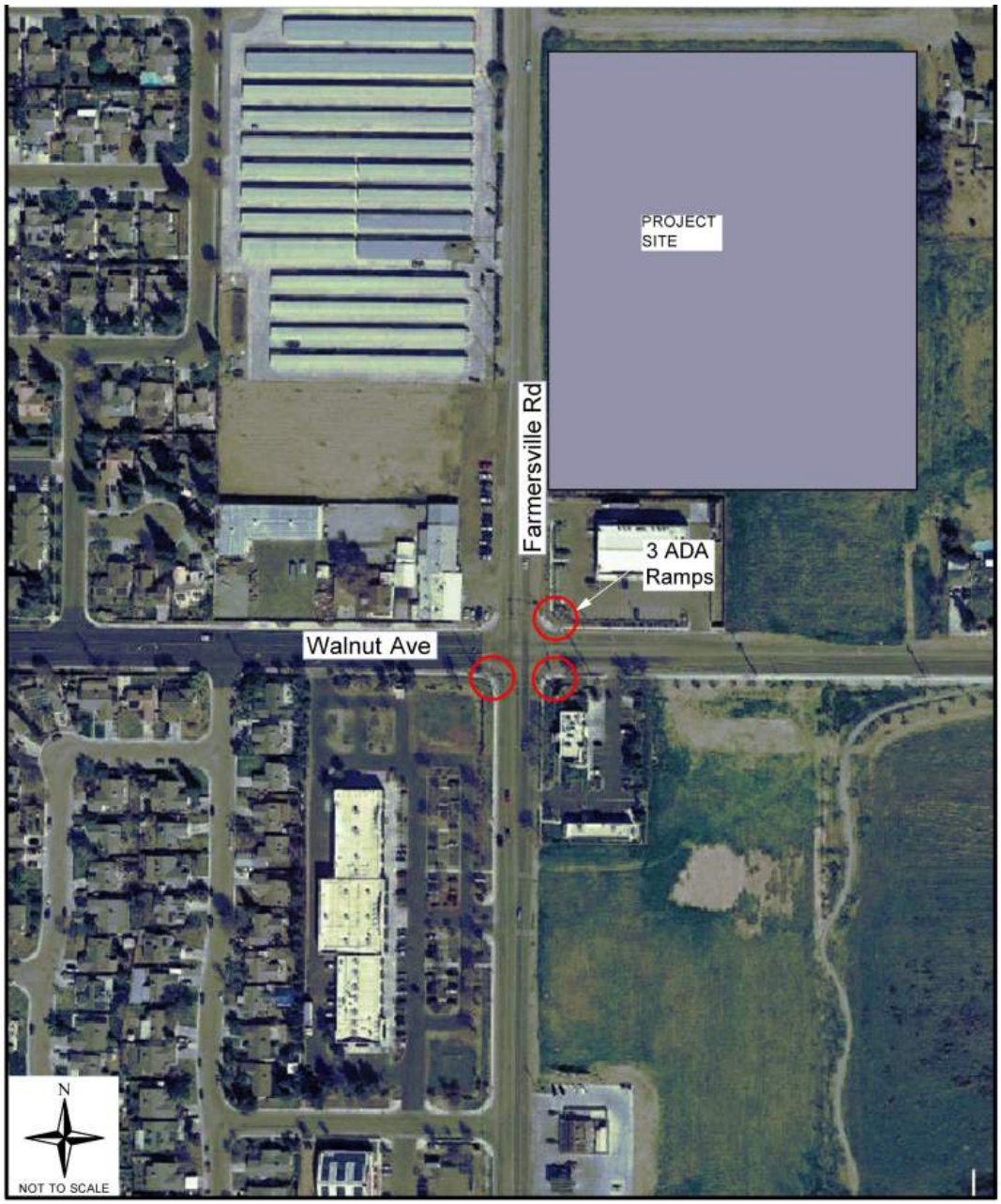
Mitigation Measures: None are required.

d. Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project does not involve a change to any emergency response plan. Access to the site is proposed via Farmersville Boulevard. The site will remain accessible to emergency vehicles of all sizes. As such, potential impacts are ***less than significant.***

Mitigation Measures: None are required.

Figure 5
VMT Mitigation



XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

RESPONSES

a-i, a-ii. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact. A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources, or if the City of Farmersville, acting as the Lead Agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. As discussed above, under Section V, Cultural Resources, no subsurface construction is anticipated to occur as a result of Project implementation as the site is currently built out.

The California Native American Tribes were contacted pursuant to AB 52 (Public Resources Code Section 21080.3.1, et seq.) and SB 18 on behalf of the City of Farmersville on May 30, 2023.

- Big Sandy Rancheria of Western Mono Indians
- Santa Rosa Indian Community of the Santa Rosa Rancheria
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley band
- Tubatulabals of Kern Valley
- North Fork Mono Tribe
- Big Sandy Rancheria of Western Mono Indians
- Kern Valley Indian Community

Tribes were provided 90 days, to request consultation pursuant to those statutes. The Santa Rosa Rancheria – Tachi Yokuts responded on July 3, 2023 and requested to be retained for consultation and monitoring, and to conduct a cultural presentation for construction staff. They also requested copies of the archaeological survey and record search as well as the Sacred Lands File search, which were provided via email. No other comments were received. Potential impacts to tribal cultural resources will be ***less than significant.***

Mitigation Measures: None are required.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

RESPONSES

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. The proposed Project would include the development of two fully affordable multi-family projects for a total of 82 units and three commercial pads. The development also includes a community area, fenced dog park, bocce ball court, community garden, on-site laundry facility, and outdoor picnic-barbeque area. The site construction will also include internal access roads, parking spaces, lighting, site landscaping and additional related improvements.

Wastewater service, water, electric power, natural gas and telecommunications facilities would all provide service to the proposed Project from their respective existing facilities and as such, would not be required to construct new or expanded facilities.

As discussed in Section X, Hydrology and Water Quality, with an increase in the area of impervious surfaces on the Project site, an increase in the amount of storm water runoff is anticipated. The site will be designed so that storm water is collected and deposited in the City's existing storm drain system. The storm water collection system design will be subject to review and approval by the City Public Works Department. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP is retained on-site during construction. Thus, the proposed Project would have a ***less than significant impact.***

The Project will have a ***less than significant impact*** to this analysis area.

Mitigation Measures: None are required.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. As discussed in Impact X(b), the proposed Project will increase demands on the Farmersville water production and distribution area. The City's water system consists of a series of wells, pump stations, treatment facilities and distribution lines. The system draws from the groundwater system underlying Farmersville and the Central Valley. While groundwater supplies can accommodate multiple dry years, the City of Farmersville, Tulare County, and nearby cities are engaging in groundwater management activities to monitor and enhance recharge capabilities to accommodate future demands. The Project site has been designated for urban development and as such, has been

accounted for in the City's infrastructure planning documents and projections. The City will have sufficient supply to serve the proposed Project. As such, the proposed Project will have a ***less than significant impact*** to this impact area.

Mitigation Measures: None are required.

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The Project will result in wastewater from residential units and commercial buildings that will be discharged into the City's existing wastewater treatment system. The wastewater will be typical of other urban/residential and general commercial/retail developments consisting of bathrooms, kitchen drains and other similar features. The Project will not discharge any unusual or atypical wastewater that would violate the City's waste discharge requirements. The City of Farmersville Public Works Department has reviewed the Project and determined that it can accommodate the wastewater generated from the project. Additionally, the proposed Project applicant would be required to comply with any applicable City and WWTF regulations and would be subject to applicable development impact fees and wastewater connection charges. With compliance to applicable standards and payment of required fees and connection charges, the Project would not result in a significant impact related to construction or expansions of existing wastewater treatment facilities. Therefore, the impact of the Project on wastewater treatment is ***less than significant***.

Mitigation Measures: None are required.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Disposal services in the City are provided by a private contractor, Mid Valley Disposal. Solid waste is usually hauled to the Visalia Landfill, north of Visalia on Road 80. The State of California requires that all cities and counties reduce the amount of waste going to landfills and the City is meeting its recycling requirements. Mid Valley Disposal has a program of recycling pick-ups in Farmersville; materials separated for recycling include paper, glass, metals and plastics to provide a diversion of portions of the waste stream resulting in a reduction of the solid waste stream going to landfills and similar disposal locations. The site has been designated for urban uses by the General Plan

and as such, the demand for City infrastructure, such as disposal services, has been accounted for in City planning documents. Impacts to this resource area are ***less than significant.***

Mitigation Measures: None are required.

e. Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. See Response d, above. The proposed Project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed Project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during project construction and operation. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

RESPONSES

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. The proposed Project is located in an area developed with residential and commercial uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread.

To receive building permits, the proposed Project would be required to be in compliance with the adopted emergency response plan. As such, any wildfire risk to the project structures or people would be ***less than significant.***

Mitigation Measures: None are required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

RESPONSES

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict

the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to ***less than significant***.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the Project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). The impact is ***less than significant***.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project design to reduce all potentially significant impacts to ***less than significant.***

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- Karl Schoettler, Contract City Planner

California Historic Resources Information System

- Celeste Thomson, Coordinator

Appendix A

Air Quality, GHG & Energy Technical Memo

Appendix B

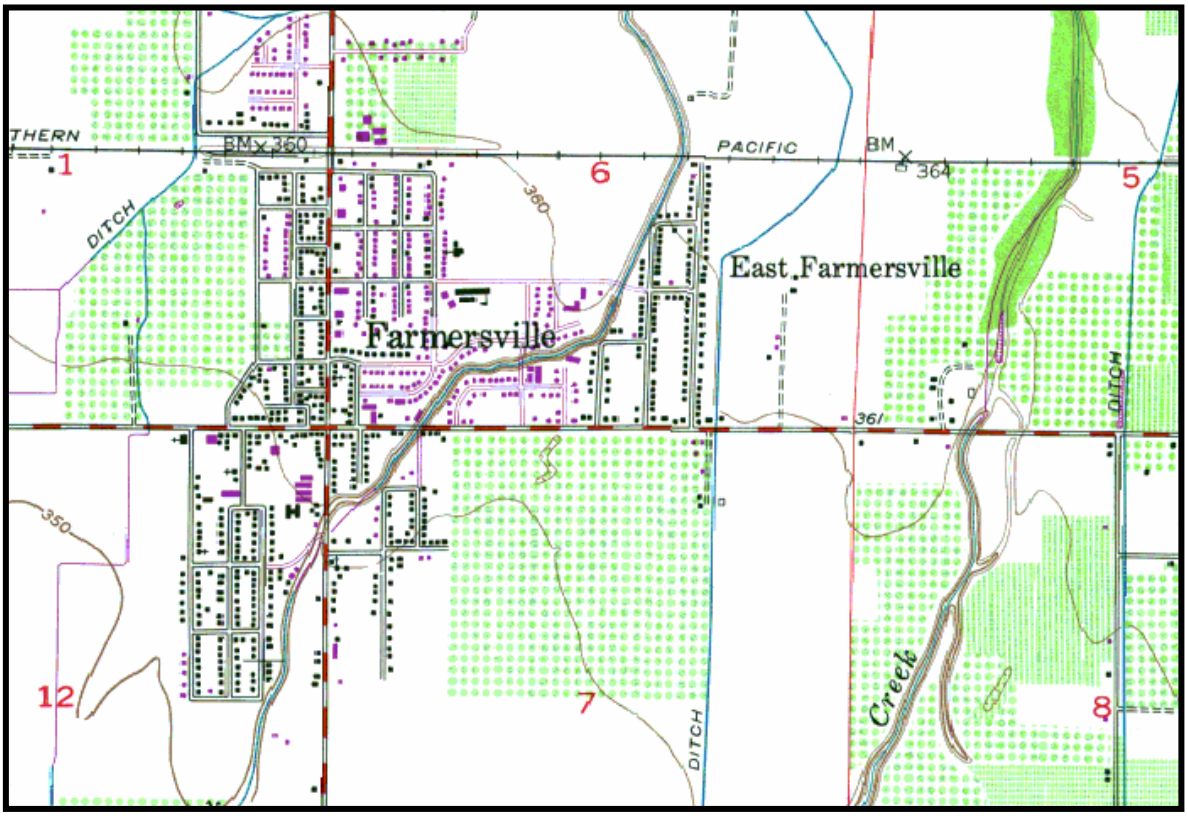
Cultural Resource Study

Appendix C

Traffic Study

CITY OF FARMERSVILLE

NPDES PHASE II
STORM WATER MANAGEMENT PLAN



May 2007

Quad Knopf

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NPDES Phase II Storm Water Management Plan

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PART 1

INTRODUCTION

PART 1 INTRODUCTION

1.1 Outline

1.2 Community Setting

1.3 Storm Water Management Action Plan

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PART 2

REGULATORY BACKGROUND AND SWMP HISTORY

PART 2 REGULATORY BACKGROUND AND SWMP HISTORY

2.1 Federal Regulatory Action

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2.2 SWMP History and Goals

PART 3

WATER RESOURCES DESCRIPTION

PART 3 WATER RESOURCES DESCRIPTION

3.1 Groundwater

3.2 Flood History

PART 4

SWMP MANAGEMENT

PART 4 SWMP MANAGEMENT

4.1 SWMP Strategy

4.2 Department Framework

- **Engineering Services:**

- **Public Works Department**

- **Building Department:**

- **Planning Department**

- **Administrative Services**

- **Emergency Response**

4.3 SWMP Responsibility Matrix

Public Works Department

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Building Department

- [illegible]

- [illegible]

Administrative Department

- [illegible]

- [illegible]

Police and Fire Departments

- [illegible]

- [illegible]

City Tax Collector

- [illegible]

[illegible]

4.4 SWMP Timeline

4.5 Implementation and Interaction with Other Agencies

4.6 Budget/Staff Resources and Legal Authority

PART 5

SWMP MINIMUM CONTROL MEASURES AND BEST MANAGEMENT PRACTICES

PART 5 SWMP MINIMUM CONTROL MEASURES AND BEST MANAGEMENT PRACTICES

5.1 Minimum Control Measures

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MCM - 4: Construction Site Storm Water Runoff Control

[illegible] MCM [illegible], *"The Permittee must develop a program to control the discharge of pollutants from construction sites greater than or equal to one acre in size within its permitted jurisdiction. The program must include inspections of construction sites and enforcement actions against violators."*

[illegible]

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5.2 Best Management Practices

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PART 6

SWMP PERFORMANCE AND EFFECTIVENESS EVALUATION

PART 6 SWMP PERFORMANCE AND EFFECTIVENESS EVALUATION

6.1 Staff Performance Evaluation

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6.2 Annual Planning and Reporting

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APPENDICES

Appendix A

SWMP Acronyms and Terms

Appendix A

Acronyms and Terms as Used in This Document

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Appendix B

Best Management Practices Matrix

CITY OF FARMERSVILLE
NPDES PHASE II PERMIT
Storm Water Management Plan
Best Management Practices (BMPs)

BMP NO.	BMPS	Implementation Time Frame YEAR 1	2	3	4	5	MCM OBJECTIVE	IMPLEMENTATION	MEASURABLE GOALS	RESPONSIBLE PARTY
MCM - 1 PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS										
1-1	Develop Inserts - Storm water quality message to be distributed in residents' water bills each month.	50%	**100%**	100%	100%	100%	The public education and outreach plan has the following objectives: 1) Change public perception and attitudes toward the drainage problems in the City of Farmersville, 2) Raise public awareness about storm drainage pollution and its impact on the City of Farmersville water resources, 3) Educate the community about specific pollutant sources and what the public can do to reduce drainage pollution, 4) Seek out public involvement (volunteer groups) in pollution prevention programs.	Insert flyer tailored to address storm water education. The flyer will be printed on the back of the existing utility bill. This mailing will go out to the entire City twice annually (population ± 8737), including areas outside of the permit boundary each month.	The effectiveness of mailer will be measured by selecting a random sample of County residents on the mailing list to survey. These residents will be mailed a feedback questionnaires. 10% of 1/10th of those surveyed will be maintained for return of the questionnaires.	Public Works Director (Eliseo Martinez)
1-2	Storm Water Link - California Integrated Waste Management Board	0%	0%	50%	**100%**	100%		The Administrative and Planning Departments will work together to develop a City website, including a storm water section to describe the background of the NPDES Phase II permitting process & hotline information.	The effectiveness of the web page will be measured by a web counter recording the number of visitors to the page. The goal for the web page will be 5 hits per month and monitored quarterly for evaluation.	Public Works Director (Eliseo Martinez)
1-3	School Visits and Public Education - Presentation to students and citizen groups regarding storm water pollution.	0%	25%	50%	**100%**	100%		The City will coordinate with adjacent comunities and the regional water quality control board to bring a storm water quality speaker to 1 of the 6 various schools and one community meeting each year.	The effectiveness of the BMP will be measured by a brief quiz/survey distributed immediately following the presentation, with a goal that at least 80% of the surveys are returned to the instructor.	Public Works Director (Eliseo Martinez)
1-4	EPA's Landscape maintenance brochures	0%	0%	**100%**	100%	100%		Distribute brochures at the hardware store, nursery and City events.	Number of flyers distributed will be logged for monitoring purposes. 100 brochures will be distributed at each designated retailer and the number and times replaced will be recorded and monitored. City will track number distributed in their office.	Public Works Director (Eliseo Martinez)
1-5	Establish pet waste control display at Liberty Parks.	0%	0%	**100%**	100%	100%		Install a sign that references the City of Farmersville pet waste ordinance and provide pick-up bags. Liberty Park has waste control bags and signage provided. All other parks do not permit animals but will have ordinance postings.	The effectiveness of the pet waste control display will be measured by tracking the number of bags distributed and by surveying the parks crew to see if there has been a noticeable change in the amount of pet waste seen or collected.	Public Works Director (Eliseo Martinez)

BMP NO.	BMPS	Implementation Time Frame YEAR 1	2	3	4	5	MCM OBJECTIVE	IMPLEMENTATION	MEASURABLE GOALS	RESPONSIBLE PARTY
MCM - 2 PUBLIC INVOLVEMENT/PARTICIPATION										
2-1	Multi-faceted City Ordinance for enhancement and enforcement of SWMP Minimum Control Measures and BMPs	**100%**	100%	100%	100%	100%	Local and State requirements will be met within this ordinance and it will be presented to the community through public notice and meetings. The success of the SWMP depends on securing support from City elected officials, citizens, business groups and County staff. To secure this support, we need to implement a plan that not only informs these audiences of the urban runoff concerns, but also asks them to participate in the development of the SWMP. The objectives of the plan will be to : 1) Raise public awareness about the drainage problems in the City of Farmersville through public involvement in the SWMP, and 2) Involve the public in the development and implementation of the SWMP to secure public "buy in" and support for the SWMP.	Adopt the ordinance which will give the City legal authority to fully implement the SWMP including provisions for a tiered level of enforcement of the program. Adapt a SWMP ordinance which will enhance and enforce the City's position on all SWMP Minimum Control Measures and BMPs. All state and locate procedures will be implemented in regards to Pulic notice and exposure.	Review of non-compliances and follow-up information will measure the effectiveness of the BMP.	Public Works Director (Eliseo Martinez)
2-2	Storm Drain Stenciling - The City will sponsor a storm drain stenciling program for eleven (11) City-maintained storm drain structures.	0%	33%	67%	**100%**	100%		Where signing and restriping is performed, existing storm drain inlets, culverts, headwalls, and other drainage structures will be stenciled annually. A stenciling standard will be developed by the City to be used for the annual stenciling program.	The effectiveness of this program will be measured by recording stenciled structures. Obtaining annual targets will confirm 100% completion by year 4. A logging procedure will track new structures to the system and process.	Public Works Director (Eliseo Martinez)
2-3	City Cleanups - City employees and citizens will clean up trash bi-annually/daily as a area or neighbhood function.	50%	50%	**100%**	100%	100%		Continue this existing cleanup activity, including roadways, culverts, hillsides, neighborhood and areas etc.	The effectiveness of this program will be measured by the quantity of garbage removed from the City road right-of-way each day or event. The minimum amount per day will be set at one load (2- disposal trash bags similar to Caltrans trash bag) of garbage. Locations of City cleanups will be recorded for evaluation.	Public Works Director (Eliseo Martinez)
2-4	Waterway Cleanup - Local Ditch Co. cleans local drainage waterways .	25%	50%	75%	**100%**	100%		Ditch Co. will continue to clean up waterways within the City on an annual basis.	The effectiveness of this program will be measured by recording the linear feet of waterway cleanup on an annual basis, with a minimum length of 2,000 lf. each year. Documentation will be completed and kept following each cleanup activity.	Public Works Director (Eliseo Martinez)
2-5	Survey - The City will develop a survey which will provide baseline information about knowledge of the storm sewer system and will provide an evaluation and assessment tool.	50%	**100%**	100%	100%	100%		The city will develop a survey to be distributed out to approximately 1% of the population in the city and areas outside of the permit boundary.	The effectiveness of the survey will be measured by the responses received.	Public Works Director (Eliseo Martinez)
2.6	Pulic Works daily cleaning	75%	**100%**	100%	100%	100%		Right-of-way clean up crews clean daily at present. Personal knowledge will be used to target areas of concern for monitoring.	Recording locations, type of cleanup & debris gathered & volume of material accumulated will measure effectiveness & targetable issues.	Public Works Director (Eliseo Martinez)
2-7	Street Sweeping (Contracted)	**100%**	100%	100%	100%	100%		Continue street sweeping operations. Maintain clean streets and environment. Develop database for record keeping and evaluation	Measures of effectiveness can be; - Number of miles per month - Volume & type of debris collected	Public Works Director (Eliseo Martinez)

BMP NO.	BMPS	Implementation Time Frame YEAR 1	2	3	4	5	MCM OBJECTIVE	IMPLEMENTATION	MEASURABLE GOALS	RESPONSIBLE PARTY
MCM - 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION										
3-1	Storm sewer map and program developed to prioritize areas of concern and establish corrective action. The addressing of illicit Discharge in the Ordinance (BMP 2-1) allows an enforcement mechanism to prohibit illicit storm water discharges.	25%	50%	75%	**100%**	100%	Minimize storm water pollution reaching waters of the United States through identification of illicit discharge sources. Develop a plan to locate and prioritize areas of concern and address non-storm water discharges and illegal dumping.	Develop map and program to provide the baseline for tracking the system and discharge complaints. At a minimum, the map will include the location of all outfalls, approximate limits of watersheds and the names and locations of all waters that receive these discharges. The ordinance will supply the support of tiered enforcement: 1) Education, 2) Notification, 3) Citation, and 4) Fines. A Priority Action List will occur through reporting, inspections, public complaints, type of business targeting and response to corrective measures.	The effectiveness of the measure will be judged by the completion of the task and the corrective actions gathered annually.	Public Works Director (Eliseo Martinez)
3-2	Train public employees involved in program and develop inspection procedures/checklists	**50%**	**100%**	100%	100%	100%		Train building and construction inspectors (all Year 1) and other related municipal staff (Year 2); with refreshers, (1 per year). Develop checklist for inspectors and procedures to detect illicit discharge, non-storm water discharges or illegal dumping. (Year 1) Track & evaluate reports.	Review of non-compliances and follow-up information 9Priority Action List) will measure the effectiveness of the BMP.	Public Works Director (Eliseo Martinez)
3-3	Priority Action List	90%	**100%**	100%	100%	100%		Enforce violations through a tiered system and track violations and inspections. Violations of non-compliance will be recorded, reviewed and acted on accordingly per the ordinance.	Review of non-compliances and follow-up information will measure the effectiveness of the BMP.	Public Works Director (Eliseo Martinez)
3-4	Sewage Spill Response - A combination of the Police, Fire, and Public Works Departments will have personnel available to respond to spills and dumping from public facilities and prevent release to receiving waters.	**100%**	100%	100%	100%	100%		Continues the existing practice of responding to sewage spills. Citizens shall contact the Police Department, which will in turn notify the Public Works or Fire Department to have personnel clean the spill.	The effectiveness of this program will be measured by immediate response and reporting as currently conducted, plus the addition of the new Priority Action List & the tiered ordinance for enforcement.	Public Works Director (Eliseo Martinez)
3-5	Hazardous Waste Spill Resopnse - A combination of the Police, Fire, and Public Works Departments will have personnel available to respond to spills and dumping from public facilities and prevent release to receiving waters.	**100%**	100%	100%	100%	100%		Continues the existing practice of responding to hazardous waste spills. Citizens shall contact the Police Department, which will in turn notify the Public Works or Fire Department to have personnel clean the spill.	The effectiveness of this program will be measured by immediate response and reporting as currently conducted in conjunction with the Priority Action List & the tiered ordinance for enforcement.	Public Works Director (Eliseo Martinez)
3-6	Illegal Dumping Resopnse - A combination of the Police, Fire, and Public Works Departments will have personnel available to respond to spills and dumping from public facilities and prevent release to receiving waters.	**100%**	100%	100%	100%	100%		Continues the existing practice of responding to illegal dumping. Citizens shall contact the Police Department, which will in turn notify the Public Works or Fire Department to have personnel clean the spill.	The effectiveness of this program will be measured by immediate response and reporting as currently conducted in conjunction with the Priority Action List & the tiered ordinance for enforcement.	Public Works Director (Eliseo Martinez)
3-7	24-hour Dispatch Emergency Response System (Hotline)	**100%**	100%	100%	100%	100%		The City has established a hotline to provide a way for the public to take an active role in protecting water quality.	The effectiveness of the hotline will be measured by the number and types of calls received. The data retained on the Priority Action List will support the effectiveness of the program too.	Public Works Director (Eliseo Martinez)

