



Tracy Long Duration Energy Storage Project

Draft Initial Study-Mitigated Negative Declaration

prepared by

San Joaquin County
Community Development Department
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prepared with the assistance of

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Appendix C	Cultural Resources Technical Report (Confidential Appendix A has been removed)
Appendix D	Preliminary Stormwater Management Report
Appendix E	Phase I Environmental Site Assessment
Appendix F	Noise and Vibration Technical Report
Appendix G	Mitigation Monitoring and Reporting Program

Draft CEQA Initial Study

1. Project Title

Tracy Long Duration Energy Storage (LDES) Project

2. Lead Agency Name and Address

San Joaquin County
Community Development Department
1810 East Hazelton Avenue
Stockton, California 95205

3. Contact Person and Phone Number

Giuseppe Sanfilippo
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4. Project Sponsor's Name and Address

Tracy BESS LLC (herein referred to as "Applicant")
4350 Executive Drive, Suite 320
San Diego, California 92121

5. Applicant Contact

Jon Boyer (Middle River Power, Director of Environmental, Health, and Safety)
jboyer@mrpgenco.com

6. Project Location and Setting

The proposed Tracy LDES Project (herein referred to as proposed project) is located in an unincorporated portion of San Joaquin County, immediately southwest of the city of Tracy and approximately 20 miles southwest of the city of Stockton. The proposed project site encompasses approximately 12.8 acres within a larger, approximately 39-acre parcel (Assessor's Parcel Number [APN] 209-240-32). The proposed project would be located adjacent to and north of the existing Tracy Combined Cycle Power Plant (TCCPP) on the same parcel. The TCCPP, including the proposed project site, is accessed by an existing 3,300-foot-long, asphalt-paved service road that runs southward from West Schulte Road. The proposed project would have raw water supply pipeline and electrical interconnections with TCCPP facilities to the south. A new overhead and/or underground 115-kilovolt (kV) line would connect the LDES switchgear to the nearby Pacific Gas & Electric Company (PG&E)

Schulte Substation via a new tap line structure to be installed adjacent to the PG&E Substation on the TCCPP site.

The proposed project site is currently undeveloped and consists of ruderal non-native grassland. The site has previously been disturbed in association with its historical use as a construction laydown area for the adjacent power plant facilities to the south. The site is relatively flat and slopes slightly downhill toward the northeast. The proposed project site (APN 209-240-32) is not designated as Prime Farmland, and it is not under a Williamson Act contract. The general locations of the proposed project, TCCPP, and PG&E Schulte Substation are shown in Figure 1 and Figure 2.

7. Surrounding Land Uses

The 39-acre TCCPP parcel is bounded by the Delta-Mendota Canal to the southwest, a vacant parcel to the west, agricultural property to the south and east, and the Union Pacific Railroad to the north. Immediately north of the railroad are the Owens-Brockway glass container manufacturing plant and the Nutting-Rice warehouse. The TCCPP facility is located between the proposed project site area and the Delta-Mendota Canal to the south/southwest.

8. General Plan Designation

General Agriculture (A/G)