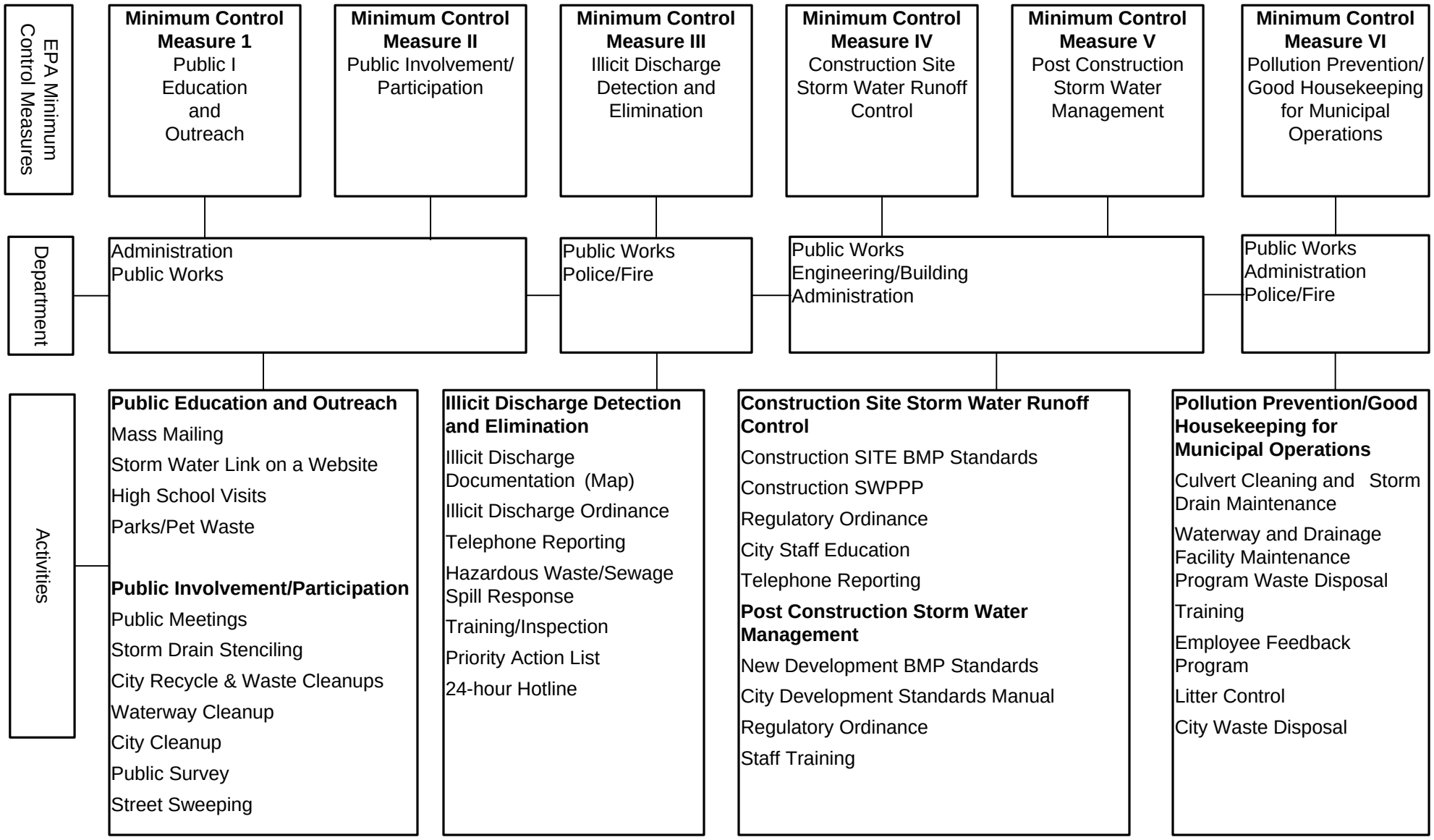
BMP NO.	BMPS	Implementation Time Frame YEAR 1	2	3	4	5	MCM OBJECTIVE	IMPLEMENTATION	MEASURABLE GOALS	RESPONSIBLE PARTY
MCM - 4: CONSTRUCTION SITE STORM WATER RUNOFF CONTROL										
4-1	Construction SWPPP - Construction Storm Water Pollution Prevention Plan Guidelines that may be incorporated into existing building permit process.	50%	**100%**	100%	100%	100%	In the absence of appropriate management controls, construction sites can release significant amounts of sediments and other pollutants into a drainage system. The objective of the construction site runoff control plan is to provide the City of Farmersville means to manage and control discharges from construction sites.	The City will develop and adopt an ordinance (BMP 2-1) requiring construction site storm water controls on projects. The City will utilize SWPPP guidelines that incorporate BMPs.	Develop SWPPP packet that is to be distributed by the Public Works Department, and made available to the public, in association with grading permit applications. 100% of all grading permit applications shall include SWPPP, and City staff shall inspect 100% of all construction sites each year.	Public Works Director (Eliseo Martinez)
4-2	Construction Site BMP Standards - BMP Standards applicable to construction disturbing sites >1 acre.	33%	67%	**100%**	100%	100%		Continue to require site BMP standards as part of the building permit process.	The effectiveness of this BMP shall be to incorporate construction site BMP standards into Storm Water Pollution Prevention Plan submittals. 100% of SWPPP submittals shall include City-approved construction site BMP standards.	Public Works Director (Eliseo Martinez)
4-3	Complaint Procedures	75%	**100%**	100%	100%	100%		Use the "hotline" as established in under BMP No. 3-7.	The effectiveness of the hotline will be measured by the number of responses and types of calls received.	Public Works Director (Eliseo Martinez)
4-4	Training for Building and Construction Inspectors	0%	50%	**100%**	100%	100%		Conduct construction storm water training for Building and Construction inspectors. Storm water quality controls shall be included in what they inspect.	The effectiveness of the training will be measured by the number of attendees (all City staff by year 3) and through an evaluation form given to each attendee and by site inspection.	Public Works Director (Eliseo Martinez)
4-5	Procedures for assessing fines	0%	0%	**100%**	100%	100%		The city will develop procedures for assessing penalties. The penalty must be appropriate to the problem.	The effectiveness of the procedures will be measured by the number, violation and type of tiered enforcement actions initiated.	Public Works Director (Eliseo Martinez)
MCM - 5: POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT										
5-1	Establish technical criteria, guidence and design review for structural, non-structural and post BMP standards.	0%	0%	**100%**	100%	100%	Educate public employees and developers of the water quality issues associated with improper post-construction controls. Establish standards and enforcement measures as required to maintain compliance and protect water quality.	Develop new and redevelopment BMP standards as part of the plan review process, and require standards in 100 % of new and re-development plans, also used as guidelines by developers, contractors, and owners.	100% of plans submitted shall include City-approved new development BMP standards. The effectiveness of the implementation will be visual inspection	Public Works Director (Eliseo Martinez)
5-2	Establish a system that implements attachment 4 requirements / standards and enforces them and tracks their maintenance. Provide outreach and technical assistance to developers and designers.	0%	0%	**100%**	100%	100%		Develop and implement ordinance addressing post-construction runoff, including enforcement measures. (BMP 2-1)	The City will inspect 100% of the sites completed each year. Results from inspections will indicate effectiveness of measure.	Public Works Director (Eliseo Martinez)
5-3	Train department staff invovled with maintaining, implementing and tracking post-construction requirements and conditions of approval.	0%	0%	**100%**	100%	100%		Conduct post-construction storm water training for Building and Construction inspectors.	Attendee's and training content will be recorded and reported annually.	Public Works Director (Eliseo Martinez)

BMP NO.	BMPS	Implementation Time Frame YEAR 1	2	3	4	5	MCM OBJECTIVE	IMPLEMENTATION	MEASURABLE GOALS	RESPONSIBLE PARTY
MCM - 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS										
6-1	Waterway and Drainage Facility Maintenance Program - Regular cleanup of local drainage waterways, sumps, and inlet structures outside of City road right-of-way.	50%	**100%**	100%	100%	100%	A significant amount of urban pollutants are associated with street and road surfaces, parking lots, plazas, corporation yards, and othermunicipal facilities. The objective of this pollution prevention and good housekeeping plan is to identify, develop and implement good housekeeping procedures to address drainage pollutants associated with all City of Farmersville public facilities.	Continue existing maintenance program utilizing one fulltime City employee to maintain drainage waterways and facilities. Develop a daily logging system of areas receiving maintenance, and the dates of maintenance performed.	The effectiveness of this program will be measured by recording the drainage areas receiving maintenance/cleanup each day. 100% of facilities will be inspected annually. Documentation will be performed by kept in a log of the following information: 1. Drainage area identifier (I.e. People's Ditch) 2. Area maintained (I.e. northeast quadrant) 3. Date cleaned and by whom 4. Special Notes All logs shall lbe filed over the permit period and made available for annual review.	Public Works Director (Eliseo Martinez)
6-2	Culvert Cleaning and Storm Drain Maintenance - Cleaning and maintenance program which maintains existing road drainage facilities	50%	**100%**	100%	100%	100%		Continue existing program to clean up culverts and other drainage facilities within the City road right-of-way prior to first storms and on an as-needed basis. Drainage inlets receive routine cleaning by the maintenance districts, of which two districts are included in the permit boundary areas. Other drainage facilities are cleaned by the Public Works Department.	The effectiveness of this program will be measured by recording the drainage areas receiving maintenance/cleanup each day. 100% of facilities will be inspected annually. Documentation will be kept in a log of the following information: 1. Drainage area identifier (I.e. People's Ditch) 2. Area maintained (I.e. northeast quadrant) 3. Date cleaned and by whom 4. Special Notes All logs shall lbe filed over the permit period and made available for annual review.	Public Works Director (Eliseo Martinez)
6-3	Waste Disposal - Proper and scheduled disposal of City garbage, antifreeze, oil, and filter materials.	**100%**	100%	100%	100%	100%		Continue existing program of contracting waste disposal to a private firm to be removed from the City.	Disposal logs will be maintained showing which wastes have been taken out of the City, and the date on which they were removed. Logs will be filed during the permitting period and made available annually for review.	Public Works Director (Eliseo Martinez)
6-4	Annual Administrative Report - Report compiled by City staff and presented to the Regional Water Quality Control Board	**100%**	100%	100%	100%	100%		The report will include a summary of the various BMPS outlined in this report, and their relative effectiveness as shown by logs, and other measurable goals, and will be submitted to the Board on an annual basis in June.	This BMP will be measured by the response received from the Regional Water Quality Control Board and the availability of data.	Public Works Director (Eliseo Martinez)
6-5	Litter Control	0%	50%	**100%**	100%	100%		Increase the number of trash receptacles and their locations in public locations.	The effectiveness of the litter control will be measured by the amount of trash recovered and continually compared to history for effectiveness and improvement.	Public Works Director (Eliseo Martinez)
6-6	Training- Municipal Staff	0%	50%	**100%**	100%	100%		Conduct training for municipal staff on the basic storm water overview and provide more targeted training for specific job duties. Training will be imperative for BMPs to be implemented and improved upon. Training to be preformed annually with refreshers as needed for new hires. etc.	The effectiveness of the training will be measured by the number of attendees and through an evaluation form given to each attendee.	Public Works Director (Eliseo Martinez)

Appendix C

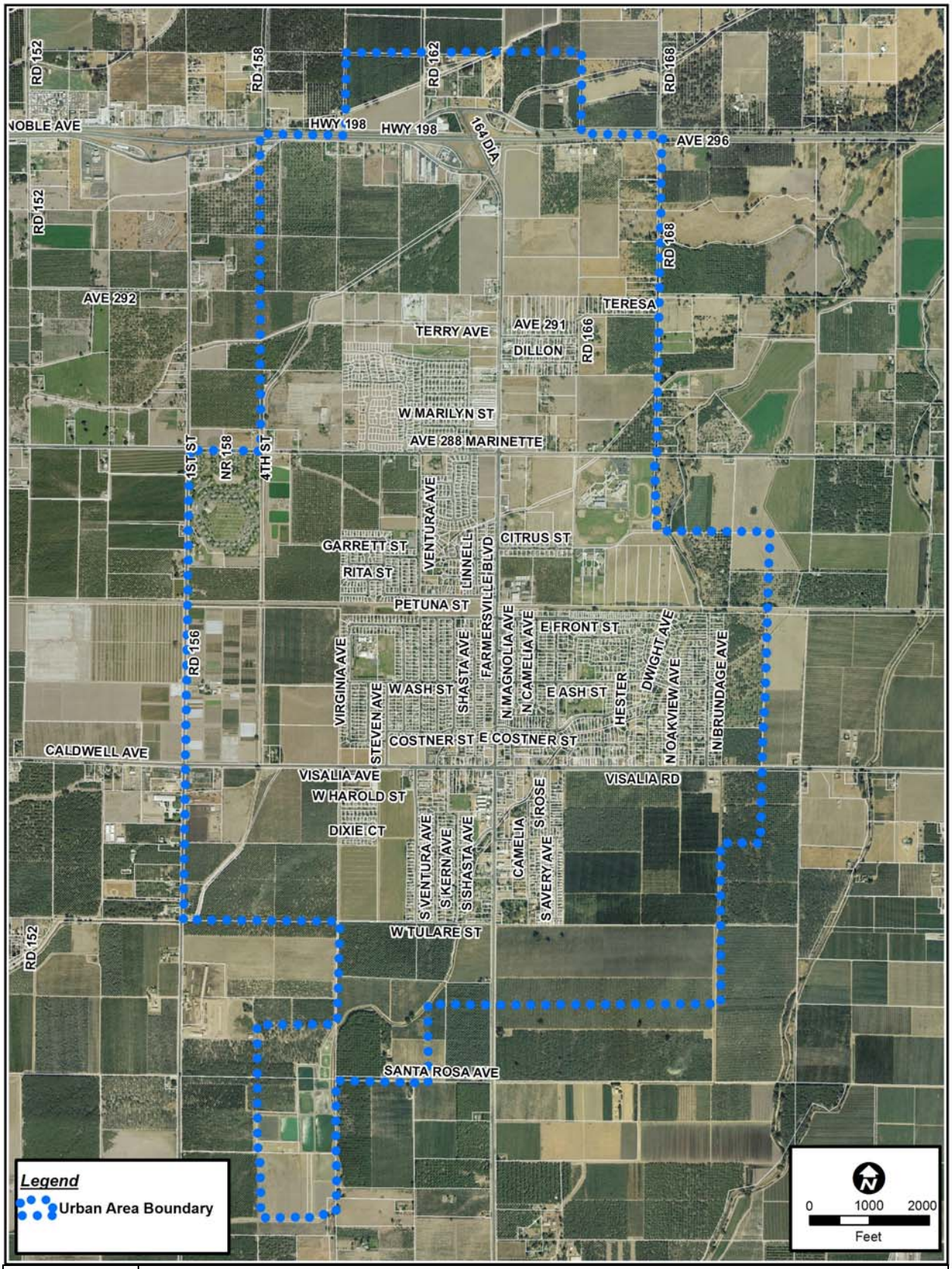
Resource Management Responsibility Matrix

City of Farmersville Storm Water Management Plan
Responsibility Matrix Chart



Appendix D

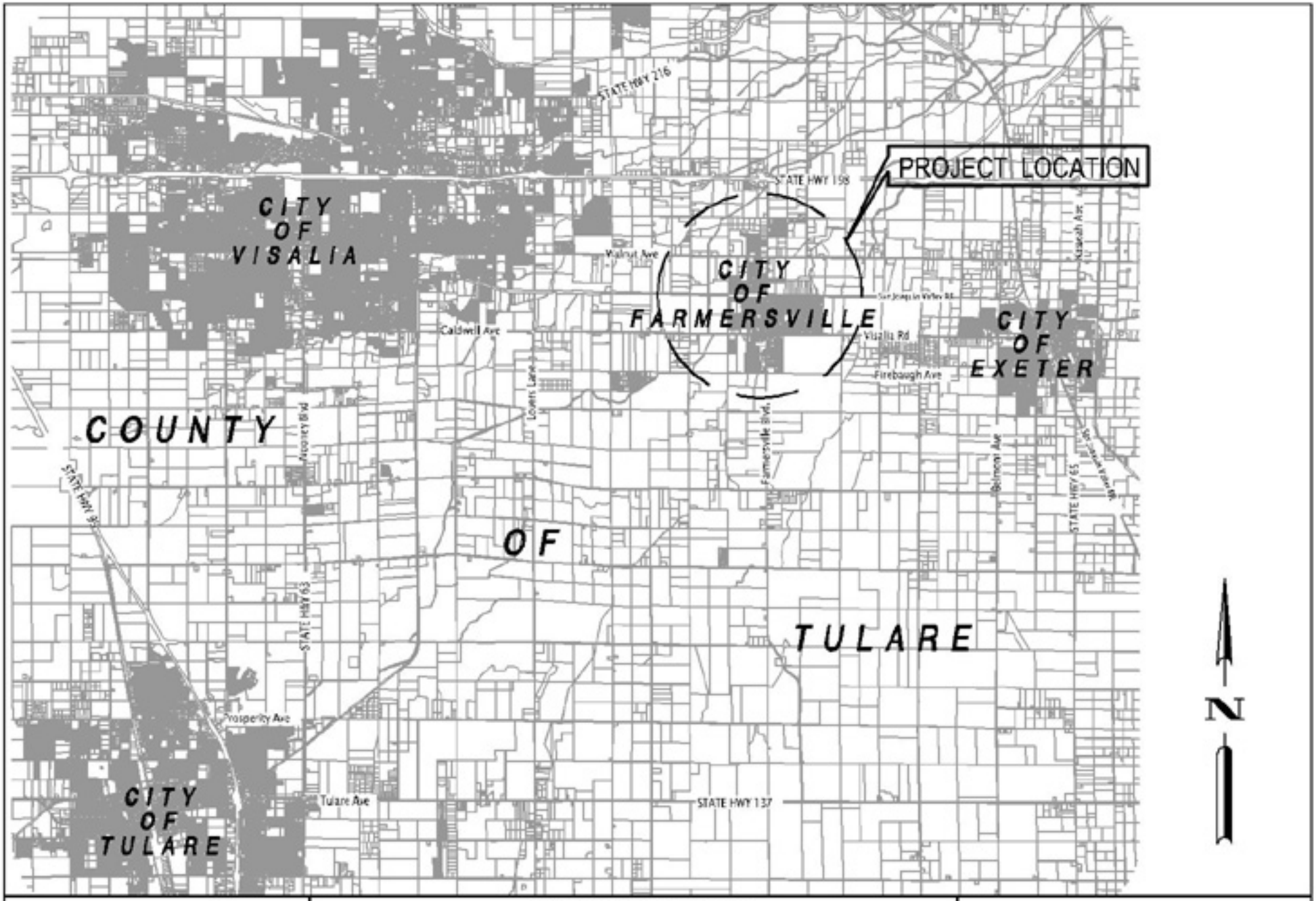
Urban Area Boundary Map
Vicinity Map, City of Farmersville
City of Farmersville, USGS – Exeter Quadrangle
Plan Boundary Location Map
Existing and Proposed Storm Drain Distribution and Facility System
Storm Drain Service Area



Quad Knopf

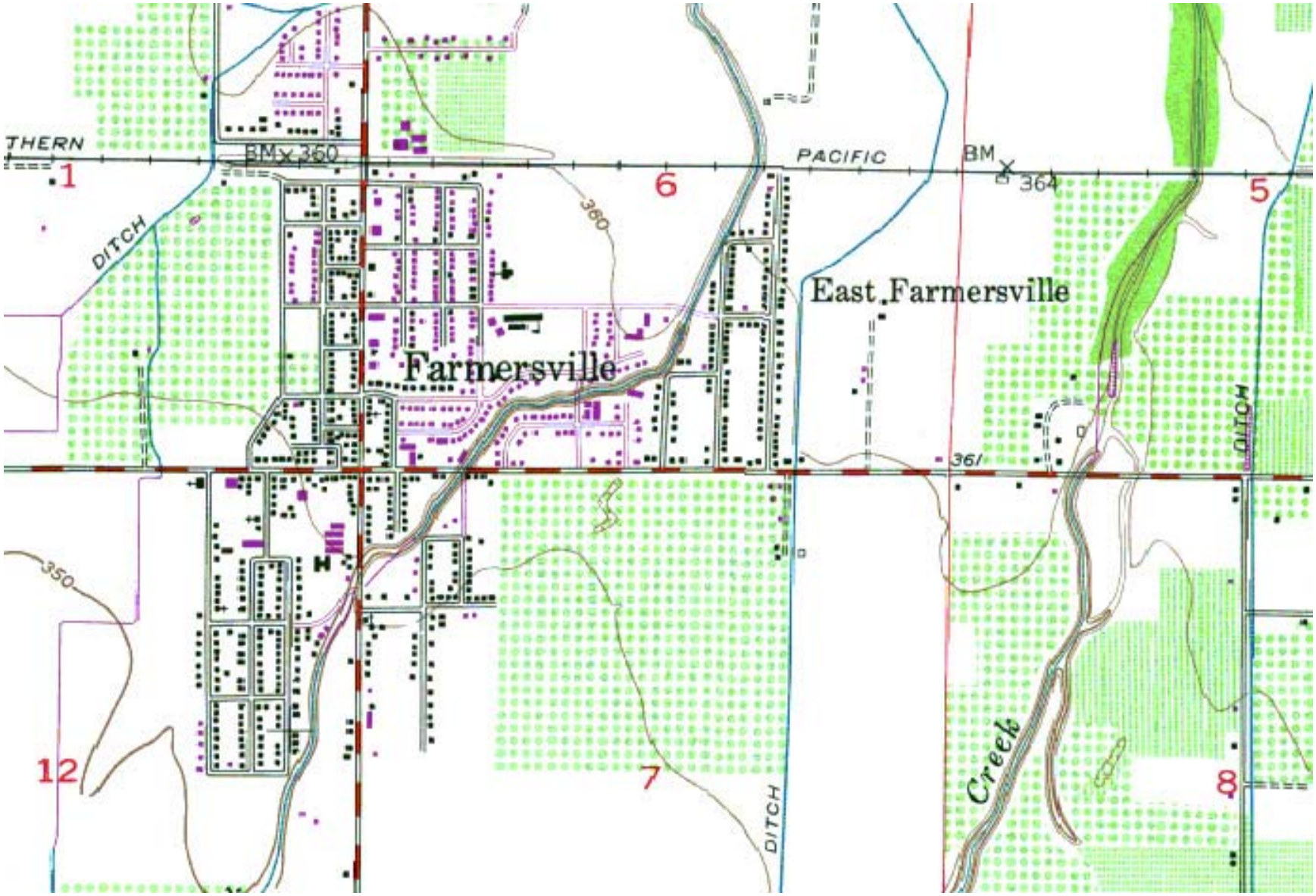
City of Farmersville – Urban Area Boundary

General Plan Update 2002



Quad Knopf

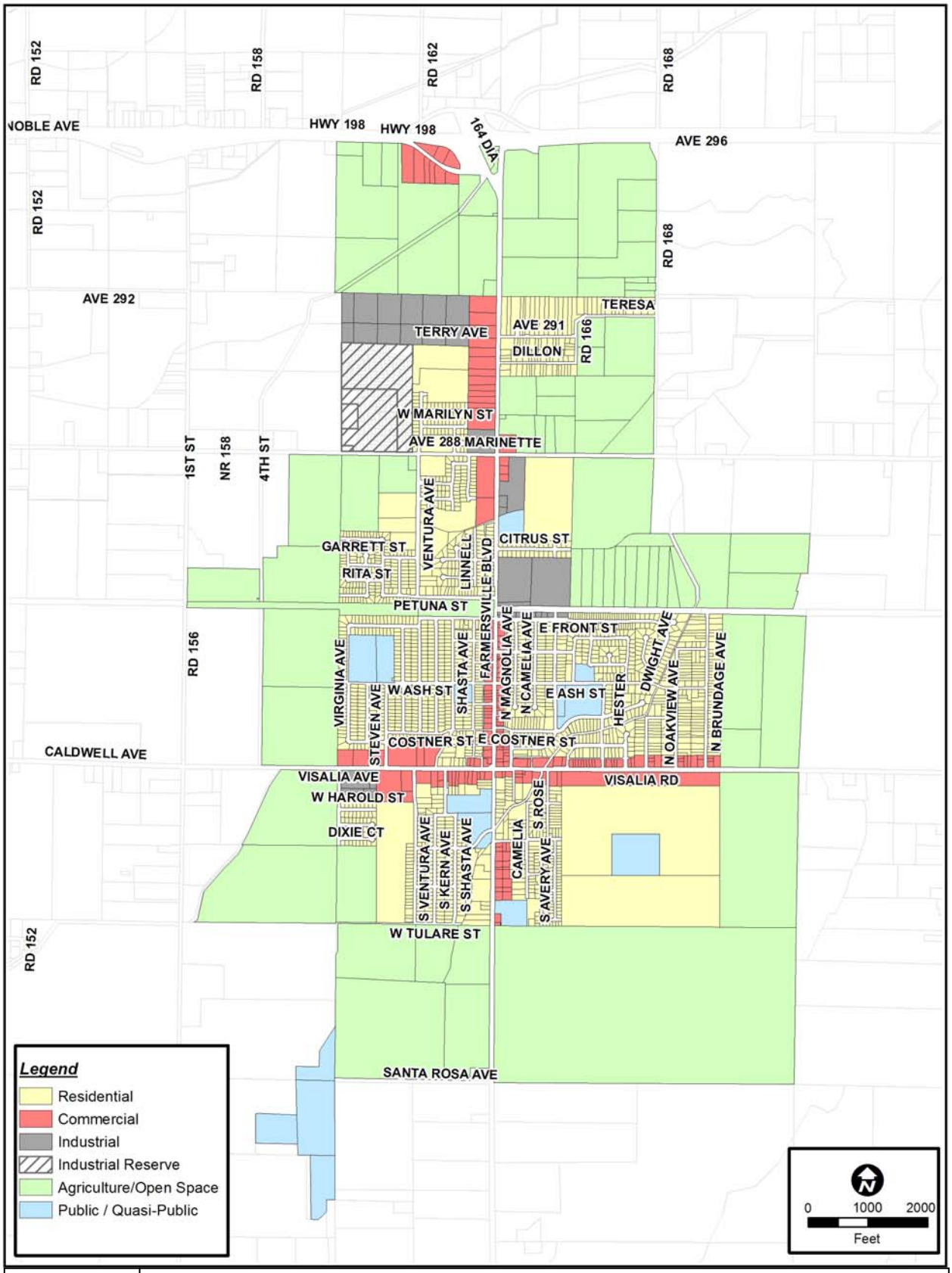
VICINITY MAP
CITY OF FARMERSVILLE



Quad Knopf

City of Farmersville
USGS – Exeter Quadrangle

Not to Scale



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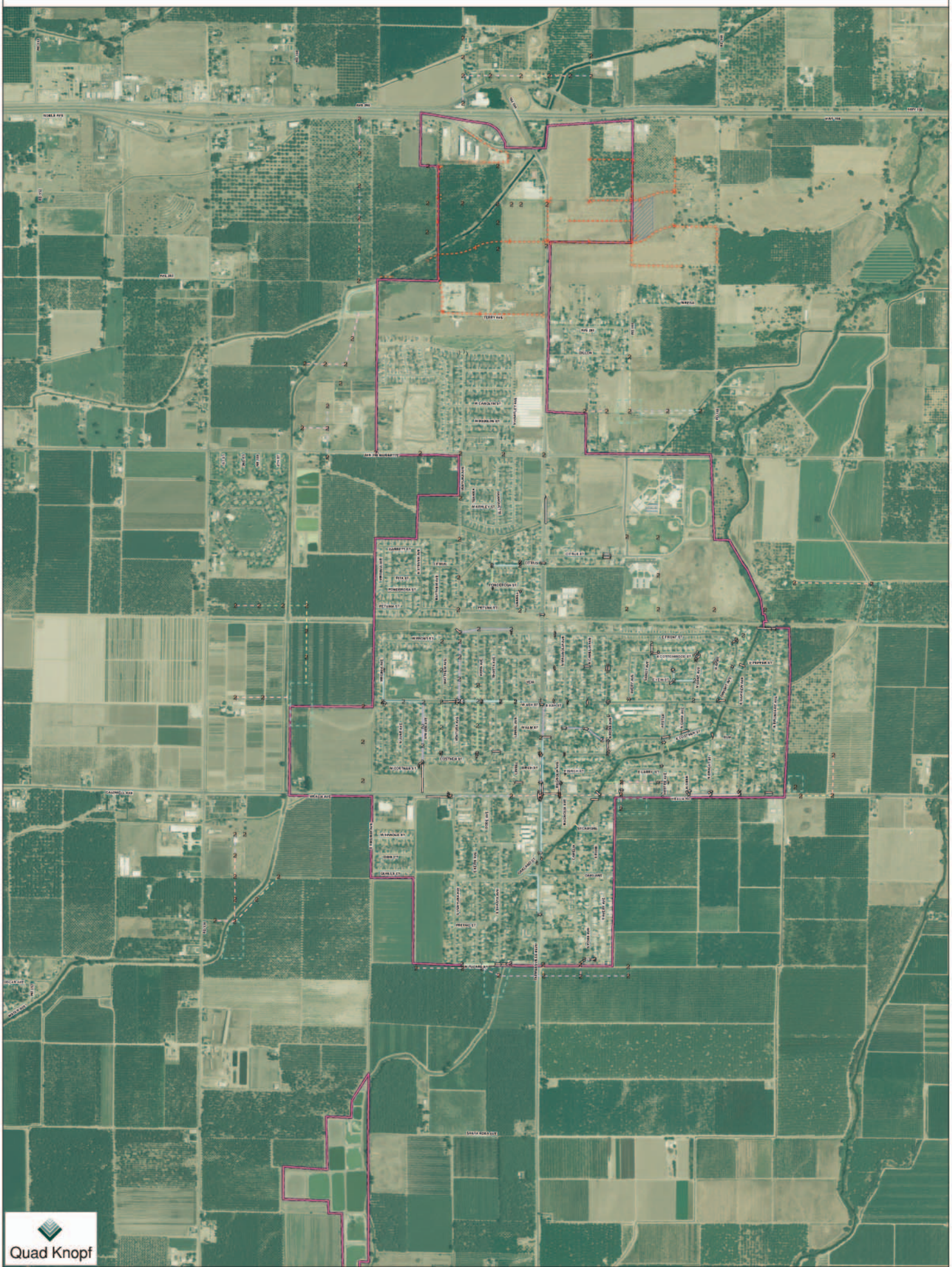
City of Farmersville
Plan Boundary

Existing and Proposed Storm Drain Distribution and Facility System



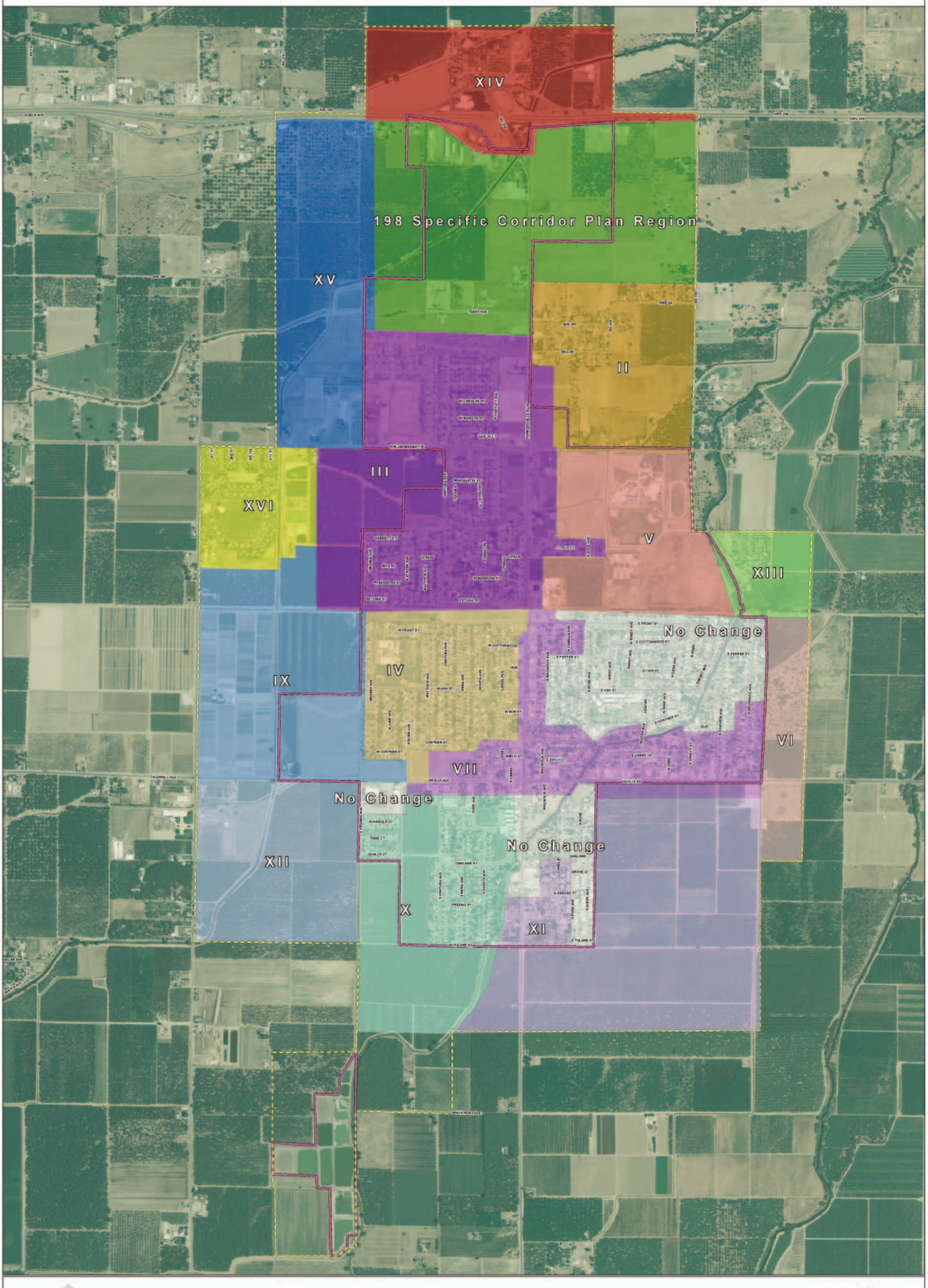
Quad Knopf

- Proposed Manholes
- Existing Manholes
- Proposed 198 Corridor Drain Inlet
- Proposed 198 Corridor Manhole
- Existing Drain Inlets
- Proposed Storm Drain Lines 198 Corridor
- Proposed Pond Basin
- Proposed 12 Inch Pipe
- Proposed 15 Inch Pipe
- Proposed 18 Inch Pipe
- Proposed 21 Inch Pipe
- Proposed 24 Inch Pipe
- Proposed 27 Inch Pipe
- Proposed 30 Inch Pipe
- Proposed 33 Inch Pipe
- Proposed 36 Inch Pipe
- Proposed 39 Inch Pipe
- Proposed 42 Inch Pipe
- Existing 12 Inch Pipe
- Existing-10 Inch Pipe
- Existing 15 Inch Pipe
- Existing 16 Inch Pipe
- Existing 18 Inch Pipe
- Existing 21 Inch Pipe
- Existing 24 Inch Pipe
- Existing 27 Inch Pipe
- Existing 30 Inch Pipe
- Existing 33 Inch Pipe
- Existing 39 Inch Pipe
- Existing 42 Inch Pipe
- Existing 48 Inch Pipe
- Existing Storm Drain
- Existing Ponding Basin
- Future Ponding Basin
- City Limits

650 325 0 650

Feet

Storm Drain Service Areas



Quad Knopf

Urban Area Boundary
City Limits
II
III
IV
V
VI
VII
IX
X
XI
XII
XIII
XIV
XV
XVI
198 Specific Corridor Plan Region
No Change

650 325 0 650
Feet

Appendix E

Agreement with Local Irrigation District

10
P

RECORDING REQUESTED BY:

CONSOLIDATED PEOPLES DITCH CO.

AND WHEN RECORDED MAIL TO:

P.O Box 366
FARMERSVILLE, CA 93223

95-081515

Recorded
Official Records
County of
Tulare
Greg Hardcastle
Recorder
9:25am 29-Nov-95

Rec Fee	34.00
Check	34.00
PV	10

THIS SPACE FOR RECORDER'S USE ONLY

THIS PAGE ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION (ADDITIONAL RECORDING FEE APPLIES)

12/93

AGREEMENT

THIS AGREEMENT, is made and entered into this 8th day of NOVEMBER, 1995 by and between the **CITY OF FARMERSVILLE**, hereinafter referred to as "City", and **CONSOLIDATED PEOPLES DITCH COMPANY**, a corporation, hereinafter referred to as "Company".

W I T N E S S E T H:

WHEREAS, the subject of this Agreement is man-made water channels commonly known as Consolidated Peoples Ditch, hereinafter collectively referred to as CPD, the origin and general course of which is described in the attached Exhibit "A"; and

WHEREAS, Company owns, uses and utilizes CPD for the purpose of diverting and transporting water released from Lake Kaweah for flood control, irrigation and other beneficial purposes, and waters from other sources downstream from Lake Kaweah; and

WHEREAS, pursuant to prior agreements, the Company has permitted the City to use CPD as an integral part of the means by which the City disposes of storm waters and other miscellaneous occurring surface waters collected within its boundaries; and

WHEREAS, conflicts may occur arising out of contemporaneous and conflicting uses of CPD by the parties; and

WHEREAS, from time to time the City intends to and will annex further lands which will result in the inclusion of other portions of CPD within its boundaries and which will result in further improvements along and in the CPD and may result in the discharge of additional waters into the CPD by City; and

WHEREAS, by the execution of the Agreement, it is the mutual wish and desire of the parties to define, fix and determine the mutual and reciprocal rights, duties and obligations of each of the parties relating to the use of CPD by City.

NOW, THEREFORE, FOR AND IN CONSIDERATION OF THE MUTUAL COVENANTS HEREINAFTER CONTAINED, IT IS AGREED AS FOLLOWS:

1. Proposed Improvements to CPD by City: As the need for further capacity in CPD to accommodate simultaneous Company flows and the City discharges becomes apparent, and as necessary funds become available, at the City's discretion, City will cause improvements tied to or in CPD within the City limits of City to be made, subject to the approval of Company. In addition, City shall implement a requirement of using detention basins for all new developments along the CPD to delay or prevent discharges therefrom into CPD, unless authorized in writing by the Company.

Any off-stream storage created by the improvements above mentioned shall be used exclusively by the City for its discharges and shall not be used by CPD without the consent of the City.

2. Approval of Improvements: Detailed engineering plans for all proposed physical improvements, installations and alterations within Company right-of-way by the City pursuant to the provisions herein shall be immediately forwarded to Company upon availability of said plans. The initial submittal of said plans shall be reviewed and commented upon by Company or its authorized representative within forty-five (45) days of receipt. Within said forty-five days, Company shall indicate if the plans are approved or disapproved. Company's failure to act within the time period set forth shall be deemed as its approval.

Should Company not approve said plans as initially submitted, City shall thereafter resubmit detailed engineering plans which respond to concerns raised by Company; said resubmittal shall be responded to within thirty (30) days of receipt by Company. Company's failure to act within the time period set forth shall be deemed as its approval.

Company shall evaluate engineering plans based on potential impacts to Company's ability to operate and maintain CPD without interference. Company's determination shall be final, but it will not withhold approval arbitrarily, capriciously, or without cause.

3. Simultaneous Use of CPD: The City acknowledges that Company has a prior and exclusive right to use all or any portion of the CPD's capacity. During the term of this Agreement, Company shall permit City to utilize ten percent (10%) of the presently estimated ditch capacity of eighty (80) cubic feet per second, on a first priority basis. It is recognized this capacity may change over time due to a number of factors. Company will permit the City to utilize all unused capacity that may be available in CPD, provided that City does not exceed the capacity of the CPD or downstream storage basins.

Notwithstanding the foregoing, when it appears imminent that the capacity of the CPD or downstream basins will be exceeded as a result of City discharges and diminution of other flows in CPD is not deemed feasible by Company, City shall fully cooperate with Company to reduce or terminate its discharges. Company shall give advance notice to City when reduction of City discharges is required.

4. Effect of Annexation of Lands to City: As the City annexes further lands, which includes other portions of CPD, the provisions of this Agreement shall be extended to the annexed area. No further agreement between the parties will be necessary to reflect the annexation.

5. Review of Plans for Development along CPD: The City agrees to provide Company with opportunities to review and comment on all tentative subdivision maps, tentative parcel maps, and all other plans relating to the development of land along CPD that are submitted to the City. The initial review opportunity shall occur during the City's

Site Plan Review process. Under the City's current process, copies of said development plans and tentative maps submitted for the Site Plan Review Committee's review shall be immediately made available to Company or its authorized representative. The City shall receive the comments from Company or its representative relating to or affecting the Company's right-of-way not later than the day before the Site Plan Review Committee meeting. The Site Plan Review Committee shall forward Company comments on said maps and plans to the applicant. The City shall require that all reasonable and justified comments and changes submitted by Company to be incorporated in plans and maps before the final map or plan is approved by the Site Plan Review Committee, provided that such comments and changes are not arbitrary or capricious. Should the City deem such comments and changes to be unreasonable or unjustified and not necessary to protect Company's rights and interest in CPD, the City and Company shall meet and confer to resolve the items of dispute. Items of dispute that cannot be resolved shall be submitted to arbitration. The City's obligation to require implementation of Company's comments and changes does not apply to development projects of other governmental agencies not subject to the City's jurisdiction.

Should the City's Site Plan Review process change, Company will be provided with a comparable opportunity to review said maps and plans.

Without cost to Company, the City shall require as a condition of development along CPD the dedication of sufficient right-of-way to allow for a 15-foot top width levee roadway on both sides of CPD, together with all necessary easements for flowage, capacity, inspection, repair, and maintenance of CPD. The provisions of this Agreement shall apply to such new areas.

6. Maintenance of CPD: Commencing on January 1, 1996, the City shall be responsible for all of the regular or necessary maintenance and repair costs of CPD within the city limits of City. This obligation shall also include the maintenance, repair and replacement of heretofore and hereafter piped or lined sections of CPD within the

city limits of City. Company shall perform, or cause to be performed, such work and City shall reimburse Company within thirty (30) days of billing. Company shall provide City a detailed billing of all maintenance performed in City limits.

7. Indemnity of Parties: The City agrees to defend, indemnify and hold Company harmless from all claims, losses, damages and costs occasioned by or arising out of the following activities:

(a) Public use of any park, bike or walking path or other facility installed by the City or others under the direction or control of the City intended for use by the public, along, adjacent to or within the Company's rights-of-way.

(b) Maintenance of any of the facilities referred to in paragraph 7(a) above.

(c) Realignment of CPD heretofore or hereafter accomplished by the City or under its direction.

(d) Operational activities of the City in the CPD.

(e) Violation by the City of any State or Federal discharge requirements, including but not limited to Proposition 65.

(f) Violation of Fish and Game Code Sections 5650, if applicable, arising out of or related to City operations or discharges.

(g) City discharges.

Except for work performed by Company on behalf of City, Company agrees to defend, indemnify and hold the City harmless from all claims arising out of any maintenance or operations activity undertaken by it in the CPD.

8. City Points of Discharge: The City agrees that all points of discharge into the CPD of surface waters by means of any discharge facility installed by the City after the date hereof shall be equipped with a gate or regulating device installed thereupon which will enable the City's discharge to be regulated or terminated should the need arise.

The City shall give Company written notice of the location of any new discharge facility. Accompanying the Notice, the City shall deliver to Company a map showing the portion of the City serviced through the discharge point, along with a written statement giving the location and manner of operation of the controlling device or gate.

In discharging surface flows into CPD, the City agrees to comply with all present and future discharge requirements imposed by the State of California or the United States. The City's discharge shall not include sanitary sewage, untreated process water from industrial and food processing plants, designated or hazardous waste. All waters in CPD leaving the city limits of the City shall not be materially different from the waters in CPD entering the City in the CPD. No discharge by the City shall render the CPD flows a nuisance or unsuitable for irrigation or ground water recharge.

The City shall not, by any affirmative act, allow any party to discharge water directly into CPD without the written consent of Company.

9. Monitoring the Flow: Upon execution of this Agreement, the City agrees to institute a monitoring program to determine the concentration of selected constituents in the City's discharge measured at a representative number of discharge sites to show the overall quality of the City's discharge into CPD. The purpose of the monitoring program shall be to establish a background profile of selected constituents in the water discharged into CPD by the City. Results of the City's monitoring program shall be made available to Company upon request.

10. City Discharge Fee: In addition to other renumeration required herein, City agrees to pay Company a fee of $1,000 per year during the term of this Agreement.

11. Term: The term of this Agreement shall be ten (10) years starting on the date of execution and ending ten (10) years thereafter. Should City or Company fail to cure any breach of the terms or conditions of this Agreement within 30 days of written notice of such, the other party shall have the right to immediately terminate this Agreement.

12. Interagency Communications: City and Company shall appoint and designate a person on their staffs who shall be available for information and expression of concerns concerning the maintenance of CPD, development along the channel, storm water discharges, compliance with the terms of this Agreement and any other matter relating to this Agreement or CPD. The object of this section is to provide a definite and easily instituted method of communication between all the parties to this Agreement with the assurance that each party's representative will have sufficient authority to and will respond by action to all concerns expressed by the other party.

13. Resolution of Disputes: The City acknowledges that CPD is a man-made channel that is owned, controlled and operated by Company. It is vital that no dispute concerning the uses of CPD results in legal action. With the object of avoiding litigation and the expenses and delays occasioned thereby, Company and City agree to submit all disputes to Arbitration.

14. Compliance with the Laws: The City agrees that any activities undertaken by it in the CPD shall be done only in compliance with all laws, and any other local, state or federal agency regulations.

15. Change of Agreement: This Agreement shall supercede any and all other past agreements between the parties concerning the CPD. This Agreement can only be

altered, discharged or prematurely terminated by a written Agreement signed by all the parties hereto. This Agreement shall be binding upon all the successors in interest of either party.

IN WITNESS WHEREOF, the parties have hereunto executed this Agreement this 8th day of November, 1995.

CONSOLIDATED PEOPLES DITCH COMPANY, a Corporation

By _____
President

CITY OF FARMERSVILLE,

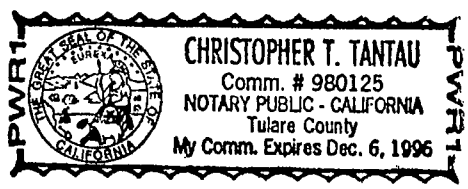
By _____
City Manager

APPROVED AS TO FORM

By Not Applicable
City Attorney

State of California }
} ss.
County of Tulare

On November 8, 1995, before me, Christopher T. Tantau, the undersigned Notary Public, personally appeared George D. Watte, President of Consolidate Peoples Ditch Company, personally known to me or proved to me on the basis of satisfactory evidence, to be the person who executed this instrument in his authorized capacities, and that by his signature on this instrument the person, or entity on behalf of which the person acted, executed the instrument.



Witness my hand and official seal

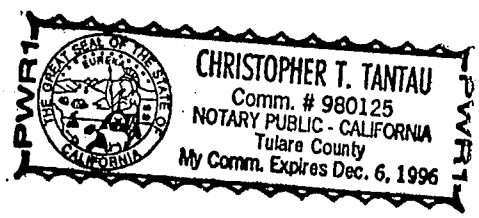
Christopher T. Tantau

Notary Public in and for said state.

State Of California }
} s.s.
County of Tulare }

On November 8, 1995, before me, Christopher T. Tantau, the undersigned Notary Public, personally appeared Steven Thompson, Farmersville City Manager, personally known to me or proved to me on the basis of satisfactory evidence, to be the person who executed this instrument in his authorized capacities, and that by his signature on this instrument the person, or entity on behalf of which the person acted, executed the instrument.

Witness my hand and official seal



Christopher T. Tantau

Notary Public in and for said state

Appendix F

Sample Worksheet

WORKSHEET 1

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1. **ACTIVITIES** □□□□□□□□□□

Appendix G

Sample BMPs

Table 3-1 Erosion Control BMPs	
BMP#	BMP Name
EC-1	Scheduling
EC-2	Preservation of Existing Vegetation
EC-3	Hydraulic Mulch
EC-4	Hydroseeding
EC-5	Soil Binders
EC-6	Straw Mulch
EC-7	Geotextiles & Mats
EC-8	Wood Mulching
EC-9	Earth Dikes and Drainage Swales
EC-10	Velocity Dissipation Devices
EC-11	Slope Drains
EC-12	Streambank Stabilization
EC-13	Polyacrylamide

Table 3-2 Temporary Sediment Control BMPs	
BMP#	BMP Name
SE-1	Silt Fence
SE-2	Sediment Basin
SE-3	Sediment Trap
SE-4	Check Dam
SE-5	Fiber Rolls
SE-6	Gravel Bag Berm
SE-7	Street Sweeping and Vacuuming
SE-8	Sandbag Barrier
SE-9	Straw Bale Barrier
SE-10	Storm Drain Inlet Protection
SE-11	Chemical Treatment

Table 3-3 Wind Erosion Control BMPs	
BMP#	BMP Name
WE-1	Wind Erosion Control

Table 3-4 Temporary Tracking Control BMPs	
BMP #	BMP Name
TR-1	Stabilized Construction Entrance/ Exit
TR-2	Stabilized Construction Roadway
TR-3	Entrance/Outlet Tire Wash

Table 4-1 Non-Stormwater Management BMPs	
BMP#	BMP Name
NS-1	Water Conservation Practices
NS-2	Dewatering Operations
NS-3	Paving and Grinding Operations
NS-4	Temporary Stream Crossing
NS-5	Clear Water Diversion
NS-6	Illicit Connection/Discharge
NS-7	Potable Water/Irrigation
NS-8	Vehicle and Equipment Cleaning
NS-9	Vehicle and Equipment Fueling
NS-10	Vehicle and Equipment Maintenance
NS-11	Pile Driving Operations
NS-12	Concrete Curing
NS-13	Concrete Finishing
NS-14	Material and Equipment Use
NS-15	Demolition Adjacent to Water
NS-16	Temporary Batch Plants

Table 4-2 Waste Management & Materials Pollution Control BMPs	
BMP#	BMP Name
WM-1	Material Delivery and Storage
WM-2	Material Use
WM-3	Stockpile Management
WM-4	Spill Prevention and Control
WM-5	Solid Waste Management
WM-6	Hazardous Waste Management
WM-7	Contaminated Soil Management
WM-8	Concrete Waste Management
WM-9	Sanitary/ Septic Waste Management
WM-10	Liquid Waste Management

Appendix H

City of Farmersville NOI submitted 8/7/03

State Water Resources Control Board
NOTICE OF INTENT
TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT FOR
STORM WATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
(WATER QUALITY ORDER NO. 2003 – 0005 - DWQ)

I. NOI Status

Mark Only One Item 1. [X] New Permittee 2. [ ] Change of Information WDID #: _____

II. Agency Information

A. Agency: City of Farmersville			
B. Contact Person: Eliseo Martinez	C. Title: Public Works Supervisor		
D. Mailing Address: 909 W. Visalia Road	E. Address (Line 2):		
F. City: Farmersville	State: CA	G. Zip: 93223	H. County: Tulare
I. Phone: (559) 747-0458	J. FAX: (559) 747-6724	K. Email Address:	

L. Operator Type (check one)
1. [X] City 2. [ ] County 3. [ ] State 4. [ ] Federal 5. [ ] Special District 6. [ ] Government Combination

III. Permit Area

Entire City of Farmersville

IV. Boundaries of Coverage (include a site map with the submittal)

The City boundaries are set forth by Farmersville's General Plan and delineated on the attached map.

V. Billing Information

A. Agency: City of Farmersville			
B. Contact Person: Eliseo Martinez	C. Title: Public Works Supervisor		
D. Mailing Address: 909 W. Visalia Road	E. Address (Line 2):		
F. City: Farmersville	State: CA	G. Zip: 93223	H. County: Tulare
I. Phone: (559) 747-0458	J. FAX: (559) 747-6724	K. Email Address:	

Fees are based on the daily population served by the Small MS4. To determine your fee, consult the current fee schedule (California Code of Regulations, Title 23, Division 3, Chapter 9 Article 1), which can be viewed at www.swrcb.ca.gov/stormwtr/municipal.html.