9. Zoning

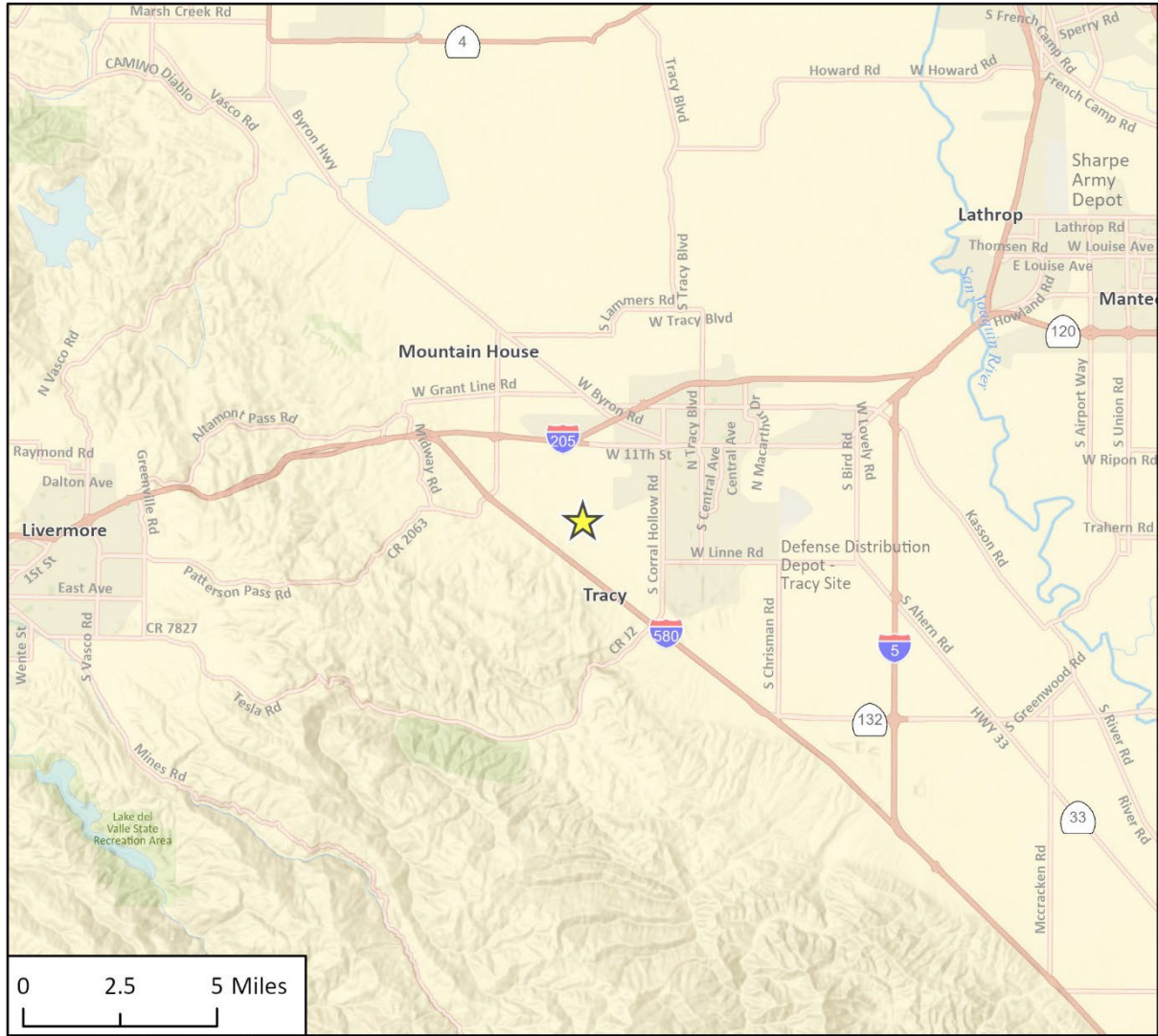
Agriculture (AG-40)

10. Description of Project

The proposed Tracy LDES Project would support California's current need for additional electrical supply capacity during periods of peak demand. The proposed project involves the construction and operation of a nominal 40-megawatt (MW), eight-hour duration, 320-MW hour (MWh) battery energy storage system (BESS) facility within an approximately 12.8-acre site north of the existing TCCPP. The existing TCCPP was licensed by the California Energy Commission (CEC) in 2010 (CEC Docket No. 08-AFC-07). The proposed project and the existing TCCPP are located on the same parcel (APN 209-240-32). The proposed project is located within the former construction laydown area for the TCCPP. The CEC has limited permitting jurisdiction of the proposed project, therefore, CEC permits are only required for the proposed generation tie (gen-tie) and raw water supply line on the developed portion of the TCCPP property (Figure 3).

The proposed project includes modular battery and electrical equipment enclosures, a 13.8-kV/115-kV electrical switchyard, and an overhead 115-kV gen-tie tap line to connect to the electrical grid via the nearby PG&E Schulte Substation. The proposed project would connect to the PG&E Schulte Substation by adding a structure to tap the existing 115-kV gen-tie line that connects the TCCPP to the PG&E Schulte Substation. The proposed project also includes a fire water tank, a short water supply pipeline connection to the TCCPP water supply, and a fire water line to the BESS facility. The proposed project design includes extension of the existing access road on the project site, addition of a stormwater detention basin, and a temporary construction laydown and parking area. Figure 3 presents a preliminary site plan for the proposed project.