L. Population 6,235 (1990)

Fee $2,000.00

Check(s) should be made payable to the SWRCB and submitted to the appropriate RWQCB.

SWRCB Tax ID is: 68-0281986

VI. Discharger Information (check applicable box(es) and complete corresponding information)

1. [X] Applying for Individual General Permit Coverage

2. [ ] Applying for a permit with one or more co-permittees

The undersigned agree to work as co-permittees in implementing a complete small MS4 storm water program. The program must comply with the requirements found in Title 40 of the Code of Federal Regulations, parts 122.32. Attach additional sheets if necessary. Each co-permittee must complete an NOI.	
Lead Agency	Signature
Agency	Signature
Agency	Signature
Agency	Signature

3. [ ] Separate Implementing Entity (SIE)

A. Agency			
B. Contact Person	C. Title		
D. Mailing Address	E. Address (Line 2)		
F. City	State **CA**	G. Zip	H. County
I. Phone	J. FAX	K. Email Address	

H. Operator Type (check one)
1. [ ] City 2. [ ] County 3. [ ] State 4. [ ] Federal 5. [ ] Special District 6. [ ] Government Combination

Minimum Control Measures being implemented by the SIE (check all that apply)

[ ] Public Education [ ] Public Involvement [ ] Illicit Discharge/Elimination
[ ] Construction [ ] Post Construction [ ] Good Housekeeping

"I agree to coordinate with the agency identified in Section III of this form and comply with its qualifying storm water program. I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Additionally, I certify that the provisions of the permit, including the development and implementation of a Storm Water Management Program, will be complied with."

N. Signature of Official _____ Date _____

VII. Storm Water Management Plan (check box)

[X] As per section A.2. of this General Permit, the SWMP is attached.

VIII. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Additionally, I certify that the provisions of the permit, including the development and implementation of a Storm Water Management Program, will be complied with."

A. Printed Name: DALE WYCKOFF

B. Title: WATER/SEWER SPECIALIST

C. Signature: _____ D. Date: 8-7-03

Appendix I

Attachment 4 of General Permit

Areas subject to high growth or serving a population of at least 50,000 must comply with the following provisions (for counties this threshold population applies to the population within the permit area).

A. RECEIVING WATER LIMITATIONS

1. Discharges shall not cause or contribute to an exceedance of water quality standards contained in a Statewide Water Quality Control Plan, the California Toxics Rule (CTR), or in the applicable RWQCB Basin Plan.

2. The permittees shall comply with Receiving Water Limitations A.1 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWMP and other requirements of this permit including any modifications. The SWMP shall be designed to achieve compliance with Receiving Water Limitations A.1. If exceedance(s) of water quality objectives or water quality standards (collectively, WQS) persist notwithstanding implementation of the SWMP and other requirements of this permit, the permittees shall assure compliance with Receiving Water Limitations A.1 by complying with the following procedure:

   a. Upon a determination by either the permittees or the RWQCB that discharges are causing or contributing to an exceedance of an applicable WQS, the permittees shall promptly notify and thereafter submit a report to the RWQCB that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of WQSs. The report may be incorporated in the annual update to the SWMP unless the RWQCB directs an earlier submittal. The report shall include an implementation schedule. The RWQCB may require modifications to the report.

   b. Submit any modifications to the report required by the RWQCB within 30 days of notification.

   c. Within 30 days following approval of the report described above by the RWQCB, the permittees shall revise the SWMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, implementation schedule, and any additional monitoring required.

   d. Implement the revised SWMP and monitoring program in accordance with the approved schedule.

   So long as the permittees have complied with the procedures set forth above and are implementing the revised SWMP, the permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the RWQCB to develop additional BMPs.

B. DESIGN STANDARDS

Regulated Small MS4s subject to this requirement must adopt an ordinance or other document to ensure implementation of the Design Standards included herein or a functionally equivalent program that is acceptable to the appropriate RWQCB. The ordinance or other document must be adopted and effective prior to the expiration of this General Permit or, for Small MS4s designated subsequent to the Permit adoption, within five years of designation as a regulated Small MS4.

All discretionary development and redevelopment projects that fall into one of the following categories are subject to these Design Standards. These categories are:

- Single-Family Hillside Residences
- 100,000 Square Foot Commercial Developments
- Automotive Repair Shops
- Retail Gasoline Outlets
- Restaurants
- Home Subdivisions with 10 or more housing units
- Parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to storm water runoff

1. Conflicts With Local Practices
   Where provisions of the Design Standards conflict with established local codes or other regulatory mechanism, (e.g., specific language of signage used on storm drain stenciling), the Permittee may continue the local practice and modify the Design Standards to be consistent with the code or other regulatory mechanism, except that to the extent that the standards in the Design Standards are more stringent than those under local codes or other regulatory mechanism, such more stringent standards shall apply.

2. Design Standards Applicable to All Categories

   a. Peak Storm Water Runoff Discharge Rates
      Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion.

   b. Conserve Natural Areas
      If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

      1) Concentrate or cluster Development on portions of a site while leaving the remaining land in a natural undisturbed condition.
      2) Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
      3) Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.

4) Promote natural vegetation by using parking lot islands and other landscaped areas.
5) Preserve riparian areas and wetlands.

c. Minimize Storm Water Pollutants of Concern
Storm water runoff from a site has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system. The development must be designed so as to minimize, to the maximum extent practicable, the introduction of pollutants of concern that may result in significant impacts, generated from site runoff of directly connected impervious areas (DCIA), to the storm water conveyance system as approved by the building official. Pollutants of concern consist of any pollutants that exhibit one or more of the following characteristics: current loadings or historic deposits of the pollutant are impacting the beneficial uses of a receiving water, elevated levels of the pollutant are found in sediments of a receiving water and/or have the potential to bioaccumulate in organisms therein, or the detectable inputs of the pollutant are at concentrations or loads considered potentially toxic to humans and/or flora and fauna.

In meeting this specific requirement, "minimization of the pollutants of concern" will require the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the Maximum Extent Practicable. Those BMPs best suited for that purpose are those listed in the *California Storm Water Best Management Practices Handbook*s; *Caltrans Storm Water Quality Handbook: Planning and Design Staff Guid*e; *Manual for Storm Water Management in Washington Stat*e; *The Maryland Stormwater Design Manua*l; *Florida Development Manual: A Guide to Sound Land and Water Managemen*t; Denver *Urban Storm Drainage Criteria Manual, Volume 3 – Best Management Practices* and *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* , USEPA Report No. EPA-840-B-92-002, as "likely to have significant impact" beneficial to water quality for targeted pollutants that are of concern at the site in question. However, it is possible that a combination of BMPs not so designated, may in a particular circumstance, be better suited to maximize the reduction of the pollutants.

d. Protect Slopes and Channels
Project plans must include BMPs consistent with local codes, ordinances, or other regulatory mechanism and the Design Standards to decrease the potential of slopes and/or channels from eroding and impacting storm water runoff:

1) Convey runoff safely from the tops of slopes and stabilize disturbed slopes.
2) Utilize natural drainage systems to the maximum extent practicable.
3) Stabilize permanent channel crossings.
4) Vegetate slopes with native or drought tolerant vegetation, as appropriate.
5) Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion, with the approval of all agencies

with jurisdiction, e.g., the U.S. Army Corps of Engineers and the California Department of Fish and Game.

e. Provide Storm Drain System Stenciling and Signage
Storm drain stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets. The stencil contains a brief statement that prohibits the dumping of improper materials into the storm water conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. All storm drain inlets and catch basins within the project area must be stenciled with prohibitive language (such as: "NO DUMPING – DRAINS TO OCEAN") and/or graphical icons to discourage illegal dumping.· Signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, must be posted at public access points along channels and creeks within the project area.· Legibility of stencils and signs must be maintained.

f. Properly Design Outdoor Material Storage Areas
Outdoor material storage areas refer to storage areas or storage facilities solely for the storage of materials. Improper storage of materials outdoors may provide an opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the storm water conveyance system. Where proposed project plans include outdoor areas for storage of materials that may contribute pollutants to the storm water conveyance system, the following Structural or Treatment BMPs are required:

1) Materials with the potential to contaminate storm water must be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.
2) The storage area must be paved and sufficiently impervious to contain leaks and spills.
3) The storage area must have a roof or awning to minimize collection of storm water within the secondary containment area.

g. Properly Design Trash Storage Areas
A trash storage area refers to an area where a trash receptacle or receptacles (dumpsters) are located for use as a repository for solid wastes. Loose trash and debris can be easily transported by the forces of water or wind into nearby storm drain inlets, channels, and/or creeks. All trash container areas must meet the following Structural or Treatment Control BMP requirements (individual single family residences are exempt from these requirements):

1) Trash container areas must have drainage from adjoining roofs and pavement diverted around the area(s).
2) Trash container areas must be screened or walled to prevent off-site transport of trash.

h. Provide Proof of Ongoing BMP Maintenance

Improper maintenance is one of the most common reasons why water quality controls will not function as designed or which may cause the system to fail entirely. It is important to consider who will be responsible for maintenance of a permanent BMP, and what equipment is required to perform the maintenance properly. As part of project review, if a project applicant has included or is required to include, Structural or Treatment Control BMPs in project plans, the Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private or public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owner's responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the project's conditions, covenants and restrictions (CC&Rs). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural or Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County or other appropriate public agency. Structural or Treatment Control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation.

i. Design Standards for Structural or Treatment Control BMPs
The Permittees shall require that post-construction treatment control BMPs incorporate, at a minimum, either a volumetric or flow based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:

1) Volumetric Treatment Control BMP

a) The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998); or
b) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (2003); or
c) The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

2) Flow Based Treatment Control BMP
   a) The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area; or
   b) The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

Limited Exclusion
Restaurants and Retail Gasoline Outlets, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical Structural or Treatment Control BMP design standard requirement only.

3. Provisions Applicable to Individual Priority Project Categories

   a. 100,000 Square Foot Commercial Developments

      1) Properly Design Loading/Unloading Dock Areas
      Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:

         a) Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
         b) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

      2) Properly Design Repair/Maintenance Bays
      Oil and grease, solvents, car battery acid, coolant and gasoline from the repair/maintenance bays can negatively impact storm water if allowed to come into contact with storm water runoff. Therefore, design plans for repair bays must include the following:

a) Repair/maintenance bays must be indoors or designed in such a way that doesn't allow storm water runon or contact with storm water runoff.
b) Design a repair/maintenance bay drainage system to capture all washwater, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.

3) Properly Design Vehicle/Equipment Wash Areas
The activity of vehicle/equipment washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for washing/steam cleaning of vehicles and equipment. The area in the site design must be:

a) Self-contained and/ or covered, equipped with a clarifier, or other pretreatment facility, and
b) Properly connected to a sanitary sewer or other appropriately permitted disposal facility.

b. Restaurants

1) Properly Design Equipment/Accessory Wash Areas
The activity of outdoor equipment/accessory washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for the washing/steam cleaning of equipment and accessories. This area must be:

a) Self-contained, equipped with a grease trap, and properly connected to a sanitary sewer.
b) If the wash area is to be located outdoors, it must be covered, paved, have secondary containment, and be connected to the sanitary sewer or other appropriately permitted disposal facility.

c. Retail Gasoline Outlets

1) Properly Design Fueling Area
Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system. The project plans must include the following BMPs:

a) The fuel dispensing area must be covered with an overhanging roof structure or canopy. The canopy's minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto the fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area.

b) The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.
c) The fuel dispensing area must have a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable.
d) At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

d. Automotive Repair Shops

1) Properly Design Fueling Area
Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system. Therefore, design plans, which include fueling areas, must contain the following BMPs:

a. The fuel dispensing area must be covered with an overhanging roof structure or canopy. The canopy's minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto the fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area.
b. The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.
c. The fuel dispensing area must have a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable.
d. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

2) Properly Design Repair/Maintenance Bays
Oil and grease, solvents, car battery acid, coolant and gasoline from the repair/maintenance bays can negatively impact storm water if allowed to come into contact with storm water runoff. Therefore, design plans for repair bays must include the following:

a) Repair/maintenance bays must be indoors or designed in such a way that doesn't allow storm water run-on or contact with storm water runoff.
b) Design a repair/maintenance bay drainage system to capture all wash-water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is

prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.

3) Properly Design Vehicle/Equipment Wash Areas
The activity of vehicle/equipment washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for washing/steam cleaning of vehicles and equipment. This area must be:

   a) Self-contained and/or covered, equipped with a clarifier, or other pretreatment facility, and properly connected to a sanitary sewer or other appropriately permitted disposal facility.

4) Properly Design Loading/Unloading Dock Areas
Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:

   a) Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
   b) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

e. Parking Lots

1) Properly Design Parking Area
Parking lots contain pollutants such as heavy metals, oil and grease, and polycyclic aromatic hydrocarbons that are deposited on parking lot surfaces by motor-vehicles. These pollutants are directly transported to surface waters. To minimize the offsite transport of pollutants, the following design criteria are required:

   a) Reduce impervious land coverage of parking areas.
   b) Infiltrate or treat runoff.

2) Properly Design To Limit Oil Contamination and Perform Maintenance
Parking lots may accumulate oil, grease, and water insoluble hydrocarbons from vehicle drippings and engine system leaks:

   a) Treat to remove oil and petroleum hydrocarbons at parking lots that are heavily used (e.g. fast food outlets, lots with 25 or more parking spaces , sports event parking lots, shopping malls, grocery stores, discount warehouse stores).
   b) Ensure adequate operation and maintenance of treatment systems particularly sludge and oil removal, and system fouling and plugging prevention control.

4. Waiver

A Permittee may, through adoption of an ordinance, code, or other regulatory mechanism incorporating the treatment requirements of the Design Standards, provide for a waiver from the requirement if impracticability for a specific property can be established. A waiver of impracticability shall be granted only when all other Structural or Treatment Control BMPs have been considered and rejected as infeasible. Recognized situations of impracticability include, (i) extreme limitations of space for treatment on a redevelopment project, (ii) unfavorable or unstable soil conditions at a site to attempt infiltration, and (iii) risk of ground water contamination because a known unconfined aquifer lies beneath the land surface or an existing or potential underground source of drinking water is less than 10 feet from the soil surface. Any other justification for impracticability must be separately petitioned by the Permittee and submitted to the appropriate RWQCB for consideration. The RWQCB may consider approval of the waiver justification or may delegate the authority to approve a class of waiver justifications to the RWQCB EO. The supplementary waiver justification becomes recognized and effective only after approval by the RWQCB or the RWQCB EO. A waiver granted by a Permittee to any development or redevelopment project may be revoked by the RWQCB EO for cause and with proper notice upon petition.

5. Limitation on Use of Infiltration BMPs

Three factors significantly influence the potential for storm water to contaminate ground water. They are (i) pollutant mobility, (ii) pollutant abundance in storm water, (iii) and soluble fraction of pollutant. The risk of contamination of groundwater may be reduced by pretreatment of storm water. A discussion of limitations and guidance for infiltration practices is contained in, *Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration, Report No. EPA/600/R-94/051, USEPA (1994).*

In addition, the distance of the groundwater table from the infiltration BMP may also be a factor determining the risk of contamination. A water table distance separation of ten feet depth in California presumptively poses negligible risk for storm water not associated with industrial activity or high vehicular traffic.

Site specific conditions must be evaluated when determining the most appropriate BMP. Additionally, monitoring and maintenance must be provided to ensure groundwater is protected and the infiltration BMP is not rendered ineffective by overload. This is especially important for infiltration BMPs for areas of industrial activity or areas subject to high vehicular traffic [25,000 or greater average daily traffic (ADT) on main roadway or 15,000 or more ADT on any intersecting roadway]. In some cases pretreatment may be necessary.

6. Alternative Certification for Storm Water Treatment Mitigation

In lieu of conducting detailed BMP review to verify Structural or Treatment Control BMP adequacy, a Permittee may elect to accept a signed certification from a Civil Engineer or a Licensed Architect registered in the State of California, that the plan meets

the criteria established herein. The Permittee is encouraged to verify that certifying person(s) have been trained on BMP design for water quality, not more than two years prior to the signature date. Training conducted by an organization with storm water BMP design expertise (e.g., a University, American Society of Civil Engineers, American Society of Landscape Architects, American Public Works Association, or the California Water Environment Association) may be considered qualifying.

Appendix J

Sample Storm Water Informational Mailer

Tulare County Clean Storm Water Program

Where Does the Storm Water Go?

Rain and excess water from your home flow right to storm drains. This water flows down streets, through gutters, into pipes, to ponding basins, canals, creeks and rivers.

In these basins and waterways, runoff seeps through the soil and into groundwater – our drinking water supply. That's why it's important to keep storm drains and runoff clean.

Loose Litter

Litter hurts our community. It contaminates our water resources and clogs storm drains – causing floods in our neighborhoods. Be sure to properly dispose of garbage, pet waste and cigarette butts! For more information on litter control, go to www.donttrashcalifornia.info.

Home and Garden

Maintaining our homes and gardens is necessary, but overusing chemicals is not. Buy household and garden products only in the amount needed and read and follow the label directions. Better yet, use alternative products. Avoid using lawn and garden products when rain is forecast! Take all unused products to a Household Hazardous Waste drop-off center. For information, call 733-6441.

Tulare County Clean Storm Water Program

Contacts

City of Visalia Public Works
7579 Avenue 288
Visalia, CA. 93277
(559) 713-4466

County of Tulare Resource Management Agency
5961 S. Mooney Boulevard
Visalia, CA. 93277
(559) 733-6291

City of Woodlake Public Works
350 N. Valencia Avenue
Woodlake, CA. 93286
(559) 564-2317

Cities of Farmersville, Exeter, Dinuba
Quad-Knopf Engineering
5110 W. Cypress Avenue
Visalia, CA. 93278
(559) 733-0440

City of Lindsay Public Works
150 N. Mirage, P.O. Box 369
Lindsay, CA. 93247
(559) 562-7119

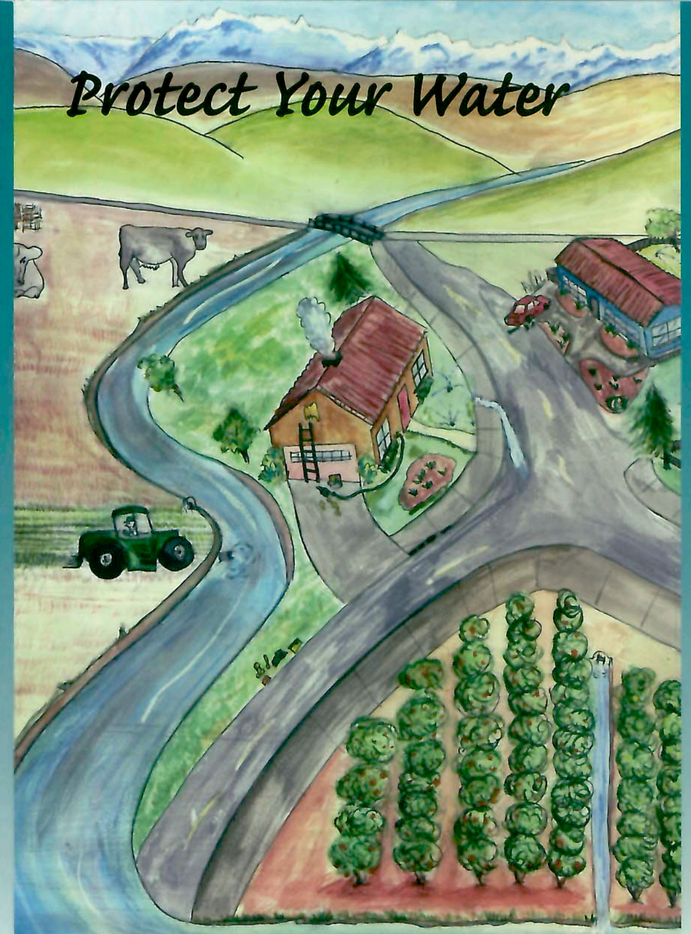
City of Tulare Public Works
3981 South "K" Street
Tulare, CA. 93274
(559) 684-4318

City of Porterville Field Services Div.
291 N. Main Street
Porterville, CA. 93257
(559) 782-7462

Tulare County Association of Governments
TCAG
5961 S. Mooney Boulevard
Visalia, CA. 93277
(559) 733-6291

TCAG
5961 S. Mooney Blvd.
Visalia, Ca 93277
(559) 733-6291
www.tularecog.org

Protect Your Water



It's just beneath your feet.

Tulare County Clean Storm Water Program

Water is the most vital resource in the Valley. If you think about it, water has an effect on everything we do in our day-to-day lives. From keeping our lawns green, to washing our dishes, we depend on water. Water plays an important role throughout our community.

For Agriculture . . .

Water is delivered through a network of canals that is managed by individual water districts. Water from rivers flows through our community – providing water for food that feeds a nation.

For Industry . . .

Businesses in our community depend on clean water for food processing, manufacturing, health care and other related industries. A clean and reliable water source is necessary to support a healthy economy.

For Home . . .

Every day we need clean water for drinking and bathing. Our communities depend on water that is supplied primarily from groundwater. Protecting groundwater is essential to protecting public health.

For Wildlife . . .

Our urban environment needs clean water in streams, lakes and ponds to provide nesting habitat for birds and other wildlife.

How Can You Help?

We're all responsible for keeping our water clean – for the future of the Valley, our communities and our children. And it starts at home.

By doing a few simple things, you can help protect the water beneath our feet. Look inside to find out what you can do.

Bag, seal and throw away pet waste – it keeps runoff and streets clean.

Put litter in trash cans. It keeps our storm drains and community clean.

Carpool to reduce air pollution, so it also helps reduce water pollution.

Set sprinkler timers to reduce contamination of runoff water from pesticides and fertilizers and help maintain a clean water supply. Use a shutoff nozzle to avoid unnecessary runoff.

Volunteer to help label storm drains with "No Dumping!" signs.

Recycle waste to keep litter off our streets and ease the strain on our landfills.

Instead of hosing, sweep driveways and sidewalks. This prevents storm water pollution and conserves water.

Take unused paint, pesticides, fertilizers and other hazardous items to a Household Hazardous Waste drop-off center. For information, call 733-6441.

It's up to us!

We need clean water today and for future generations. Preventing storm water pollution is important and will help keep our communities clean.

Accidental Spills

Cover a hazardous material spill (such as used motor oil or antifreeze) with kitty litter, then sweep it up and take it to a Household Hazardous Waste drop-off center. Never hose spills into the gutter!

Car Fluids

Inspect your car regularly to prevent and repair leaks. Don't dump motor oil or antifreeze down storm drains! Recycle motor oil and auto fluids.

Paint

Paint keeps our homes looking beautiful, but it has an ugly effect on our water. Never wash paint into the gutter! Rinse water-based paintbrushes in sinks. Avoid oil-based paints and varnishes.

How Does Storm Water Become Polluted?

When it rains, storm water flows across driveways, streets and lawns. As it flows, it can pick up pollutants such as oil, pesticides, cigarette butts and trash. This runoff carries these pollutants through the storm drain system. The pollutants then can affect wildlife habitats, outdoor recreation and our water supply.

Even when it's not raining, water from sprinklers, car washing, pool draining and other sources can carry pollutants into the storm drain system.

Rain gathers oil and other toxic fluids from leaky cars.

Runoff collects litter and yard waste.

Rain turns air pollution into storm water pollution.

Runoff picks up detergent and grime from car washing.

Overusing pesticides means money and pollutants down the drain. (The storm drain, that is!)

Overwatering creates runoff that can carry fertilizers and pesticides into the storm drain system.

Appendix K

Green Waste Flyer

The Green Can is for…

Green Waste Only – Organic Yard Material

Examples:

- ✓ *Tree Trimmings*
- ✓ *Leaves*
- ✓ *Grass*
- ✓ *Weeds*
- ✓ *Brush*
- ✓ *Plants, Etc*

No Dirt
No Plastic Bags
No Recyclables
No Wire or Twine around Brush or Trimmings

Cans with trash or items other than Green Waste found in them will not be emptied! After these items have been removed, your can will be emptied on next week's pickup day.

Thank You,
The City of Farmersville and Waste Connections

Verde Bote Es Para…

Desperdicio Verde – Materiales Organicos de Jardin

Ejemplos:

- ✓ *Tree Podas de Arboles*
- ✓ *Hojas*
- ✓ *Sacare/Pasto*
- ✓ *Hierbas*
- ✓ *Ramas*
- ✓ *Planta, Etc*

No Tierra
No Bolsas de Platico
No Reciclables
No Alhambre o Mecate Alrededor de Podas o de Ramas

Botes que contengan basure u otros articulos qué no sean desperdicios verdas bi serab vacuadis. Despues de qué estos articulos hallan sido removidos, su bote sera vaciado la siguiente semana enal dia qué tiene programido a recojer su basura.

Thank Gracias,
La Cuidad de Farmersville y Waste Connections

Appendix L

Spring Clean-Up Flyer

Spring Clean-Up

Need to get rid of stuff that's been hanging around your yard or cluttering your garage for too long?

We Can Help! In celebration of Earth Week, the City of Farmerville is offering residents a way to help beautify our City by accepting Electronic Waste (E-Waste) and General Household trash.

The event will take place at Roy Park on South Farmersville Boulevard.

NEW EXTENDED HOURS

WHEN:

April 19th to 21st

Thursday 8:00am - 6:00pm

Friday 7:00am - 3:00pm

Saturday 8:00am - 3:00pm

WHO:

Any Farmersville resident can participate

WHAT:

General household trash, furniture, bulky items; yard waste.
Electronic Waste including televisions, computers, and monitors

*Not Accepted: Batteries, microwaves, concrete, paint, oil, or any hazardous waste

Free Dump Day Guidelines:

- A current City utility bill will be required as proof of residency.
- Residential customers only. No business or commercial waste allowed.
- All metal and wood should be separated for faster unloading.
- Trailers will be limited to no longer than 10 feet.
- Participants will be required to unload their own vehicle.

For more information, contact the City of Farmersville at 747-0458.

La "Primavera" llego
Tiempo de limpieza!

¿Necesita tirar materia que se está colgando alrededor
de su yarda o se está estorbando en su garage?

Le podemos ayudar! Para ayudar a celebrar semana de la tierra, la ciudad de Farmersville está ofreciendo a residentes dos maneras de ayudar a mantener limpia nuestra ciudad. ocurrirán en la

MAS HORAS

DONDÉ:
Roy Park

CUANDO:
Abril 19 al 21, 2007
Jueves 8:00am - 6:00pm
Viernes 7:00am - 3:00pm
Sabado 8:00am - 3:00pm

QUIEN:
Todo residente de Farmersville, puede participar

Aceptado: Basura de la casa (muebles, artículos abultados, basura de la yarda, metal de desecho)

No Aceptado: Baterías, micro ornos, cemento, pintura, aceite, o cualquier desecho peligroso

Reglas para El Dia de Limpieza Gratis:

- la cuenta actual de la basura de la ciudad será requerida como prueba de residente
- No se permite basura de negocios o de commercios
- todo el metal y madera se debe separar para descargar más rápidos
- el vagon será limitado a no más de largo de 10 pies
- Los participantes serán requeridos a descargar su propio vehículo.

Los participantes de los dos eventos serán elegibles para entrar en el sorteo del día de la tierra del condado de Tulare y poder ganarse un viaje de fin de semana!

Para más información, favor de llamar 747-0458

Engineering

Architecture

Planning

Land Surveying

GIS/GPS

Biology

5110 W. Cypress Avenue
Visalia, California 93277
(559) 733-0440

8405 N. Fresno Street, Suite 300
Fresno, California 93720
(559) 449-2400

5080 California Avenue, Suite 400
Bakersfield, California 93309
(661) 616-2600

9600 Prototype Court
Reno, NV 89521
(775) 324-1212

One Sierragate Plaza, Suite 270c
Roseville, California 95678
(916) 784-7823

Quad Knopf

4.01.040 - Establishment of development fees.

The following development impact fees are hereby established and imposed on the issuance of all building permits for development within the city to finance the cost of the following categories of public facilities and improvements required by new development. The development impact fees consist of the following fees which are hereby established:

A. Law Enforcement Facilities, Vehicles and Equipment. A development impact fee is hereby established for law enforcement facilities, vehicles and equipment;

B. Fire Suppression/Rescue Facilities, Vehicles and Equipment. A development impact fee is hereby established for fire suppression/rescue facilities, vehicles and equipment;

C. General Facilities, Vehicles and Equipment. A development impact fee is hereby established for general facilities, vehicles and equipment;

D. Circulation (Streets, Signals and Bridges). A development impact fee is hereby established for circulation (streets, signals and bridges);

E. Library Collection Items and Dedicated Public Use Computers. A development impact fee is hereby established for library collection items and dedicated public use computers.

F. Water Treatment, Storage and Distribution System. A development impact fee is hereby established for water treatment, storage and distribution system;

G. Wastewater Collection and Treatment System. A development impact fee is hereby established for wastewater collection and treatment system.

H. Storm Drainage Collections System. A development impact fee is hereby established for storm drainage collection system;

I. Public Use Facilities. A development impact fee is hereby established for public use facilities;

J. Park Land. A development impact fee is hereby established for park land.

(Ord. 425 (part), 2006; Ord. No. 512, § 1, 11-8-2021)

Parks & Recreation

Reserve Park or Facility Here

Parks

The City of Farmersville has 6 developed park sites, including:

Select Language
Google Translate

- Armstrong Park: 4 acres
- Freedom Field
- Jennings Park: 2.1 acres
- Liberty Park: 6 acres
- Riverbank Park: 0.5 acres
- Roy's Park: 4.5 acres
- Sequoia Gateway
- Veterans Memorial Park: 4.33 acres
- Veterans Memorial Sports Park: 11.82 acres

Amenities

Existing parks feature amenities such as:

- Barbecues
- Baseball diamonds
- Grass fields
- Soccer fields
- Picnic tables
- Playgrounds
- Trails

Documents

- Farmersville Park Policy
- Parks Strategic Plan (PDF)

Contact Us

Google Translate

Parks & Recreation

Physical Address
909 W. Visalia Road
Farmersville, CA 93223

Phone: 559-747-0458

Fax: 559-747-6724

Hours

Monday thru Friday
8am-5pm

Directory

Government Websites by CivicPlus®

Google Translate

City of Farmersville
Wastewater Treatment Plant

2010's

YEAR	POPULATION	TOTAL TREATED
2010	10,588	309,004,373
2011	10,796	308,521,404
2012	10,807	306,534,904
2013	10,860	312,953,912
2014	10,901	289,131,499
2015	10,908	111,444,660
2016		0
2017		0
2018		0
2019		0
DECADE TOTAL		1,637,590,752

MONTH	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
JANUARY	26,122,015	26,751,382	25,157,273	26,323,189	25,168,560	23,522,215				
FEBRUARY	23,554,715	23,518,842	23,208,092	23,813,506	22,589,997	21,019,447				
MARCH	26,325,570	25,900,644	25,568,706	25,929,118	24,893,619	22,660,525				
APRIL	25,350,427	24,387,162	25,115,940	24,616,393	23,647,192	21,875,834				
MAY	26,398,420	25,777,913	25,930,783	25,797,232	24,616,230	22,366,639				
JUNE	21,448,977	25,908,839	24,929,928	25,081,305	23,481,956	0				
JULY	26,888,312	27,214,524	25,471,812	26,854,903	23,883,526	0				
AUGUST	26,340,528	26,474,089	26,866,992	27,549,031	24,948,369	0				
SEPTEMBER	26,721,089	26,128,720	26,008,356	27,194,494	23,640,843	0				
OCTOBER	27,270,657	26,202,632	26,195,593	27,645,620	24,451,405	0				
NOVEMBER	25,947,933	25,150,487	25,425,344	25,879,585	23,817,887	0				
DECEMBER	26,635,730	25,106,170	26,656,085	26,269,536	23,991,915	0				
Gallons	309,004,373	308,521,404	306,534,904	312,953,912	289,131,499	111,444,660	0	0	0	0

2020's

YEAR	POPULATION	TOTAL TREATED
2020		0
2021		0
2022		0
2023		0
2024		0
2025		0
2026		0
2027		0
2028		0
2029		0
DECADE TOTAL		0

MONTH	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										
Gallons	0	0	0	0	0	0	0	0	0	0

WWTP DATA

2030's

YEAR	POPULATION	TOTAL TREATED
2030		0
2031		0
2032		0
2033		0
2034		0
2035		0
2036		0
2037		0
2038		0
2039		0
DECADE TOTAL		0

MONTH	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										
Gallons	0	0	0	0	0	0	0	0	0	0

City of Farmersville
Well Production

1980's

YEAR	POPULATION	TOTAL PRODUCED
1980	5,544	282,646,200
1981	5,650	309,351,600
1982	5,775	335,370,200
1983	5,925	367,501,300
1984	6,075	431,805,400
1985	6,211	397,760,000
1986	6,200	412,436,900
1987	6,200	452,789,700
1988	6,125	284,789,500
1989	6,150	492,287,700
DECADE TOTAL		3,766,738,500

MONTH	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
JANUARY	13,798,300	16,348,200	16,467,200	19,029,800	18,025,000	23,272,000	23,062,100	27,175,500	20,643,700	27,731,400
FEBRUARY	12,190,900	14,861,000	16,058,800	16,148,100	21,108,900	20,806,300	19,568,200	24,230,600	17,588,800	24,058,200
MARCH	15,803,500	14,602,600	16,027,900	19,346,200	25,606,700	23,393,400	24,340,800	23,600,400	15,755,100	28,026,800
APRIL	20,681,000	21,262,200	17,608,600	22,229,800	32,481,200	34,215,300	30,998,700	36,114,600	15,370,800	43,687,100
MAY	28,214,400	27,529,800	38,959,600	38,036,200	49,677,200	48,611,900	43,478,400	50,684,100	25,009,300	50,749,000
JUNE	35,495,800	33,299,900	44,374,400	46,260,500	55,222,500	56,881,600	51,391,200	59,014,800	24,937,700	60,666,400
JULY	39,190,300	49,028,500	42,904,700	51,130,700	58,145,400	58,134,300	57,866,300	60,183,600	35,349,700	67,634,700
AUGUST	37,604,300	40,656,100	45,384,600	47,626,700	51,104,800	31,857,700	52,543,800	57,665,500	24,519,600	59,155,600
SEPTEMBER	29,817,700	32,963,800	35,079,400	38,977,800	43,964,200	22,772,400	31,964,000	36,572,200	22,364,600	42,917,200
OCTOBER	20,936,200	24,353,200	23,948,100	26,928,400	31,121,900	31,715,600	29,467,800	27,952,600	28,194,000	33,400,900
NOVEMBER	11,569,200	18,440,100	19,877,300	21,379,200	23,294,100	24,345,000	24,434,400	25,786,000	28,357,100	27,436,100
DECEMBER	17,344,600	16,006,200	18,679,600	20,407,900	22,053,500	21,754,500	23,321,200	23,809,800	26,699,100	26,824,300
Gallons	282,646,200	309,351,600	335,370,200	367,501,300	431,805,400	397,760,000	412,436,900	452,789,700	284,789,500	492,287,700

1990's

YEAR	POPULATION	TOTAL PRODUCED
1990	6,235	491,828,400
1991	6,485	474,416,600
1992	6,724	487,720,800
1993	6,843	531,083,100
1994	7,082	556,967,900
1995	7,641	489,238,200
1996	7,759	508,836,400
1997	8,077	536,307,100
1998	8,197	520,722,100
1999	8,515	528,263,900
DECADE TOTAL		5,125,384,500

MONTH	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
JANUARY	24,957,900	27,965,900	22,075,500	28,631,100	32,467,900	32,963,000	28,488,000	28,735,000	25,570,300	32,942,800
FEBRUARY	21,561,100	30,523,800	22,320,800	25,393,000	25,218,000	25,876,000	26,646,000	26,880,000	26,960,000	26,272,500
MARCH	29,477,100	25,460,400	28,190,800	27,074,000	33,610,000	27,475,000	32,561,000	39,226,400	32,927,000	35,766,700
APRIL	39,788,800	34,685,200	38,474,600	37,091,000	41,949,500	35,157,000	34,095,000	46,301,000	36,242,600	38,844,100
MAY	49,350,300	44,851,100	52,762,600	53,673,800	49,290,100	38,041,000	44,554,000	57,303,200	38,155,800	53,281,700
JUNE	54,855,300	54,339,100	51,132,200	57,438,100	68,354,000	46,697,400	52,057,400	59,003,400	47,118,400	71,663,800
JULY	65,179,600	62,282,400	51,544,200	68,766,500	76,000,400	53,967,800	51,911,300	62,315,200	61,652,400	65,066,400
AUGUST	61,719,300	57,978,000	60,901,000	65,796,900	71,936,000	70,130,000	61,354,400	59,632,800	58,325,800	61,614,500
SEPTEMBER	46,389,000	48,432,700	54,658,800	54,527,900	59,637,200	53,514,000	50,745,900	53,721,800	65,780,200	50,178,200
OCTOBER	37,793,800	37,780,000	46,947,800	40,248,600	37,409,800	36,747,000	51,755,400	52,351,900	55,207,000	38,899,400
NOVEMBER	31,509,700	28,221,000	30,979,600	43,651,400	30,244,000	37,408,000	43,971,000	33,005,800	33,604,800	28,303,200
DECEMBER	29,246,500	21,897,000	27,732,900	28,790,800	30,851,000	31,262,000	30,697,000	17,830,600	39,177,800	25,430,600
Gallons	491,828,400	474,416,600	487,720,800	531,083,100	556,967,900	489,238,200	508,836,400	536,307,100	520,722,100	528,263,900

2000's

YEAR	POPULATION	TOTAL PRODUCED
2000	8,737	507,036,300
2001	8,814	649,209,800
2002	9,003	614,768,200
2003	9,276	652,465,800
2004	9,550	645,560,800
2005	9,918	664,507,800
2006	9,801	670,539,200
2007	9,884	724,009,000
2008	9,975	705,647,400
2009	10,078	735,986,300
DECADE TOTAL		6,569,730,600

MONTH	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
JANUARY	24,710,200	31,019,300	33,819,800	27,194,000	32,522,900	34,497,800	35,651,300	40,172,300	35,208,700	37,714,200
FEBRUARY	21,369,900	26,180,300	32,718,300	31,528,400	31,076,900	33,131,000	35,430,100	33,636,100	33,469,800	33,305,200
MARCH	28,751,400	38,875,200	40,988,100	38,224,400	41,030,600	38,104,300	35,104,900	46,937,900	48,987,300	45,025,300
APRIL	43,337,400	40,896,300	55,282,100	39,996,000	55,595,500	47,106,100	35,286,600	56,946,000	64,359,000	59,445,900
MAY	53,073,500	74,612,400	63,212,200	54,614,200	71,829,300	59,515,800	64,041,800	79,017,800	77,769,400	78,781,200
JUNE	63,472,500	82,938,000	67,447,500	78,314,900	77,673,900	79,188,700	83,069,900	88,504,300	86,057,300	81,935,900
JULY	69,171,300	84,674,200	77,882,500	90,693,800	82,449,200	85,166,900	89,497,700	96,447,700	84,086,400	98,473,900
AUGUST	51,207,700	82,234,600	70,795,400	78,458,700	78,783,700	82,875,600	83,130,300	89,989,000	75,479,700	89,641,800
SEPTEMBER	44,821,900	67,860,900	55,555,200	77,323,200	59,659,500	64,751,300	71,398,400	68,492,700	61,297,100	76,941,500
OCTOBER	42,261,900	55,821,700	51,017,100	67,403,700	54,115,500	58,392,200	54,821,200	45,610,200	60,984,700	54,798,400
NOVEMBER	32,463,200	31,853,100	33,000,000	35,817,300	30,935,300	45,392,800	44,544,400	40,088,000	40,879,800	44,093,500
DECEMBER	32,395,400	32,243,800	33,050,000	32,897,200	29,888,500	36,385,300	38,562,600	38,167,000	37,068,200	35,829,500
Gallons	507,036,300	649,209,800	614,768,200	652,465,800	645,560,800	664,507,800	670,539,200	724,009,000	705,647,400	735,986,300

City of Farmersville
Well Production

2010's

YEAR	POPULATION	TOTAL PRODUCED
2010	10,588	681,756,100
2011	10,796	669,751,100
2012	10,807	656,446,300
2013	10,860	715,273,200
2014	10,901	625,355,800
2015	10,908	226,987,400
2016		0
2017		0
2018		0
2019		0
DECADE TOTAL		3,575,569,900

MONTH	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
JANUARY	34,520,200	36,183,400	38,399,100	35,133,300	39,572,300	31,278,900				
FEBRUARY	31,272,600	33,067,000	36,033,700	32,784,500	33,034,000	28,920,000				
MARCH	42,221,700	37,740,300	42,664,000	44,942,300	41,585,500	40,954,100				
APRIL	43,648,000	49,012,800	41,915,900	58,078,000	48,214,600	43,772,500				
MAY	61,506,900	64,483,500	64,593,300	71,101,400	64,190,000	51,097,300				
JUNE	86,079,600	71,953,800	79,796,500	84,019,700	75,275,900	30,964,600				
JULY	94,689,400	90,962,400	81,616,100	91,685,900	75,783,600	0				
AUGUST	82,895,700	83,588,500	81,362,100	83,598,300	68,990,800	0				
SEPTEMBER	72,766,600	73,092,300	67,657,100	71,595,500	60,089,500	0				
OCTOBER	54,727,200	52,408,700	51,437,600	58,832,600	51,659,300	0				
NOVEMBER	40,967,100	39,102,500	38,510,600	45,008,800	36,614,900	0				
DECEMBER	36,461,100	38,155,900	32,460,300	38,492,900	30,345,400	0				
Gallons	681,756,100	669,751,100	656,446,300	715,273,200	625,355,800	226,987,400	0	0	0	0

2020's

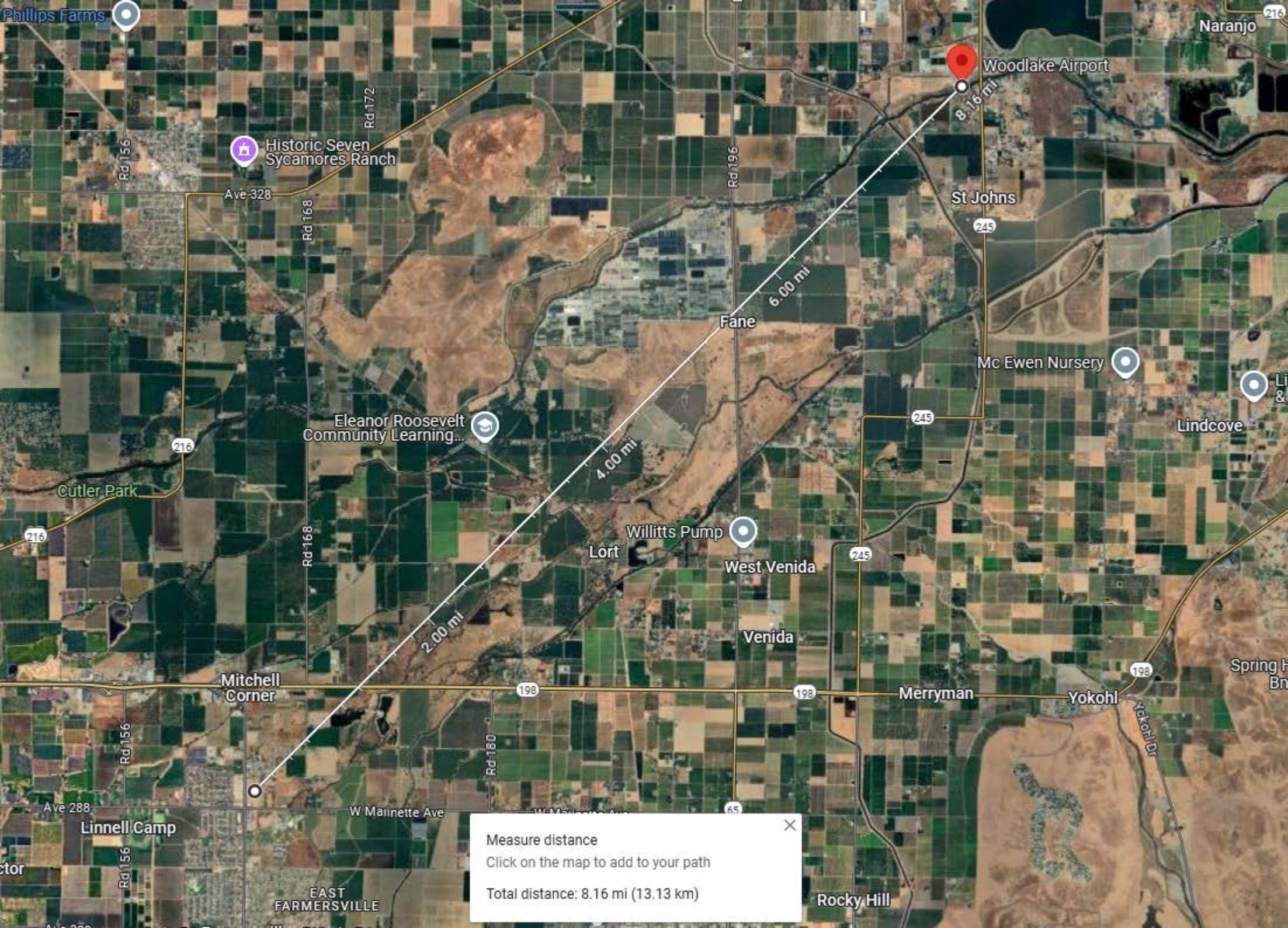
YEAR	POPULATION	TOTAL PRODUCED
2020		0
2021		0
2022		0
2023		0
2024		0
2025		0
2026		0
2027		0
2028		0
2029		0
DECADE TOTAL		0

MONTH	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										
Gallons	0	0	0	0	0	0	0	0	0	0

2030's

YEAR	POPULATION	TOTAL PRODUCED
2030		0
2031		0
2032		0
2033		0
2034		0
2035		0
2036		0
2037		0
2038		0
2039		0
DECADE TOTAL		0

MONTH	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										
Gallons	0	0	0	0	0	0	0	0	0	0


Phillips Farms
Naranjo
Woodlake Airport
8.16 mi
Historic Seven Sycamores Ranch
Rd 172
Rd 156
Rd 196
Ave 328
Rd 168
St Johns
245
6.00 mi
Fane
Mc Ewen Nursery
Eleanor Roosevelt Community Learning...
4.00 mi
Lindcove
216
Cutler Park
Willitts Pump
Lort
West Venida
2.00 mi
Venida
Mitchell Corner
198
Merryman
Yokohl
Yokohl Dr
Rd 180
Ave 288
W Marinette Ave
Linnell Camp
EAST FARMERSVILLE
Rocky Hill
Measure distance
Click on the map to add to your path
Total distance: 8.16 mi (13.13 km)

AIRPORT

WOODLAKE AIRPORT

Situated on approximately 87 acres, the Woodlake Airport provides the community with an air link to the world. The airport is located on the southern edge of Woodlake, next to the St. Johns River. Woodlake Municipal Airport is often free of the winter tule fog which plagues other Valley airports.

The airport is a general aviation facility and features one runway (Runway 7/25), 3,000 feet in length and 50 feet wide. The airport features the Runway Café, fueling facility, hangars and tie downs. The City has