Figure 1 Regional Location



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24-15860 EPS

Fig 1 Regional Location

★ Project Location

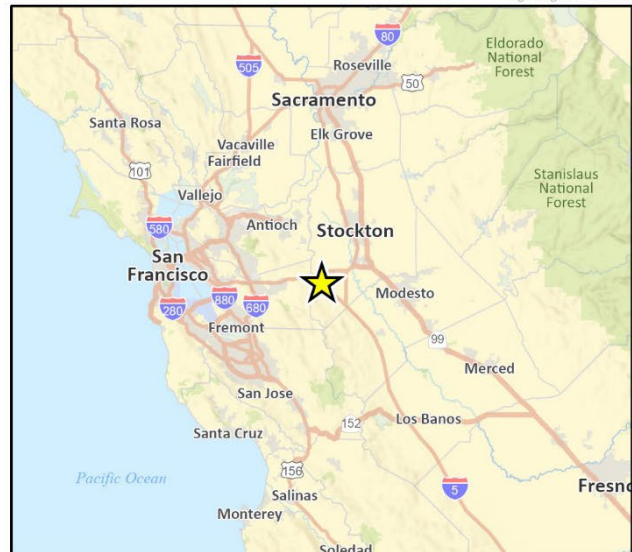
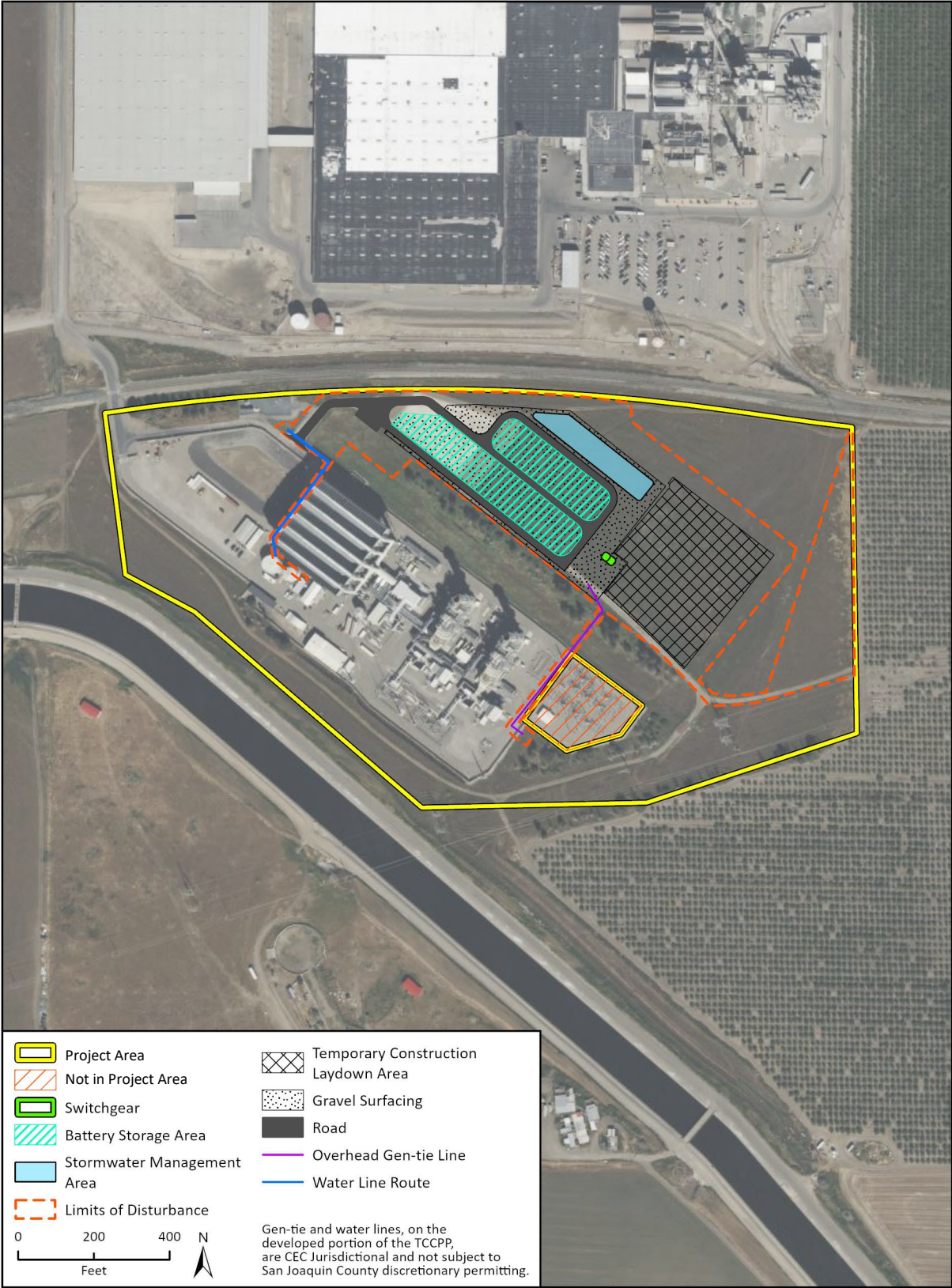


Figure 2 Project Location



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Fig X Site Plan CR

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Battery Energy Storage System Facility

The preliminary design for the proposed project includes approximately 88 battery container enclosures (each with internal heating, ventilation, and air conditioning [HVAC] systems, internal fire detection and suppression systems, and battery management systems) and 44 inverter/power conversion system (PCS) enclosures on skids. The design also includes 34 medium voltage transformers to be located on skids adjacent to the PCS enclosures. The BESS components would be placed on either a concrete pad, drilled pier, or pile foundations. The battery storage technologies being considered are lithium-iron-phosphate (lithium-ion) or other similar technologies that may become commercially available as the BESS project undergoes final design. The proposed project would have the occasional need for battery upgrades or augmentation in the future. Augmentation batteries would be installed on existing foundations to maintain system load capacity as the batteries degrade over time.

The BESS enclosures would be approximately 8-feet wide by 9.5-feet tall by 20-feet long and would include internal HVAC and internal fire detection and fire suppression systems in each container. The internal HVAC systems would allow the battery containers to function properly in temperatures ranging from approximately -13 degrees Fahrenheit to approximately 131 degrees Fahrenheit. These containers would also include a battery management system which monitors battery voltage, current, temperature, security, fault diagnosis and management, and external communication with the power conversion system. The inverter/PCS containers would be 3.5-feet wide by 8-feet tall by 4.5-feet deep. Each PCS would include an inverter, protection equipment, direct current and alternating current circuit breakers, and a connection cabling system. The PCSs would be connected to the battery containers by underground electrical conductors. In addition, medium voltage transformers would be located adjacent to the inverter/PCS skids.

The proposed project would include a switchyard with switchgear located in the southeastern portion of the proposed BESS facility. The switchgear would manage and control the electrical energy flow within the BESS system. The switchgear would be able to isolate different parts of the BESS for safety during operation and maintenance activities. Additionally, the switchgear would ensure the BESS can connect to, and disconnect from, the energy grid to allow the BESS to provide or absorb power when required and provide energy at peak demand times. The switchgear would also transfer energy stored in the BESS to the gen-tie line. The switchgear facilities would include a 13.8-kV/115-kV generation step-up (GSU) transformer.

Gen-Tie Line

The proposed project BESS facility would be interconnected with the PG&E Schulte Substation by an overhead and/or underground 115-kV gen-tie line. The 115-kV gen-tie line would run south from the 13.8-kV/115-kV GSU in the proposed BESS switchyard to the proposed tap structure adjacent to the existing 115-kV gen-tie line that connects the TCCPP to the PG&E Schulte Substation (see Figure 2). The gen-tie line would be supported by several steel (or wood) poles up to approximately 50 feet in height. The portion of the proposed project gen-tie line on the developed TCCPP site would be under the CEC's jurisdiction.

Water Supply Pipeline

The proposed project would have an on-site fire water tank in accordance with South San Joaquin County Fire Authority requirements. The capacity is currently planned to be approximately 27,000 gallons and have an adjacent fire hydrant for accessing the fire water supply (Figure 3). The fire water

tank would be self-filling through a new pressurized pipeline connection to the TCCPP raw water service. The portion of the project water supply line on the developed TCCPP site would be under the CEC's jurisdiction. The proposed project would also include a fire water line from the fire water tank to the BESS facility.

Hazardous Materials Management

Construction would generate limited amounts of hazardous wastes, such as used lubricants, cleaning solvents, and other chemicals. Additional hazardous wastes that could be encountered or released during construction could include incidental spill waste and concrete washout. Waste generated or encountered during construction would be handled, contained, transported, and/or disposed of according to local, State, and federal regulations. The proposed project would not store or use any acutely or extremely hazardous materials in excess of threshold quantities.

With each module of the BESS, applicable building codes and design standards require that numerous controls and sensors be in place to shut down operation if any unsafe conditions occur, including those that could lead to a leak or spill. The proposed BESS design includes minimal facilities with the potential to result in spills. The facility transformers that contain mineral or vegetable oil would have secondary containment. If a spill were to occur, pertinent measures in the project emergency response plan and/or the Spill Containment and Countermeasures Plan would be implemented to contain and clean up the spill. The proposed project will also include preparation of a Hazardous Material Business Plan to manage and report hazardous materials for the proposed project.

Stormwater Management

The proposed project would control stormwater flow by routing runoff around the facility perimeter to a proposed stormwater management area with a detention basin, located along the northeastern boundary of the project site. The proposed stormwater management area is approximately 0.5 acre in size, and the detention basin design includes an outlet control structure, which would be an 18-inch diameter outfall and rip rap protection. The detention basin design criteria is based on a 100-year, 24-hour storm. The grading and drainage plan for the project site considers the results of the site-specific hydrology study. The proposed project on-site detention and infiltration basin has been designed to manage the design stormwater runoff event in accordance with County standards. Site runoff would be limited to no more than allowed above current pre-project development flows.

Lighting

Low-elevation (less than 14-foot), controlled security lighting would be installed on the project site. The lighting would be motion activated for security and to facilitate nighttime visits for maintenance. Lighting would be only in areas where it is required for safety, security, or operations, and would be directed on-site and include shielding as necessary to minimize illumination of the night sky or potential impacts to surrounding viewers.

Construction

Construction of the proposed project is anticipated to take approximately 12 months, with construction to begin in the fourth quarter of 2025 to facilitate commercial operation by the first quarter of 2027. Construction activities would occur Monday through Friday between 6:00 a.m. and 9:00 p.m. in accordance with San Joaquin County noise standards. Weekend work and nighttime construction are not expected to be required. During construction, construction equipment and construction worker vehicles would be staged in the temporary staging and laydown area located

adjacent to the eastern border of the BESS facility (Figure 2). A workforce of up to approximately 50 construction workers is anticipated to be on-site during construction. Truck trips are expected to include up to approximately 30 trips per day during construction.