For more information call 559.564.8055
Runway Café, 559.564.3986

CITY OF WOODLAKE EST. 1941

QUICK LINKS

Our History
Schools
Recreation
Contact

DEPARTMENTS

Administration
Housing
Planning
Public Works

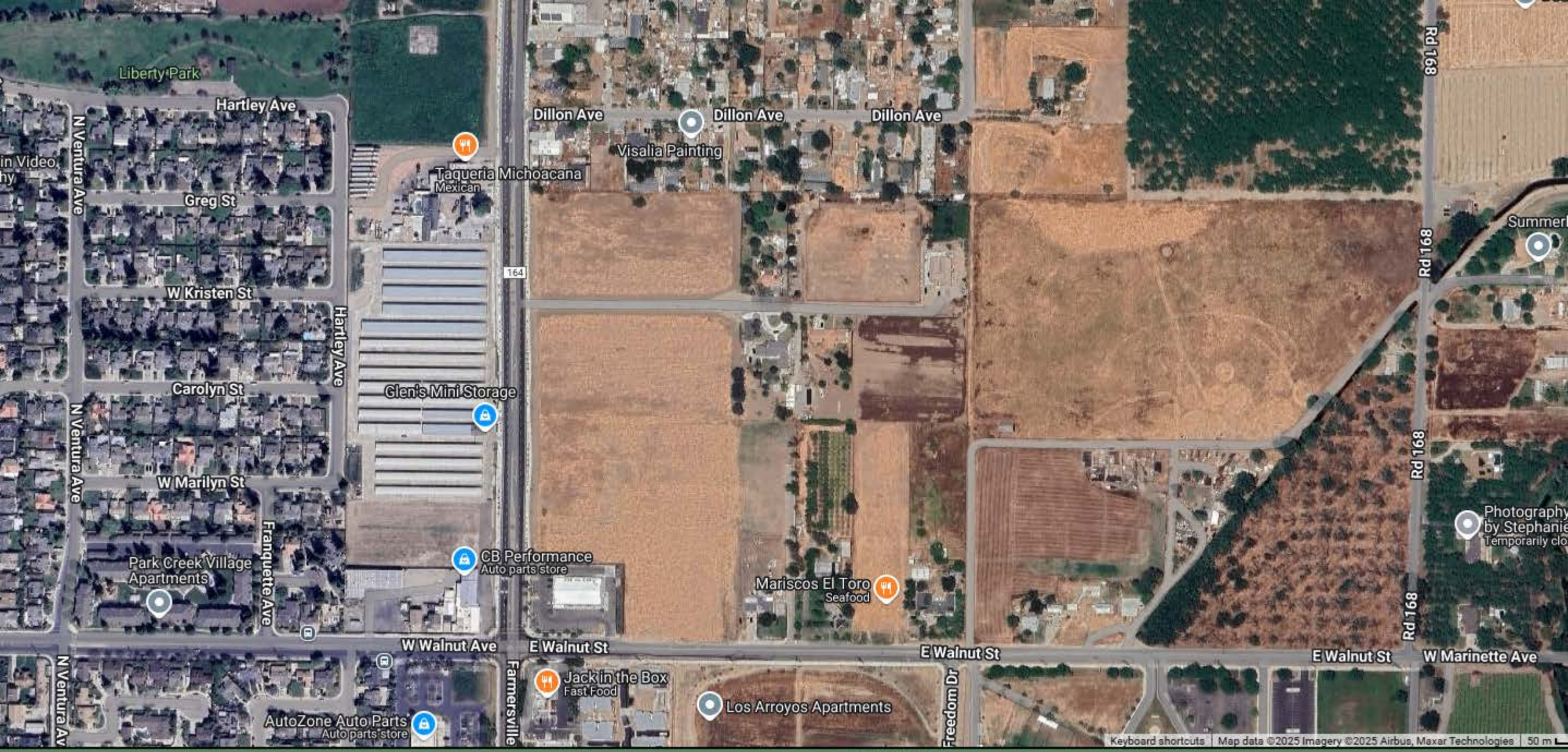
SERVICES

Transportation
Police
Fire

CONNECT

350 N Valencia Blvd
Woodlake, CA 93286
559-564-8055

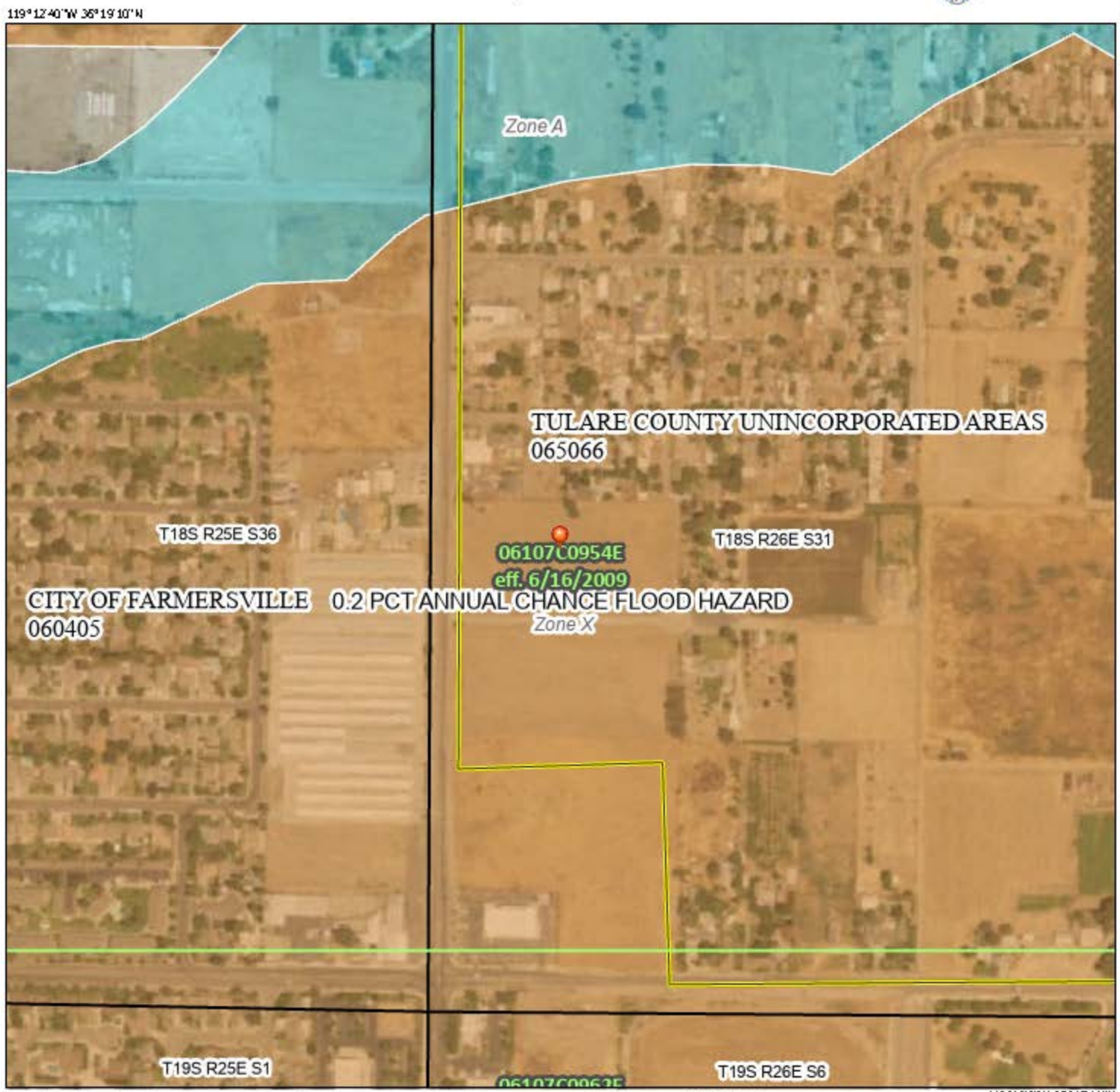
[REPORT] [MAP]	EL CENTRO ROCKET TARGET NO.1 (#92)	80000167	STATE RESPONSE	ACTIVE	E1/2, NW1/2, S25, T14S & R12E	EL CENTRO	92244	35-40%	IMPERIAL
[REPORT] [MAP]	EL CENTRO ROCKET TARGET NO. 2 (#93)	80000101	STATE RESPONSE	ACTIVE	E1/2, NW1/2, S13, T14S & R12E	EL CENTRO	92244	35-40%	IMPERIAL
[REPORT] [MAP]	EL MONTE (SAN GABRIEL VALLEY SUPERFUND SITE)	60001337	FEDERAL SUPERFUND - LISTED	ACTIVE	COVERS PORTIONS OF CITIES OF EL MONTE, ROSEMEAD, AND TEMPLE CITY	EL MONTE	91732	90-95%	LOS ANGELES
[REPORT] [MAP]	HYTONE CLEANERS	60000629	STATE RESPONSE	ACTIVE	2702 MOUNTAIN VIEW ROAD	EL MONTE	91732	95-100%	LOS ANGELES
[REPORT]	U.S. EPA SAN GABRIEL VALLEY - BOOSTER STATION	60003743	STATE RESPONSE	ACTIVE	COVERS VARIOUS CITIES	EL MONTE	91732		LOS ANGELES
[REPORT] [MAP]	OBIE'S DUMP	60001365	STATE RESPONSE	ACTIVE	8437 SHELDON ROAD	ELK GROVE	95624	55-60%	SACRAMENTO
[REPORT] [MAP]	MARCHANT/WHITNEY	60001628	STATE RESPONSE	ACTIVE	5679 HORTON STREET	EMERYVILLE	94608	40-45%	ALAMEDA
[REPORT] [MAP]	SOUTHERN PACIFIC, SUISUN MARSH	48400001	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	END OF CHADBORNE RD, SUISUN MARSH	FAIRFIELD	94585	25-30%	SOLANO
[REPORT] [MAP]	PACIFIC COAST PIPE LINES	56130038	FEDERAL SUPERFUND - LISTED	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	67 EAST TELEGRAPH ROAD	FILLMORE	93015	60-65%	VENTURA
[REPORT] [MAP]	TRI-AIR, INCORPORATED	10070021	STATE RESPONSE	ACTIVE - LAND USE RESTRICTIONS	915 TENTH STREET	FIREBAUGH	93622	90-95%	FRESNO
[REPORT] [MAP]	BRITZ FERTILIZERS, INC - FIVE POINTS	10280077	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	21817 SOUTH COALINGA ROAD	FIVE POINTS	93624	80-85%	FRESNO
[REPORT] [MAP]	GEORGIA-PACIFIC CORPORATION	23240008	STATE RESPONSE	ACTIVE - LAND USE RESTRICTIONS	90 WEST REDWOOD AVENUE	FORT BRAGG	95437	45-50%	MENDOCINO
[REPORT] [MAP]	EEL RIVER SAWMILLS, MILL A	12240119	STATE RESPONSE	ACTIVE	1053 NORTHWESTERN AVE	FORTUNA	95540	40-45%	HUMBOLDT
[REPORT] [MAP]	FRESNO AIR TERMINAL/OLD HAMMER FIELD (J09CA0823)	10450005	STATE RESPONSE	ACTIVE	MCKINLEY AND CLOVIS AVENUES	FRESNO	93727	65-70%	FRESNO
[REPORT] [MAP]	FRESNO SANITARY LANDFILL	10490097	FEDERAL SUPERFUND - LISTED	ACTIVE - LAND USE RESTRICTIONS	SW CORNER OF JENSEN & WEST AVENUES	FRESNO	93706	95-100%	FRESNO
[REPORT] [MAP]	T H AGRICULTURE & NUTRITION, L.L.C.	10280334	FEDERAL SUPERFUND - DELISTED	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	7183 EAST MCKINLEY AVENUE	FRESNO	93727	40-45%	FRESNO
[REPORT] [MAP]	SOUTH FRESNO REGIONAL GROUNDWATER PLUME	10400005	STATE RESPONSE	ACTIVE	NORTH OF CHURCH AVENUE AT SOUTH EAST AVE	FRESNO	93721	95-100%	FRESNO
[REPORT] [MAP]	WEIR FLOWAY INC.	10340137	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	2494 SOUTH RAILROAD AVENUE, P.O. BOX 164	FRESNO	93707	95-100%	FRESNO
[REPORT] [MAP]	FMC CORPORATION - FRESNO	10280013	STATE RESPONSE	ACTIVE	2501 SOUTH SUNLAND AVENUE	FRESNO	93725	95-100%	FRESNO



0 SITES LISTED

STATUS	PROJECT TYPE	ADDRESS	CITY

National Flood Hazard Layer FIRMette



Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS
  - Without Base Flood Elevation (BFE) Zone A, V, A99
  - With BFE or Depth Zone AE, AO, AH, VE, AR
  - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD
  - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
  - Future Conditions 1% Annual Chance Flood Hazard Zone X
  - Area with Reduced Flood Risk due to Levee. See Notes. Zone X
  - Area with Flood Risk due to Levee Zone D
- OTHER AREAS
  - NO SCREEN Area of Minimal Flood Hazard Zone X
  - Effective LOMRs
  - Area of Undetermined Flood Hazard Zone D
- GENERAL STRUCTURES
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- OTHER FEATURES
  - 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
  - Coastal Transect
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- MAP PANELS
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

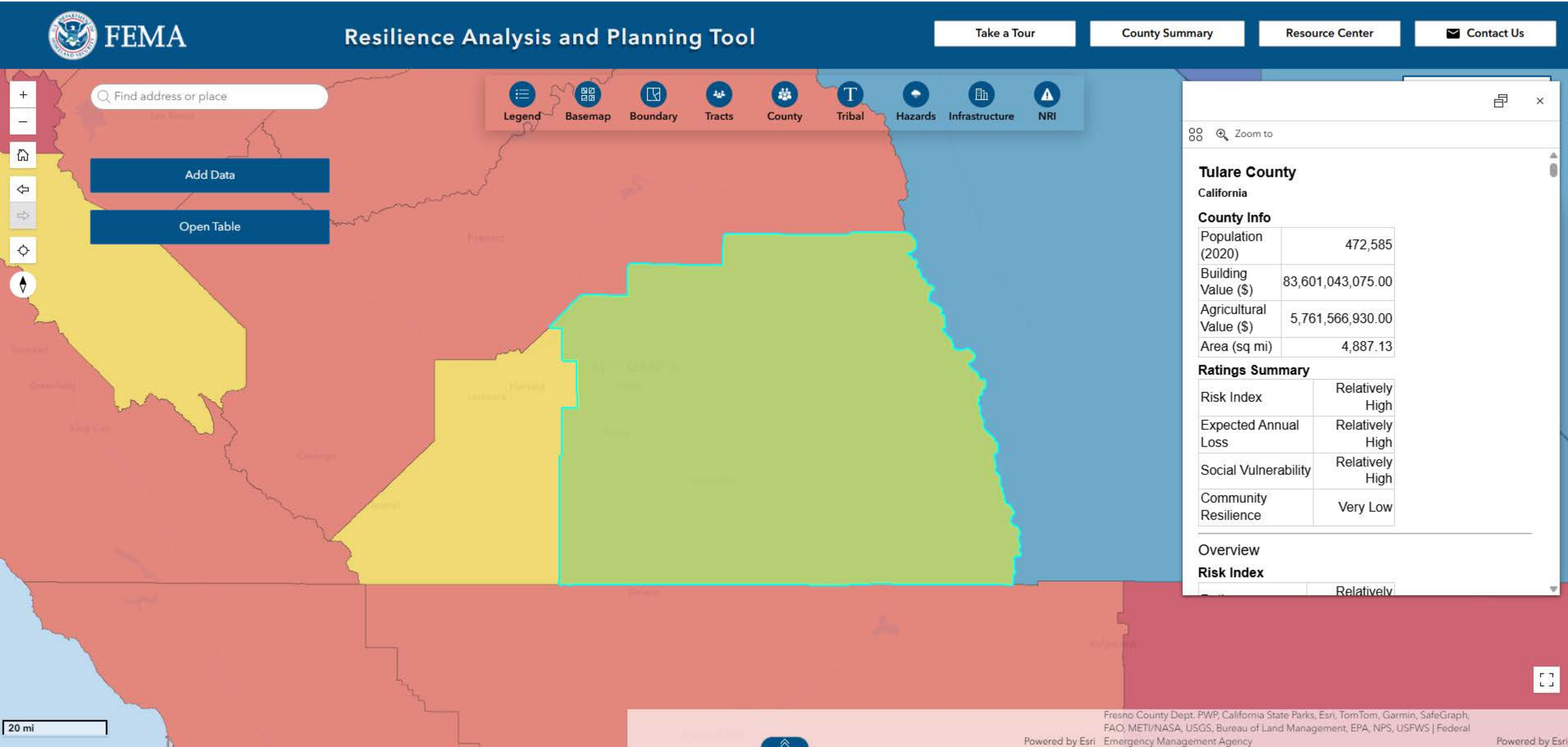
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/15/2025 at 6:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.


FEMA
Resilience Analysis and Planning Tool
Take a Tour
County Summary
Resource Center
Contact Us
Find address or place
Legend
Basemap
Boundary
Tracts
County
Tribal
Hazards
Infrastructure
NRI
Add Data
Open Table
Zoom to
Tulare County
California
County Info
Population (2020) 472,585
Building Value ($) 83,601,043,075.00
Agricultural Value ($) 5,761,566,930.00
Area (sq mi) 4,887.13
Ratings Summary
Risk Index Relatively High
Expected Annual Loss Relatively High
Social Vulnerability Relatively High
Community Resilience Very Low
Overview
Risk Index
Relatively
20 mi
Fresno County Dept. PWP, California State Parks, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS | Federal Emergency Management Agency
Powered by Esri
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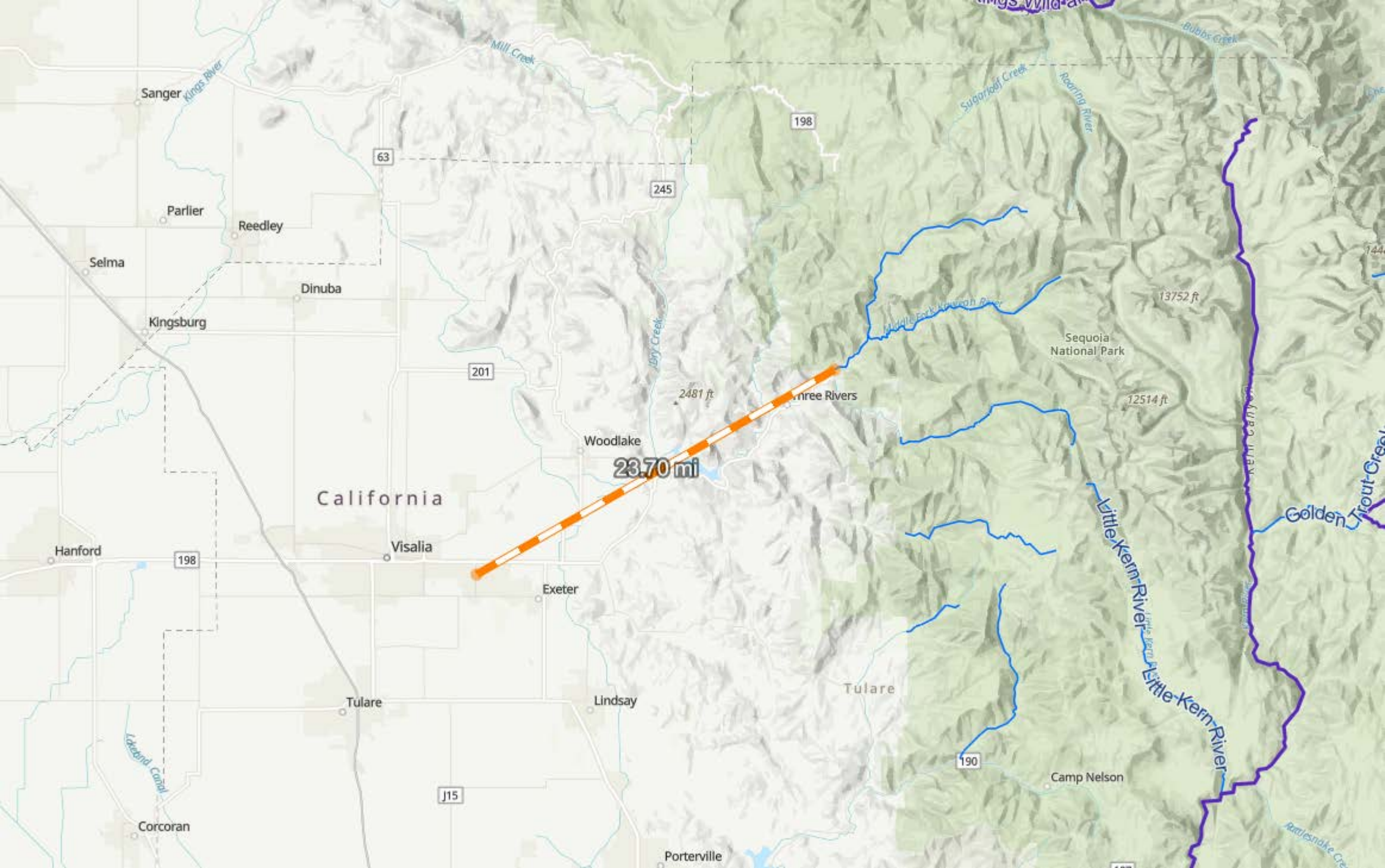
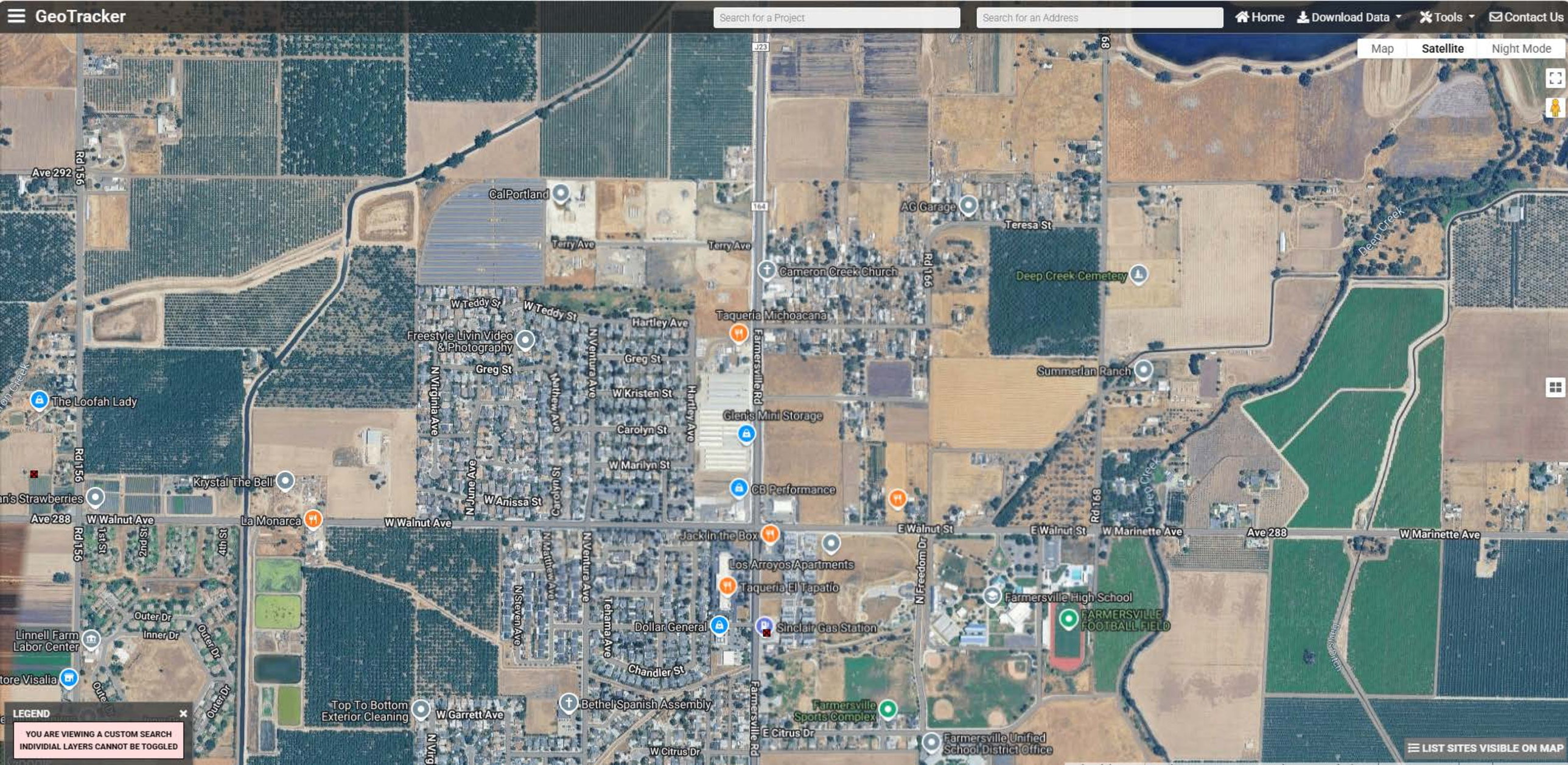

Sanger
Kings River
Mill Creek
Bubbs Creek
Sugarloaf Creek
Roaring River
198
63
245
Parlier
Reedley
Selma
Dinuba
Kingsburg
201
Dry Creek
Middle Fork Kaweah River
13752 ft
Sequoia
National Park
2481 ft
12514 ft
Three Rivers
Woodlake
23.70 mi
California
Visalia
Hanford
198
Exeter
Little Kern River
Little Kern River
Golden Trout Creek
Tulare
Lindsay
Tulare
Lakeland Canal
190
Camp Nelson
J15
Corcoran
Porterville
Rattlesnake Creek

Air Quality Thresholds of Significance-Criteria Pollutants

The San Joaquin Valley Air Pollution Control District's current adopted thresholds of significance for criteria pollutant emissions and their application is presented in the following table.

Pollutant/Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)
CO	100	100	100
NOx	10	10	10
ROG	10	10	10
SOx	27	27	27
PM_{10}	15	15	15
PM2.5	15	15	15


GeoTracker
Search for a Project
Search for an Address
Home
Download Data
Tools
Contact Us
Map
Satellite
Night Mode
Ave 292
Rd 156
CalPortland
Terry Ave
Cameron Creek Church
AG Garage
Teresa St
Deep Creek Cemetery
Deep Creek
Rd 168
W Teddy St
Hartley Ave
Taqueria Michoacana
Freestyle Livin Video & Photography
Greg St
N Virginia Ave
N Ventura Ave
Matthew Ave
W Kristen St
Farmersville Rd
Summerlan Ranch
The Loofah Lady
Carolyn St
Glen's Mini Storage
W Marilyn St
N June Ave
N Johnson St
W Anissa St
CB Performance
Krystal The Bell
Ave 288
W Walnut Ave
La Monarca
E Walnut St
W Marinette Ave
1st St
2nd St
4th St
Jack in the Box
Los Arroyos Apartments
Taqueria El Tapatio
N Freedom Dr
Farmersville High School
FARMERSVILLE FOOTBALL FIELD
N Seven Ave
Tehama Ave
Outer Dr
Inner Dr
Linnell Farm Labor Center
Dollar General
Sinclair Gas Station
Chandler St
Top To Bottom Exterior Cleaning
W Garrett Ave
Bethel Spanish Assembly
Farmersville Sports Complex
E Citrus Dr
W Citrus Dr
Farmersville Unified School District Office
LEGEND
YOU ARE VIEWING A CUSTOM SEARCH
INDIVIDIAL LAYERS CANNOT BE TOGGLED
LIST SITES VISIBLE ON MAP

From: Rod Stinson
To: Sepulveda, Margaret G
Subject: RE: [EXTERNAL] Tierra Vista Project [New Project: Gardenia Courtyards]
Date: Wednesday, February 11, 2026 3:01:14 PM
Attachments: Description of the Proposed Project and Endangered Species Analysis.docx
image001.png

Hi Maggie,

I'm sorry for bothering you after such a long time, but you were so helpful that I was hoping you could lend us a hand again. We are working on another project that may in the same boat as the project we talked about a while ago in this email string. We are preparing an Environmental Assessment for the Gardenia Courtyards Project in Tulare County (I'm not sure you're the right contact, but I hope so) and HCD requested that we conduct informal consultation with USFWS about effects to special-status species. In 2024, we talked about a project in the San Joaquin Valley, and you responded that USFWS does not issue a determination of no effect or conduct informal consultation for projects that do not have the potential to impact critical habitat or special-status species. I believe that the same situation applies to the Gardenia Courtyards Project and I'm hoping that you will concur. A description of the project site, the proposed development, and an excerpt of the analysis of potential impacts to endangered species is included as an attachment; a brief summary is provided below.

The 2.39-acre project site is located northeast of the intersection of Farmersville Road and East Walnut Street/West Walnut Avenue, in the City of Farmersville, California. The project site is currently undeveloped with a private, dirt stubbed street on the project site's southern frontage. The Gardenia Courtyards Project would include the development of a 42-unit affordable senior housing community. Construction of the proposed project would be expected to occur over an approximately one-year and five-month period and all staging areas during project construction would be located on-site. The maximum depth of ground disturbance during construction of the proposed project, including utility trenches and site grading, would be approximately 20 feet.

As discussed in detail in the attached document, habitat does not exist on-site to support the special-status species that were listed as potentially occurring in the project site vicinity. In addition, the IPaC results note that the project site does not contain any critical habitat. Thus, we concluded that the proposed project would not result in any adverse effects to special-status species. If you agree with our conclusions, will you confirm that this project falls under the same umbrella as the project that we discussed before, and that it is not a project for which USFWS would conduct informal consultation?

Please let me know if you have any questions; I look forward to discussing the project with you further (if needed).

Thanks,

Roderick Stinson

Vice President

phone. (916) 372-6100 1501 Sports Drive, Suite A Sacramento, CA 95834
fax. (916) 419-6108 www.raneymanagement.com

RANEY PLANNING & MANAGEMENT, INC. 25 years

From: Sepulveda, Margaret G <margaret_sepulveda@fws.gov>
Sent: Thursday, December 19, 2024 9:01 AM
To: Rod Stinson <rods@raneymanagement.com>
Subject: RE: [EXTERNAL] Tierra Vista Project

Hi, Rod. I can confirm this is what we discussed. Thank you!