Construction activities would include extending the access road to the project site, site preparation and grading, installation of foundations and equipment, installation of wiring, and commissioning. Although the project site is fairly level, grading would be required throughout most of the site to prepare the ground surface for the construction of roads, switchgear, the BESS enclosures, and BESS container pads. Construction would result in approximately 6,300 cubic yards of cut topsoil and native soil and require approximately 3,730 cubic yards of fill materials, which would be sourced off-site. Delivery of construction materials and supplies would reach the project site by truck delivery routed through I-580, to International Parkway/Mountain House Parkway, to the project site on West Schulte Road. Construction debris would be hauled to the Tracy Material and Recovery Facility located approximately 8.5-miles southeast of the project site.

Operation and Maintenance

The proposed project would operate seven days per week, 365 days per year. The BESS facility would be operated remotely. Only occasional, on-site maintenance is anticipated following commissioning; such activities would include, but not be limited to, replacement of BESS equipment, filter replacement, and miscellaneous electrical or site repairs on an as-needed basis. Operation and maintenance staff would visit the switchgear periodically during operation to perform routine maintenance. Maintenance trucks would be used to perform routine maintenance, including, but not limited to, equipment testing, monitoring, repair, routine procedures to ensure service continuity, and standard preventative maintenance. Routine operations would require up to two workers in a medium-duty utility truck to visit the proposed project facility up to two times per week. Operation and maintenance personnel would access the project site from the on-site access road connecting to West Schulte Road. Eight new parking stalls (9 foot by 20 foot in size) would be constructed near the proposed BESS facility. Existing parking is also available at the TCCPP facility.

Decommissioning

At the end of the proposed project's useful life (anticipated to be up to approximately 40 years), the proposed project would be decommissioned. Currently, standard decommissioning practices include dismantling and repurposing, salvaging/recycling, or disposing of the proposed project components in accordance with applicable laws and regulations. However, actual decommissioning for the proposed project would be conducted in accordance with all applicable local, State, and federal requirements in effect at the time of decommissioning, and a final decommissioning plan, based on then-current technology, site conditions, and regulations, would be prepared prior to actual decommissioning.

11. Other Public Agencies Whose Approval is Required

San Joaquin County is the lead agency for permitting the proposed project through an Administrative Use Permit. In addition, separate TCCPP license amendment approvals would be required from the CEC for the portions of the 115-kV gen-tie and the raw water line on the developed portion of the TCCPP facility that is under the jurisdiction of the CEC.

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Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

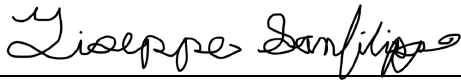
Determination

Based on 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 to 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 (EIR) is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” 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 EIR is required, but it must analyze only the effects that remain to be addressed.

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- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential 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.



Signature

Giuseppe Sanfilippo

Printed Name

5/6/2025

Date

Senior Planner

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

To represent views that would be experienced from viewpoints surrounding the project site, four key viewpoints (KVP) were selected for the simulation of post-project conditions. Each KVP presents a single viewpoint that depicts the visual change that implementation of the proposed project would have on viewers from the identified viewpoint. The visual simulations provided in these figures are the result of a computer modeling process that combines gathered field data (photographs and measurements) with the Applicant’s conceptual engineering design data to digitally model a simulated image of the proposed project. Figure 4 shows the location of the KVPs, and Figure 5 through Figure 8 show the results of these simulations, completed by POWER Engineers in July 2024.