Maggie Sepulveda
Senior Fish and Wildlife Biologist, San Joaquin Valley Division
U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way W-2605
Sacramento, CA 95825
(916) 414-6512
margaret_sepulveda@fws.gov

From: Rod Stinson <rods@raneymanagement.com>
Sent: Thursday, December 19, 2024 8:49 AM
To: Sepulveda, Margaret G <margaret_sepulveda@fws.gov>
Subject: [EXTERNAL] Tierra Vista Project

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Margaret,

We spoke back on October 21st regarding the Tierra Visa Project. In that conversation you noted that you had reviewed the project (we also discussed the minimal nature of project effects), and that USFW would not typically enter into informal consultation for a project like this. The USDA is asking me to confirm with you through email. Can you please respond confirming that we had this discussion?

Thank you,

Roderick Stinson

Vice President

phone. (916) 372-6100
fax. (916) 419-6108

1501 Sports Drive, Suite A Sacramento, CA 95834
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Human Services

The Human Services Branch provides services and essential resources to protect the most vulnerable Tulare County residents through the implementation of programs that use best practice interventions and education. The Human Services Branch serves the residents of Tulare County by providing protective and supportive services to at-risk and underserved families and individuals of all ages.

The Human Services Branch comprises the following three divisions:

Adult Services
Develops and supports home- and community-based services that allow individuals to stay in their own homes or least restrictive, home-like environments. Additionally, this division provides assistance to veterans and their families looking to access veterans benefits.

Child Welfare Services (CWS)
Assists families in providing preventive services when health and safety issues occur. CWS is dedicated to helping families achieve safety and stability, making sure children are

protected from abusive and potentially harmful situations, and ensuring families in our system receive the services they need.

TulareWORKs

Provides essential resources and services to children and families experiencing financial hardship, life crises, or barriers to employment. Additionally, TulareWORKs partners with community organizations to minimize employment barriers, provide job skills training, and facilitate additional support services.

Adoption

Learn More

Adult Protective Services (APS)

Learn More

CalFresh (Nutrition Assistance)

Learn More

CalWORKs (Cash Aid)

Learn More

Cash Assistance Program for Immigrants (CAPI)

Learn More

Child Welfare Services (CWS)

Learn More

Child Welfare Services Family Advocate

Learn More

Civil Rights

Learn More

Employment Services & Family Stabilization

Learn More

Foster Youth Resources

Learn More

General Assistance

Learn More

Health Insurance Counseling and Advocacy Program (HICAP)

Learn More

Indigent Cremation Program

Learn More

In-Home Parent Education

Learn More

In-Home Supportive Services (IHSS)

Learn More

Legal Services for Seniors

Learn More

Mandated Reporting

Medi-Cal

Learn More

Learn More

Multi-Purpose Senior Services (MPSS)

Learn More

Nutritious Meals for Seniors

Learn More

Pregnant & Parenting Teens (Cal-Learn)

Learn More

Presumptive Transfer

Learn More

Public Guardian

Learn More

Refugee Cash Assistance (RCA)

Learn More

Reporting Child Abuse

Learn More

Resource Family Approval (RFA)

Learn More

Safely Surrendering Your Baby

Learn More

Senior Information & Assistance

Learn More

Supplemental Security Income (SSI) Advocacy

Learn More

Step Up

Learn More

Trafficking & Crime Victim Assistance Program (TCVAP)

Learn More

TulareWORKs Family Advocate

Learn More

Contact & Location

Monday – Thursday
8:00 a.m. – 5:30 p.m.
Friday
8:00 a.m. – 12:00 p.m.

Telephone: (559) 624-8075
Fax: (559) 749-9838

Google Map

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Tulare County Health & Human Serv

Tulare County Health & Human Services Agency

2.8 ★★★☆☆ (62)

Environmental health service · ♿

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5957 S Mooney Blvd, Visalia, CA 93277

Open · Closes 5 PM

tchhsa.org

(800) 834-7121

7MHM+2X Visalia, California

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Popular times Mondays

LIVE A little busy

Restaurants | Hotels | Things to do | Transit | Parking | Pharmacies | ATMs

Sign in

Visalia Rawhide Baseball Club

GREEN ACRES

Visalia

Visalia Marriott at the Convention Center

Fiesta Auto Insurance & Tax Service

Adventure Park

198

W Tulare Ave

Tulare Ave

S Conyer St

Visalia Mall

W Walnut Ave

E Walnut Ave

Subway

Lennar at Higgins Ranch

Jack in the Box

Linnell Camp

E K Ave

W Whitendale Ave

2.00 mi

Ave 280

Costco Wholesale

4.00 mi

Rd 128

S Court St

Rd 156

EAST FARMERSVILLE

W Visalia Rd

Farmersville

E Visalia Rd

Higby

Ave 271

6.00 mi

Tulare County Health & Human Services Agency

S Demaree St

Oakmore Way

Avenue 264

Rd 140

S Farmersville Blvd

Loma

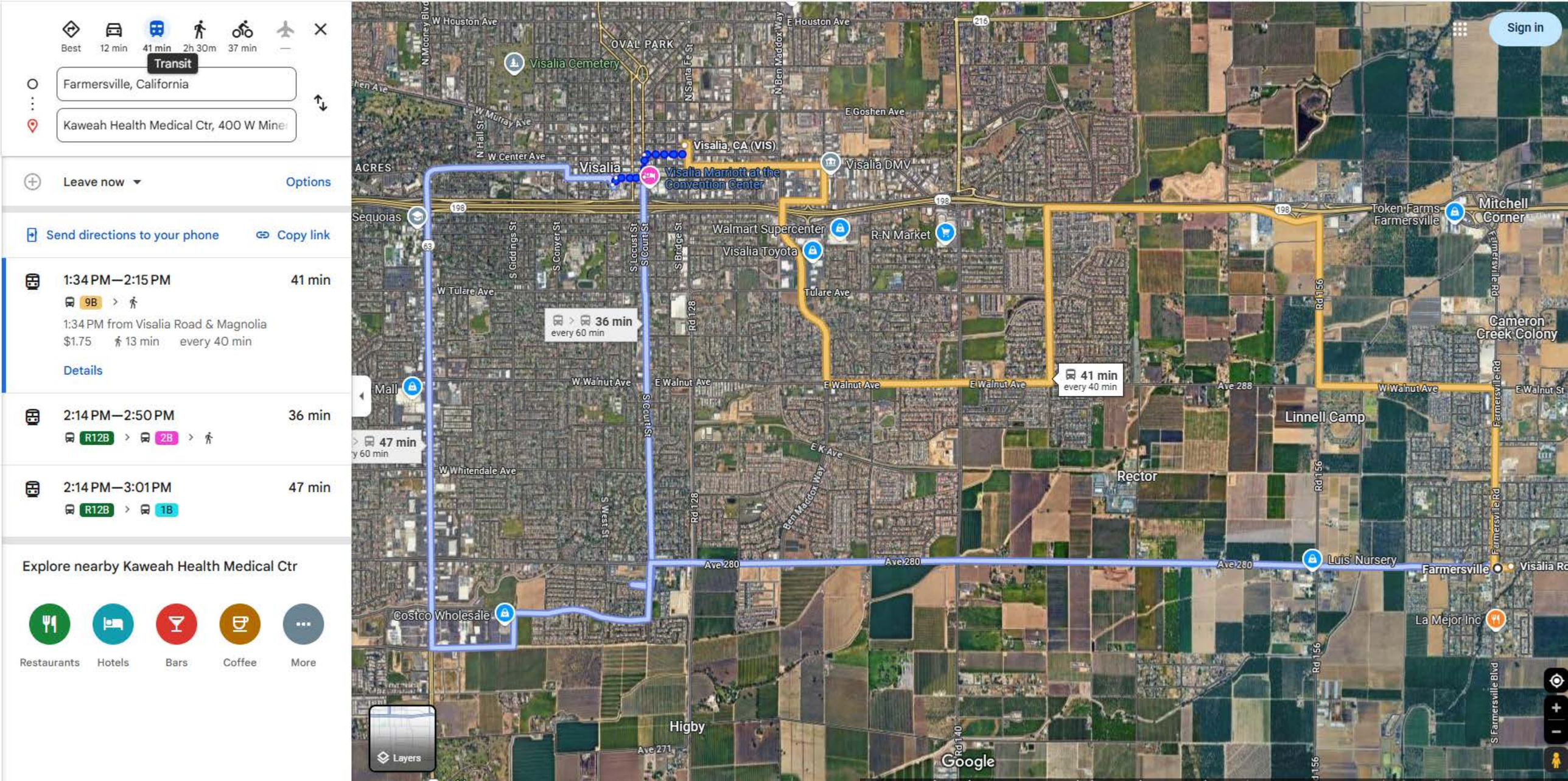
Measure distance

Click on the map to add to your path

Total distance: 6.59 mi (10.60 km)

Layers

Family HealthCare Network
Hours
All filters
Sign in
Search this area
Results
Share
Family HealthCare Network
3.2 (29)
Medical Center · 730 Farmersville Rd
Open · Closes 7 PM ·
(877) 960-3426
Website
Directions
Family HealthCare Network
5.0 (7)
Medical Center · 682 E Visalia Rd
Open · Closes 5 PM ·
(877) 960-3426
Website
Directions
Family HealthCare Network
3.7 (364)
Medical Center · 400 E Oak Ave
Open · Closes 7 PM ·
(877) 960-3426
Website
Directions
Family HealthCare Network
2.4 (136)
Medical Center · 401 E School Ave
Open · Closes 7 PM ·
(877) 960-3426
Website
Directions
Family HealthCare Network
3.1 (92)
Medical Center · 501 N Bridge St
Open · Closes 9 PM ·
(877) 960-3426
Website
Directions
Update results when map moves
AG Garage
Teresa St
Cameron Creek Colony
Freestyle Livin Video & Photography
Hartley Ave
Greg St
W Kristen St
Carolyn St
W Marilyn St
Krystal The Bell
Summerlan Ranch
Deep Creek
Walnut Ave
W Walnut Ave
E Walnut St
W Marinette Ave
Farmersville Rd
2,000.00 ft
Farmersville High School
N Freedom Dr
Davis Ditch
N Ventura Ave
Chandler St
Top To Bottom Exterior Cleaning
E Citrus Dr
W Citrus Dr
Sequoia Cleaning Services
N Linnell Ave
W Petunia St
W Front St
E Front St
Farmersville Junior High School
Family HealthCare Network
4,214.27 ft
E Cottonwood St
N Shasta Ave
N Kern Ave
N Ventura Ave
N Matthew Ave
N Virginia Ave
Avery Ave
N Gene Ave
N Dwight Ave
E Yew St
W Ash St
EAST FARMERSVILLE
Measure distance
Click on the map to add to your path
Total distance: 4,214.27 ft (1.28 km)
Layers


Best
12 min
41 min
Transit
2h 30m
37 min
Farmersville, California
Kaweah Health Medical Ctr, 400 W Mine
Leave now
Options
Send directions to your phone
Copy link
1:34 PM—2:15 PM
41 min
9B
1:34 PM from Visalia Road & Magnolia
$1.75
13 min
every 40 min
Details
2:14 PM—2:50 PM
36 min
R12B
2B
2:14 PM—3:01 PM
47 min
R12B
1B
Explore nearby Kaweah Health Medical Ctr
Restaurants
Hotels
Bars
Coffee
More
Sign in
Visalia Cemetery
OVAL PARK
Visalia, CA (VIS)
Visalia Marriott at the Convention Center
Visalia
Visalia DMV
Sequoias
Walmart Supercenter
R-N Market
Visalia Toyota
Token Farms Farmersville
Mitchell Corner
Cameron Creek Colony
Linnell Camp
Rector
Luis Nursery
Farmersville
La Mejor Inc
Costco Wholesale
Higby
Tulare Ave
W Walnut Ave
E Walnut Ave
W Whitendale Ave
Ave 280
Ave 288
Ave 271
36 min
every 60 min
41 min
every 40 min
47 min
Layers
Google

Services & Schedules

Discover the various routes for traveling within Tulare County. Use our interactive map to select specific routes and access more information.

Fixed Route →

With local and commuter routes, our fixed route services allow you to travel efficiently and affordably throughout Tulare County.

Paratransit & Dial-A-Ride →

Seniors, Medicare cardholders, and ADA-eligible riders can take advantage of paratransit and Dial-A-Ride services throughout the region.

On-Demand/Microtransit →

Our shared-ride, on-demand service, also known as microtransit, will take you where and when you want to go within the Transport service zones—just request a trip through our app.

A free transportation service for at-risk youth in Tulare County, the LOOP Bus provides group transit through community-based programs.

Taking you throughout and across Tulare County.

All Routes

Find the route that's right for you.

View All Routes | Local Fixed Routes | Commuter Fixed Routes

C10	North County	See Route →
	DL – Dinuba Loop	See Route →
C20	South County	See Route →
C30	Northeast County	See Route →
C40	Southeast County	See Route →
C70	Porterville – Springville	See Route →
C80	Porterville-Terra Bella-Ducor	See Route →
C90	Lindsay – Strathmore – Plainview – Woodville – Poplar – Porterville	See Route →
TR	Tule River Indian Reservation	See Route →
11X	Tulare-Visalia	See Route →

D2	Northwest Dinuba	See Route →
D3	Southeast Dinuba	See Route →
D4	Central Dinuba	See Route →
T1	North Tulare	See Route →
T2	Southeast Tulare	See Route →
T3	West Tulare	See Route →
T4	Northeast Tulare	See Route →
T5	Southwest Tulare	See Route →
T6	East Tulare	See Route →

System map

HIDE ALL SHOW ALL

- Dinuba Loop
- C10: North County
  see schedule
- C20: South County
  see schedule
- C30: Northeast County
  see schedule
- C40: Southeast County
  see schedule
- C70: Porterville - Springville
  see schedule

Contact Us

Find additional support while planning your route and exploring Tulare County.

Call the Greenline

Get information about fixed route schedules, transfers, and other information for any transit service in Tulare County, including TCRTA services.

Hours:

Monday – Friday: 8:00 a.m. – 5:00 p.m.
Saturday: 8:30 a.m. – 5:30 p.m.
Sunday: Closed

1 (877) 404-6473

Call Customer Service

For specific questions and concerns about TCRTA services, alerts, policies, and reservations, contact our customer service team for assistance seven days a week.

Hours:

Monday – Sunday: 8:00 a.m. – 5:00 p.m.

1 (559) 372-2290

Find Help & Support

Click here to report your rider experience. We would like to hear from you.
i-Sight Portal

200 E. Center Ave., Visalia, CA
93291

Explore TCRTA

Plan Your Trip

Routes & Schedules

Fares & Passes

Public Information

Procurement

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Policies & More

App Terms of Use

Connecting Services

Visalia Transit

Porterville Transit

Delano Area Rapid Transit (DART)

Kings Area Regional Transit (KART)

Alerts

Plan Your Trip / Track Your Bus

your inbox.

Your Email

Submit

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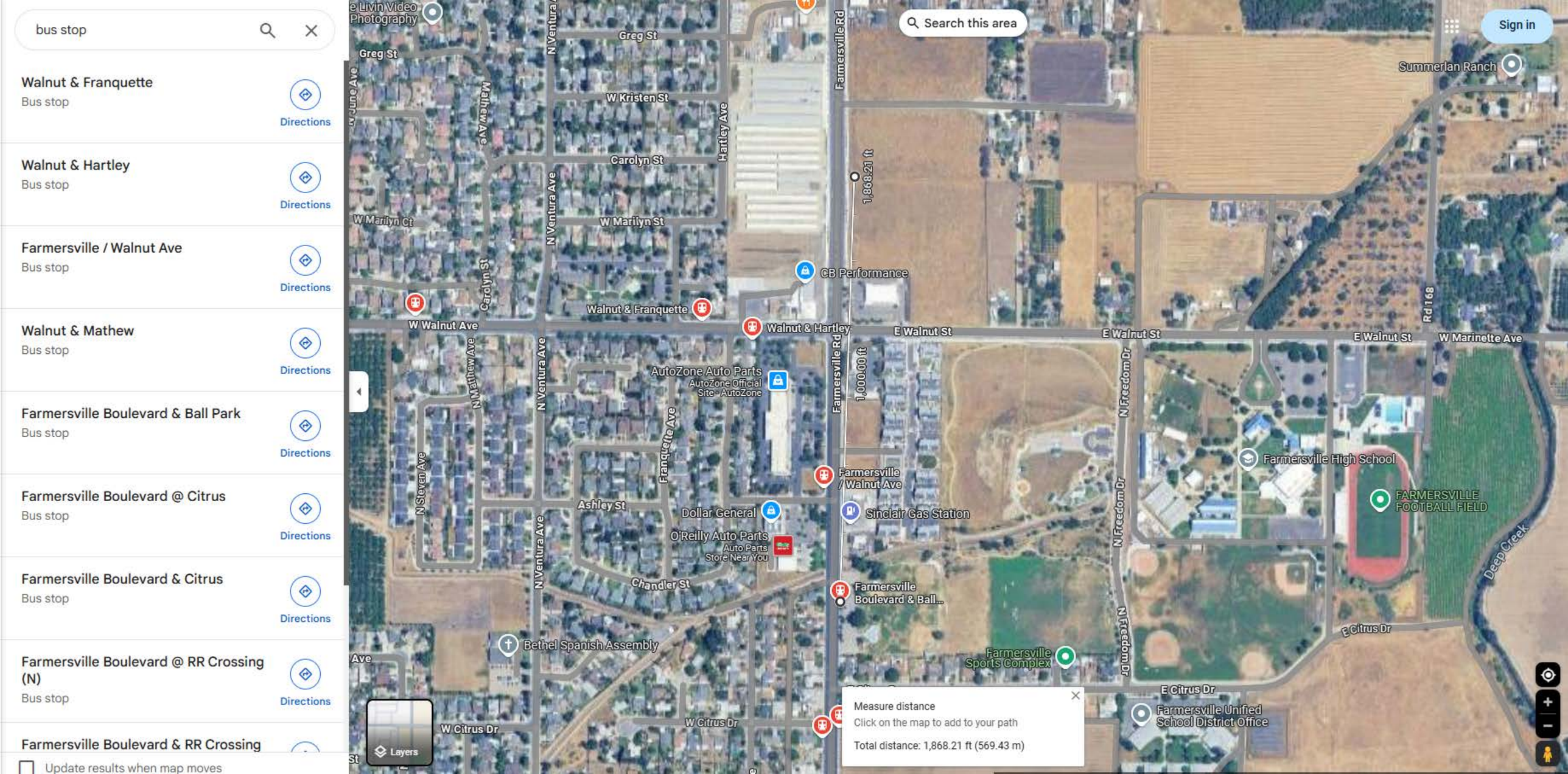
bus stop
Farmersville / Walnut Ave
Bus stop
Directions
Walnut & Hartley
Bus stop
Directions
Farmersville Boulevard & Ball Park
Bus stop
Directions
Walnut & Franquette
Bus stop
Directions
Farmersville Boulevard @ Citrus
Bus stop
Directions
Farmersville Boulevard & Citrus
Bus stop
Directions
Farmersville Boulevard @ RR Crossing (N)
Bus stop
Directions
Farmersville Boulevard & RR Crossing (S)
Bus stop
Directions
Update results when map moves
Search this area
Sign in
Terry Ave
Terry Ave
Terry Ave
Teresa St
Rd 168
Cameron Creek Church
Ave 291
Rd 166
Deep Creek Cemetery
Liberty Park
W Teddy St
Hartley Ave
Dillon Ave
Visalia Painting
Livin Video hotography
N Ventura Ave
Greg St
Greg St
Farmersville Rd
Summerlan Ranch
Matthew Ave
W Kristen St
Hartley Ave
Carolyn St
N Ventura Ave
W Marilyn St
Photography by Stephanie
Temporarily closed
CB Performance
Carolyn St
Walnut & Franquette
Walnut & Hartley
E Walnut St
E Walnut St
E Walnut St
W Marinette Ave
Rd 168
Jack in the Box
N Matthew Ave
N Ventura Ave
AutoZone Auto Parts
N Freedom Dr
Franquette Ave
Farmersville High School
Ashley St
Dollar General
FARMERSVILLE FOOTBALL FIELD
Measure distance
Click on the map to add to your path
Total distance: 1,181.30 ft (360.06 m)
Layers


bus stop
Walnut & Franquette
Bus stop
Directions
Walnut & Hartley
Bus stop
Directions
Farmersville / Walnut Ave
Bus stop
Directions
Walnut & Mathew
Bus stop
Directions
Farmersville Boulevard & Ball Park
Bus stop
Directions
Farmersville Boulevard @ Citrus
Bus stop
Directions
Farmersville Boulevard & Citrus
Bus stop
Directions
Farmersville Boulevard @ RR Crossing (N)
Bus stop
Directions
Farmersville Boulevard & RR Crossing
Update results when map moves
Search this area
Sign in
Summerlan Ranch
Greg St
W Kristen St
Carolyn St
W Marilyn St
W Walnut Ave
Walnut & Franquette
Walnut & Hartley
CB Performance
AutoZone Auto Parts
AutoZone Official Site - AutoZone
Farmersville / Walnut Ave
Sinclair Gas Station
Dollar General
O'Reilly Auto Parts
Auto Parts Store Near You
Ashley St
Chandler St
Farmersville Boulevard & Ball...
Bethel Spanish Assembly
Farmersville Sports Complex
W Citrus Dr
E Citrus Dr
Farmersville Unified School District Office
Farmersville High School
FARMERSVILLE FOOTBALL FIELD
E Walnut St
W Marinette Ave
Deep Creek
Farmersville Rd
N Ventura Ave
Hartley Ave
Carolyn St
N Mathew Ave
N Steven Ave
Franquette Ave
N Freedom Dr
Rd 168
1,868.21 ft
1,000.00 ft
Layers
Measure distance
Click on the map to add to your path
Total distance: 1,868.21 ft (569.43 m)

Table

All Topics	Farmersville city, California
Median households income (in 2023 dollars), 2019-2023	**$57,832**
PEOPLE	
Population	
Population estimates, July 1, 2024, (V2024)	⚠ 10,501
Population estimates base, April 1, 2020, (V2024)	⚠ 10,407
Population, percent change - April 1, 2020 (estimates base) to July 1, 2024, (V2024)	⚠ 0.9%
Population, Census, April 1, 2020	10,397
Population, Census, April 1, 2010	10,588
Age and Sex	
Persons under 5 years, percent	⚠ 5.2%
Persons under 18 years, percent	⚠ 30.1%
Persons 65 years and over, percent	⚠ 8.7%
Female persons, percent	⚠ 47.9%
Race and Hispanic Origin	
White alone, percent	⚠ 31.7%
Black alone, percent (a) (a)	⚠ 0.2%
American Indian and Alaska Native alone, percent (a) (a)	⚠ 1.2%
Asian alone, percent (a) (a)	⚠ 0.4%
Native Hawaiian and Other Pacific Islander alone, percent (a) (a)	⚠ 0.2%
Two or More Races, percent	⚠ 32.3%
Hispanic or Latino, percent (b) (b)	⚠ 89.1%
White alone, not Hispanic or Latino, percent	⚠ 9.7%
Population Characteristics	
Veterans, 2019-2023	104
Foreign-born persons, percent, 2019-2023	24.3%
Housing	
Housing Units, July 1, 2024, (V2024)	X
Owner-occupied housing unit rate, 2019-2023	66.3%
Median value of owner-occupied housing units, 2019-2023	$237,700
Median selected monthly owner costs - with a mortgage, 2019-2023	$1,316

Map ☑

Table ☑

Description of Rating ☑

Rating Options ☑

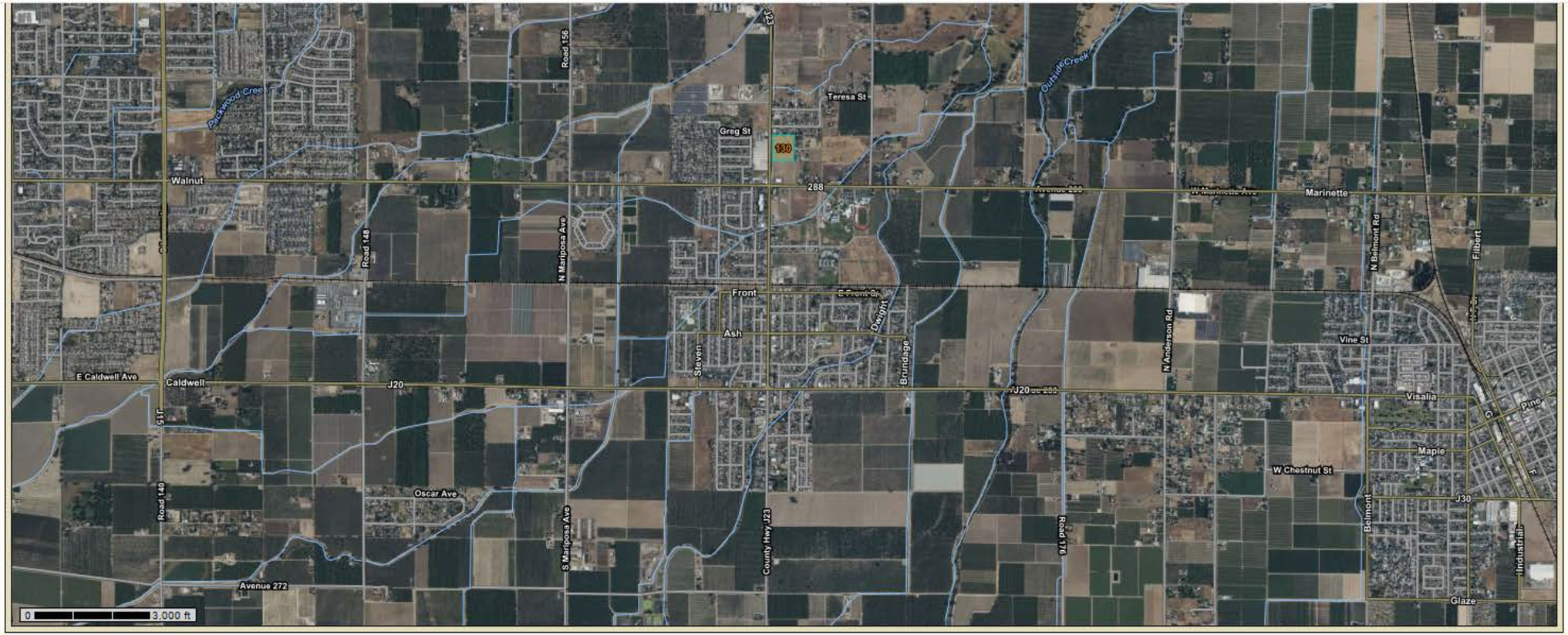
Detailed Description ☐

Advanced Options

View Description | View Rating

- Hydric Rating by Map Unit
- Irrigated Capability Class
- Irrigated Capability Subclass
- National Commodity Crop Productivity Index
- NH Forest Soil Group
- Nonirrigated Capability Class
- Nonirrigated Capability Subclass
- NRCS Ecological Site ID
- NRCS Ecological Site Name
- Order of Soil Survey
- PFAS Attenuation in Soils
- PFAS Movement Classes
- Soil Moisture Class
- Soil Moisture Subclass
- Soil Taxonomy Classification
- Soil Taxonomy Great Group
- Soil Taxonomy Order
- Soil Taxonomy Particle Size or Substitute Class
- Soil Taxonomy Subgroup
- Soil Taxonomy Suborder
- Soil Temperature Regime

- Land Management
- Military Operations
- Recreational Development
- Sanitary Facilities
- Soil Health
- Vegetative Productivity



Tables — Farmland Classification — Summary By Map Unit

Summary by Map Unit — Tulare County, Western Part, California (CA659)

Summary by Map Unit — Tulare County, Western Part, California (CA659)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
130	Nord fine sandy loam, 0 to 2 percent slopes	Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	8.7	100.0%
Totals for Area of Interest			**8.7**	**100.0%**

Description — Farmland Classification

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options — Farmland Classification

Tables — Dwellings Without Basements — Summary By Map Unit

Summary by Map Unit — Tulare County, Western Part, California (CA659)

Summary by Map Unit — Tulare County, Western Part, California (CA659)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
130	Nord fine sandy loam, 0 to 2 percent slopes	Very limited	Nord (85%)	Flooding (1.00)	8.8	100.0%
Totals for Area of Interest					**8.8**	**100.0%**

Table — Dwellings Without Basements — Summary by Rating Value

Summary by Rating Value

Summary by Rating Value

Rating	Acres in AOI	Percent of AOI
Very limited	8.8	100.0%
Totals for Area of Interest	**8.8**	**100.0%**

Description — Dwellings Without Basements

ENG - Engineering

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options — Dwellings Without Basements

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	1199999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	2282.85
ASD for Thermal Radiation for People (ASDPPU)	5303.80
ASD for Thermal Radiation for Buildings (ASDBPU)	1333.23
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	119999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	1066.29
ASD for Thermal Radiation for People (ASDPPU)	2032.29
ASD for Thermal Radiation for Buildings (ASDBPU)	459.84
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	59999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	847.92
ASD for Thermal Radiation for People (ASDPPU)	1522.56
ASD for Thermal Radiation for Buildings (ASDBPU)	333.76
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	11999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	498.04
ASD for Thermal Radiation for People (ASDPPU)	778.70
ASD for Thermal Radiation for Buildings (ASDBPU)	158.59
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	8999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	452.85
ASD for Thermal Radiation for People (ASDPPU)	690.74
ASD for Thermal Radiation for Buildings (ASDBPU)	138.84
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	2999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	314.91
ASD for Thermal Radiation for People (ASDPPU)	437.03
ASD for Thermal Radiation for Buildings (ASDBPU)	83.54
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	599
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	184.89
ASD for Thermal Radiation for People (ASDPPU)	223.40
ASD for Thermal Radiation for Buildings (ASDBPU)	39.67
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	59
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	85.93
ASD for Thermal Radiation for People (ASDPPU)	85.06
ASD for Thermal Radiation for Buildings (ASDBPU)	13.59
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	11
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	

Calculate Acceptable Separation Distance

Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	49.32
ASD for Thermal Radiation for People (ASDPPU)	42.25
ASD for Thermal Radiation for Buildings (ASDBPU)	6.25
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options

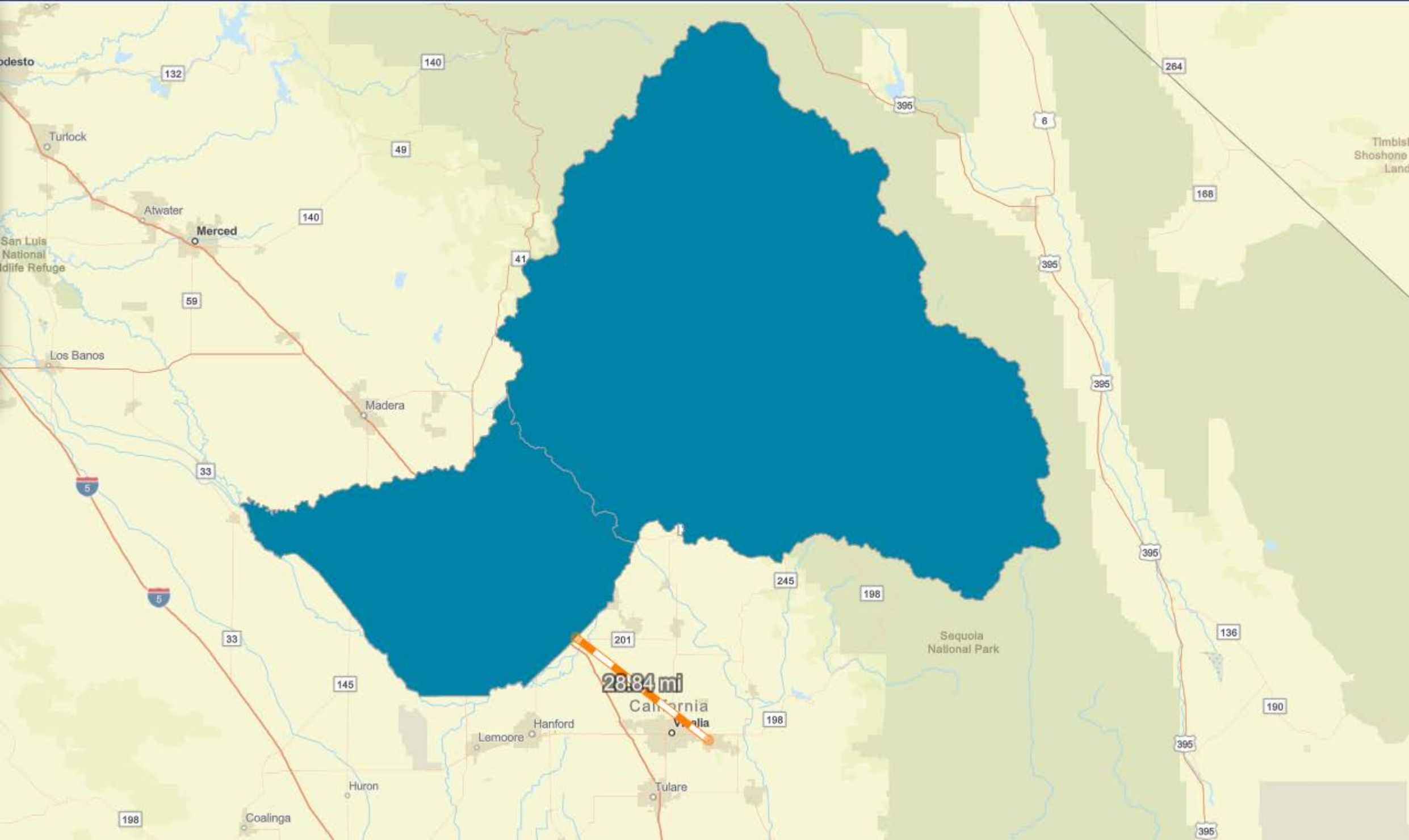
	mm/dd/yyyy
User's Name	

Road # 1 Name:	

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☐	**Heavy Trucks** ☐
Effective Distance	224		
Distance to Stop Sign			
Average Speed	35		
Average Daily Trips (ADT)	38		
Night Fraction of ADT	15		
Road Gradient (%)			
Vehicle DNL	30	0	0
Calculate Road #1 DNL	30	Reset	

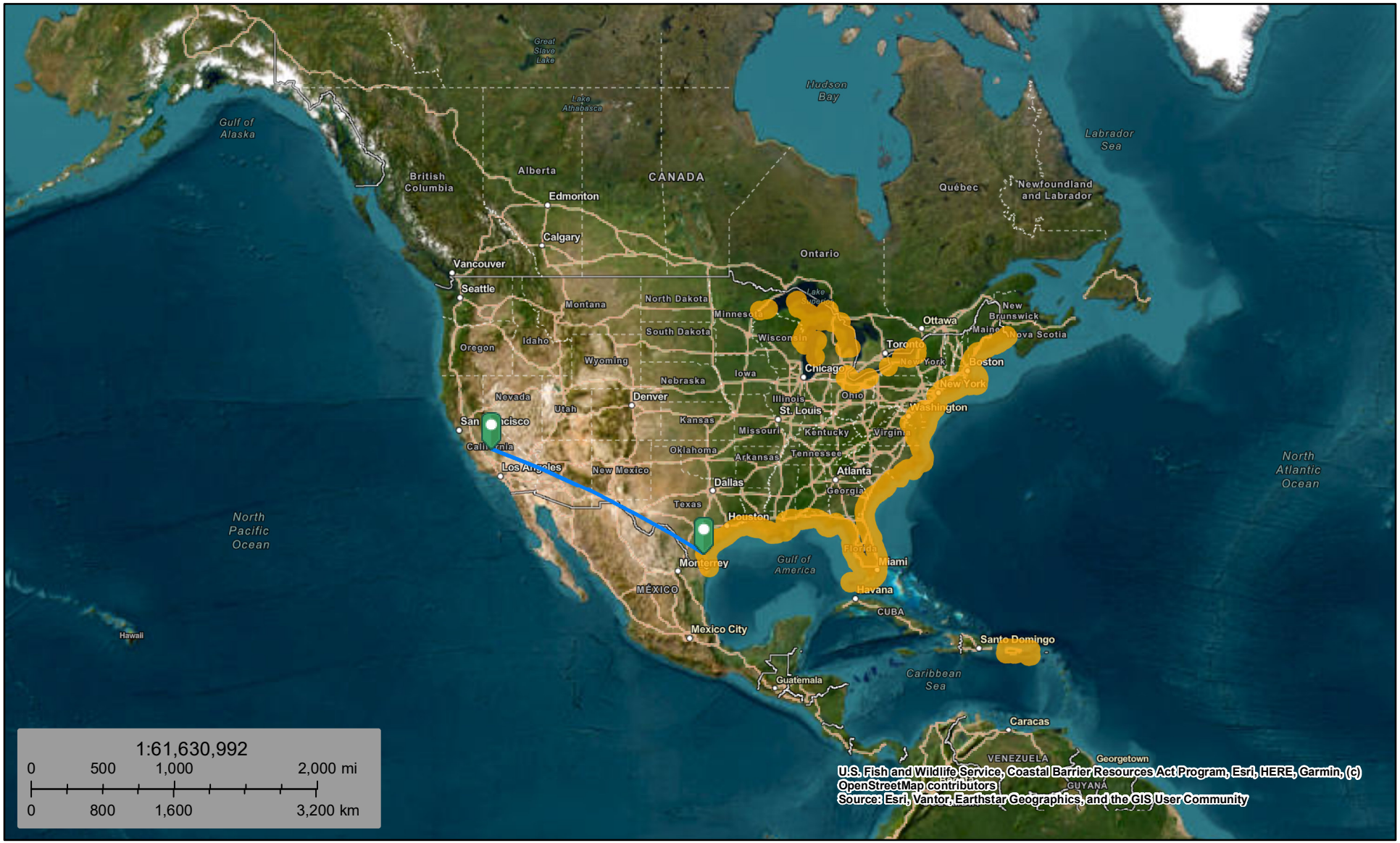
Add Road Source | Add Rail Source


Turlock
Atwater
Merged
Los Banos
Madera
Hanford
Lemoore
Huron
Coalinga
Tulare
Sequoia
National Park
28.84 mi
132
140
49
59
33
5
145
198
201
245
41
395
6
264
168
136
190

Kings Canyon
National Park
Pine Flat
Lake
Sanger
Parlier
Reedley
Selma
Dinuba
Kingsburg
Sequoia
National Park
Three Rivers
Woodlake
California
Hanford
Visalia
Exeter
Tulare
Lindsay

U.S. Fish and Wildlife Service
Coastal Barrier Resources System

Coastal Barrier Resources Map



December 10, 2025

Generalized Units

This map is for general reference only. The Coastal Barrier Resources System (CBRS) boundaries depicted on this map are representations of the controlling CBRS boundaries, which are shown on the official maps, accessible at https://www.fws.gov/library/collections/official-coastal-barrier-resources-system-maps. All CBRS related data should be used in accordance with the layer metadata found on the CBRS Mapper website.

The CBRS Buffer Zone represents the area immediately adjacent to the CBRS boundary where users are advised to contact the Service for an official determination (https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation) as to whether the property or project site is located "in" or "out" of the CBRS.

CBRS Units normally extend seaward out to the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Tulare County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

NOT FOR CONSULTATION

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Buena Vista Lake Ornate Shrew Sorex ornatus relictus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/1610	Endangered
San Joaquin Kit Fox Vulpes macrotis mutica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered
Tipton Kangaroo Rat Dipodomys nitratoides nitratoides Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7247	Endangered

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard Gambelia silus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/625	Endangered

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Northwestern Pond Turtle Actinemys marmorata — Proposed Threatened
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/1111

Amphibians

NAME	STATUS
Western Spadefoot Spea hammondii	Proposed Threatened

Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5425

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus	Proposed Threatened

Wherever found
There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/9743

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi	Threatened

Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/498

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Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete

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If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

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Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey

effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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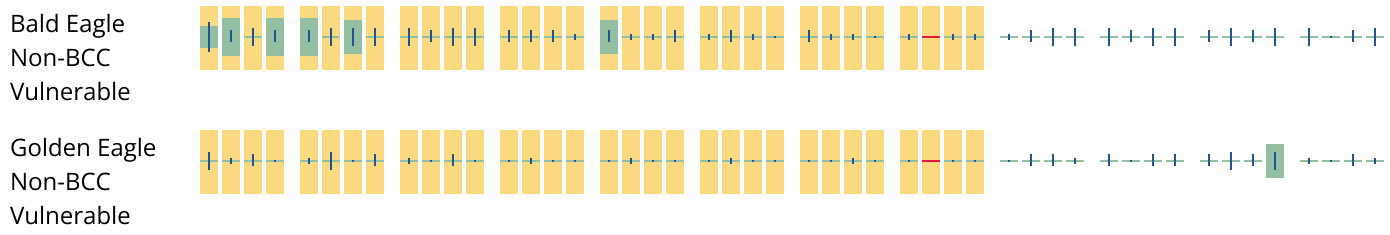

Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of

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presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-

golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15

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Black Swift Cypseloides niger — Breeds Jun 15 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8878

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Nuttall's Woodpecker Dryobates nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

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Oak Titmouse *Baeolophus inornatus* — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Santa Barbara Song Sparrow *Melospiza melodia graminea* — Breeds Mar 1 to Sep 5

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5513

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

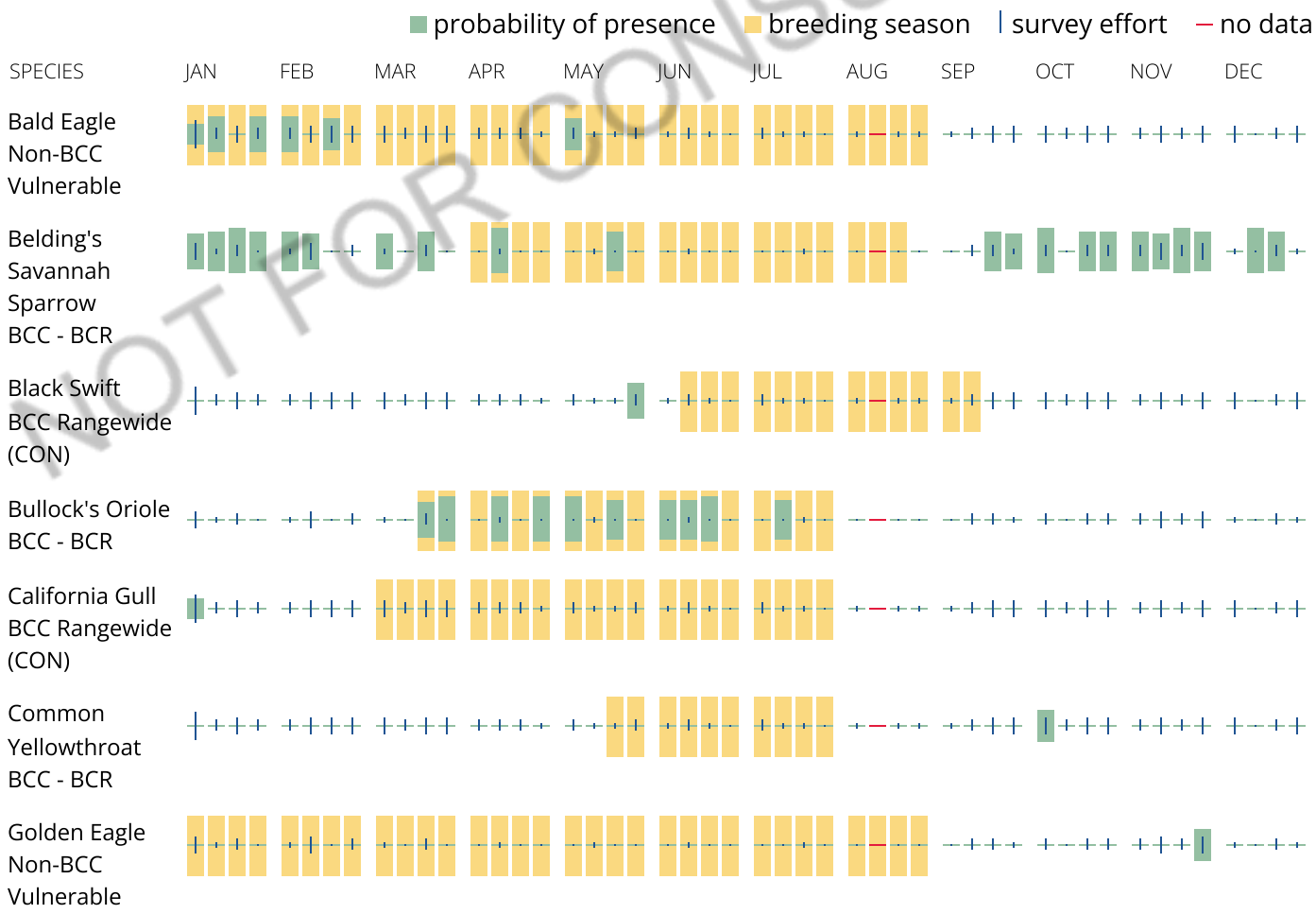
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



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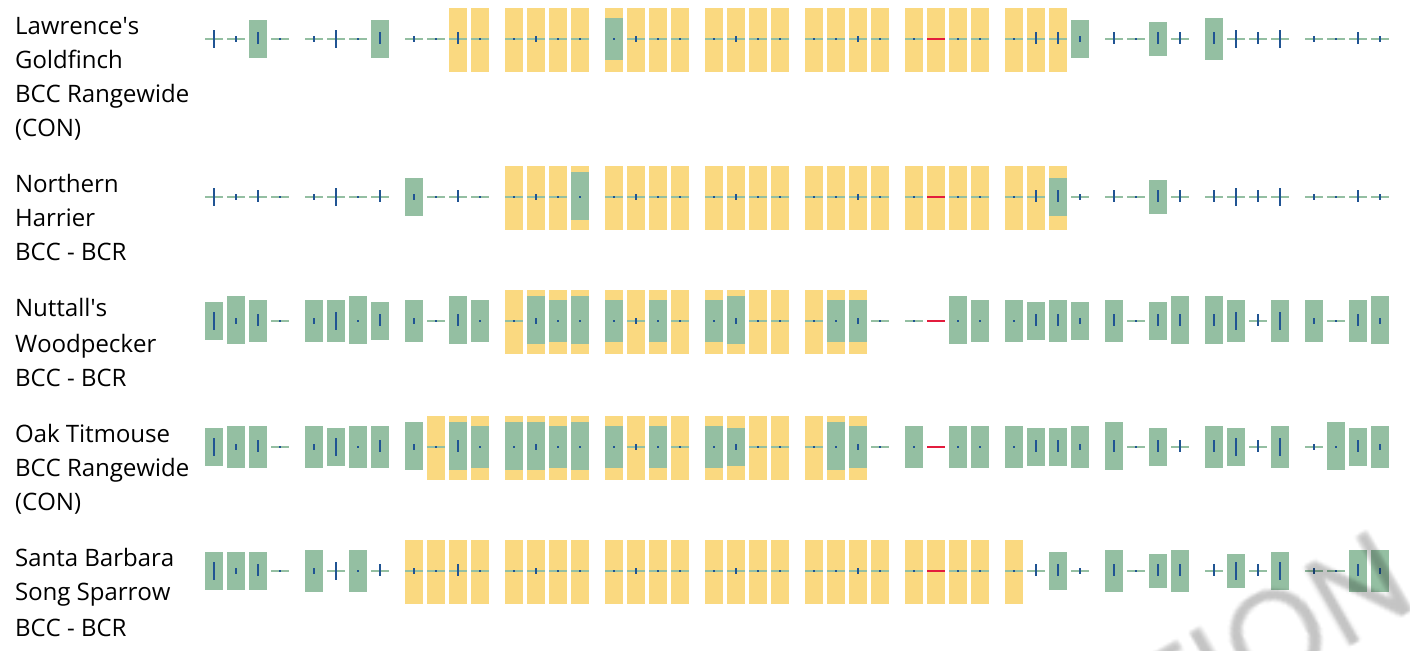

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Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

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For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

NOT FOR CONSULTATION

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

Wildlife refuges and fish hatcheries

Refuge and fish hatchery information is not available at this time

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

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The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

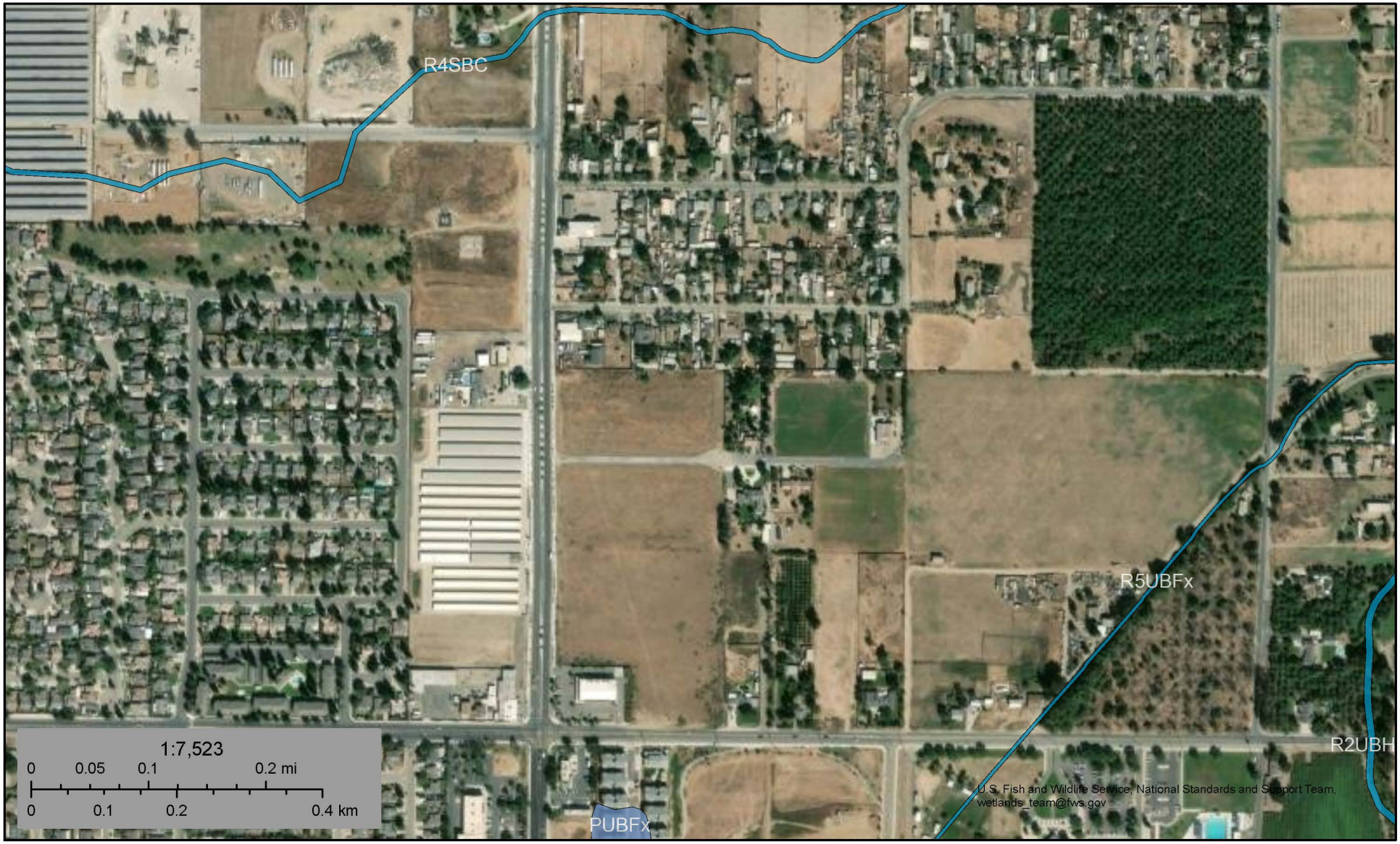
Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

U.S. Fish and Wildlife Service

National Wetlands Inventory

Gardenia Courtyard



May 15, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.