Figure 4 Key Viewpoints Map

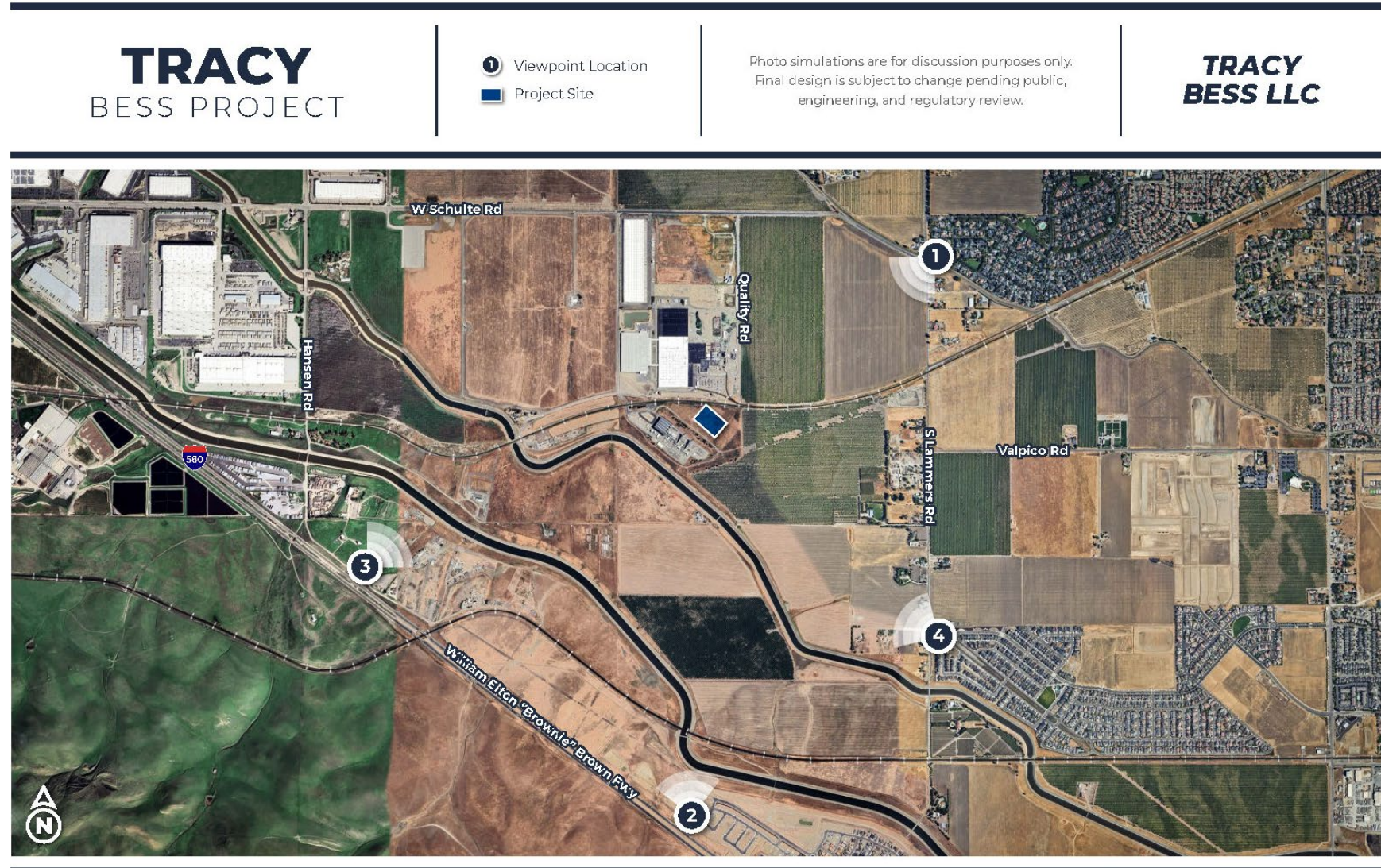


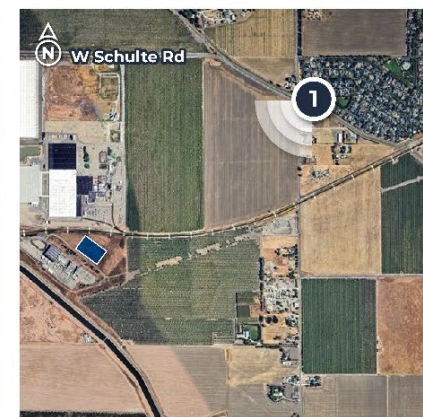
Figure 5 Key Viewpoint 1



TRACY BESS PROJECT

VIEWPOINT 1

6/21/2024 • 9:25 am • Looking Southwest

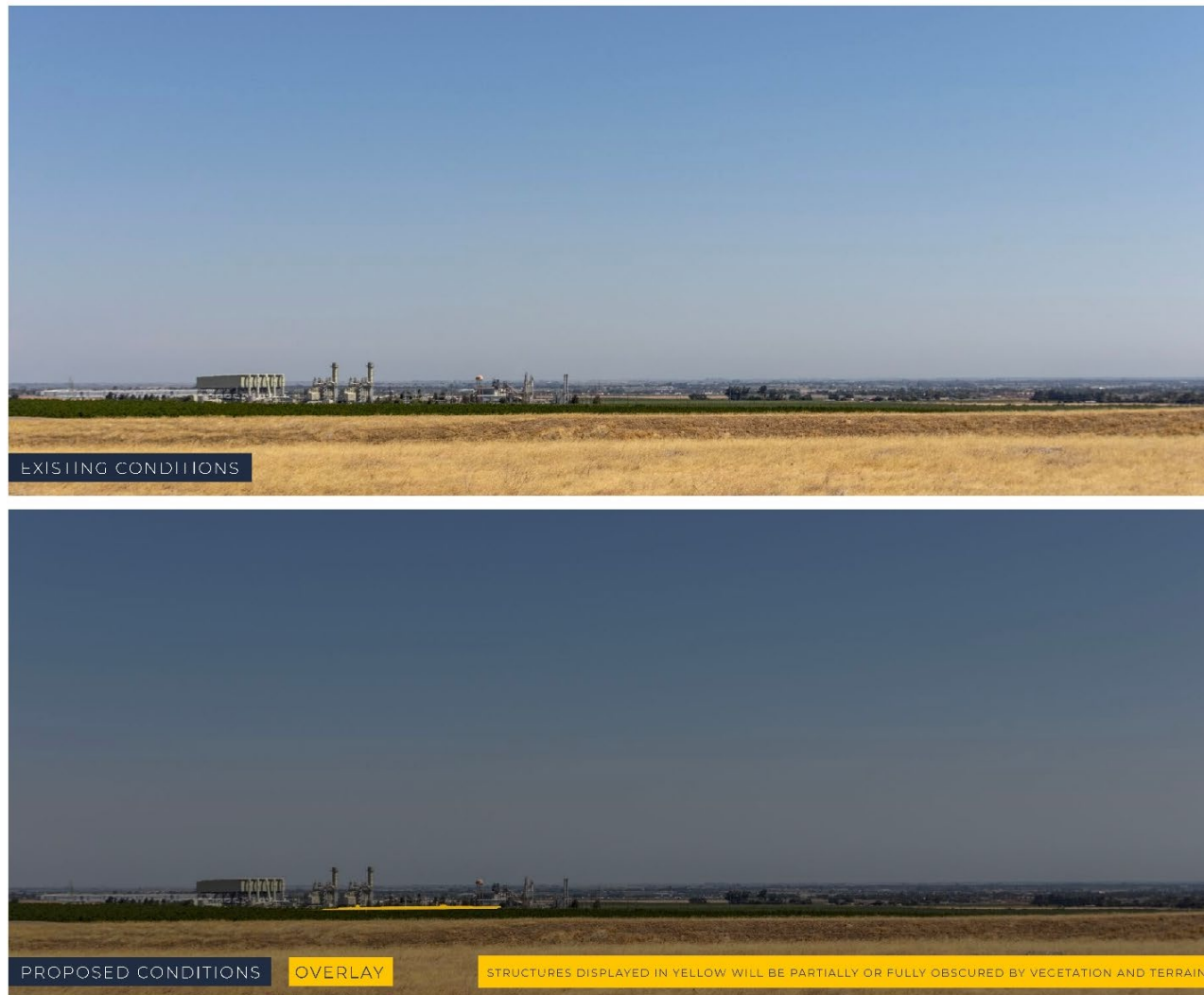


① Viewpoint Location ■ Project Site

Photo simulations are for discussion purposes only.
Final design is subject to change pending public,
engineering, and regulatory review.

TRACY
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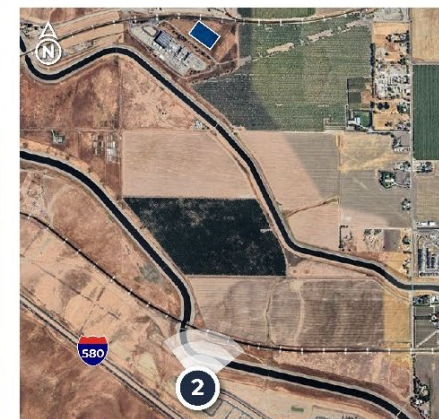
Figure 6 Key Viewpoint 2



TRACY BESS PROJECT

VIEWPOINT 2

6/21/2024 • 10:24 am • Looking North

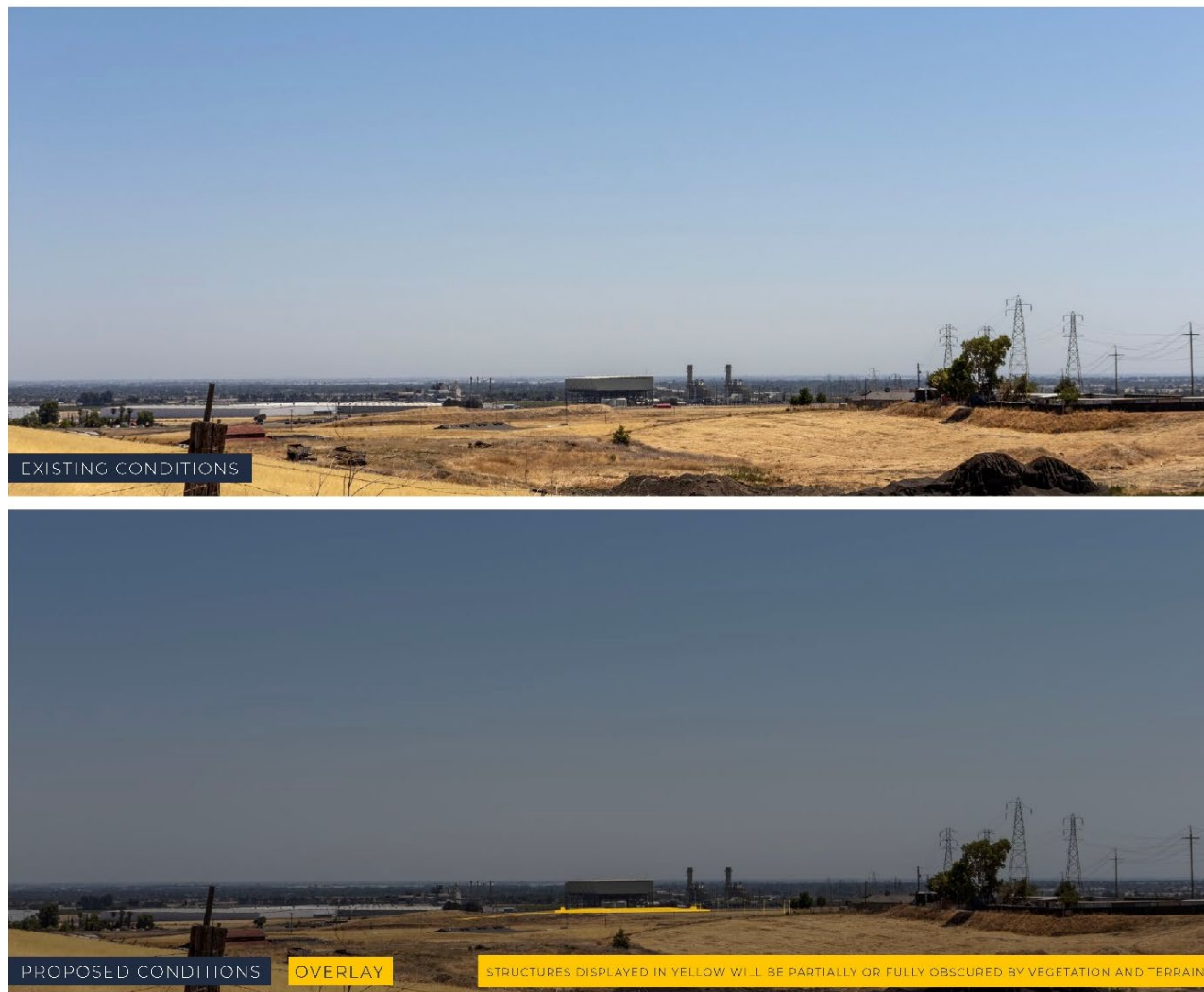


2 Viewpoint Location ■ Project Site

Photo simulations are for discussion purposes only.
Final design is subject to change pending public,
engineering, and regulatory review.

**TRACY
BESS LLC**

Figure 7 Key Viewpoint 3



TRACY BESS PROJECT

VIEWPOINT 3

6/21/2024 • 11:19 am • Looking Northeast



③ Viewpoint Location ■ Project Site

Photo simulations are for discussion purposes only.
Final design is subject to change pending public,
engineering, and regulatory review.

TRACY
BESS LLC

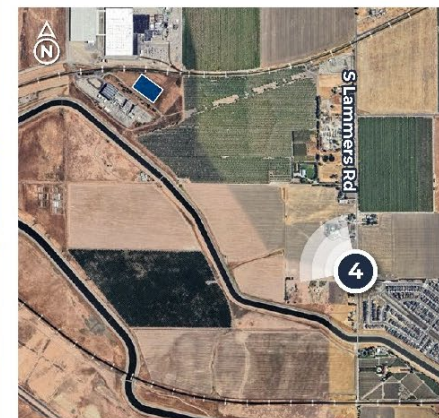
Figure 8 Key Viewpoint 4



TRACY BESS PROJECT

VIEWPOINT 4

6/21/2024 • 9:51 am • Looking Northwest



4 Viewpoint Location ■ Project Site

Photo simulations are for discussion purposes only.
Final design is subject to change pending public,
engineering, and regulatory review.

**TRACY
BESS LLC**

a. Would the project have a substantial adverse effect on a scenic vista?

The San Joaquin County General Plan states that views of the Delta, agriculturally rich valley floor, and Coast Ranges and Sierra Nevada mountains serve as the primary scenic resources within the county; however, there are no designated scenic vistas within the county (San Joaquin County 2016). Additionally, due to the flat topography of the project site and surrounding terrain, distant views of the Coast Ranges are available in the project vicinity. However, due to distance and atmospheric haze, views of the Sierra Nevada ranges are usually obscured near the proposed project. As shown in Figure 5, public views of the proposed project from West Schulte Road would be largely screened from view by existing orchards to the west of the project site. The proposed project would not affect views of the Coast Ranges due to the shorter height of the project components. Additionally, as shown in Figure 6 through Figure 8, the proposed project would not obstruct existing views in the project area because the project components would be partially or fully obscured by vegetation and terrain. Therefore, no impact would occur.

NO IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The California Department of Transportation has identified a portion of Interstate (I-) 580 (I-580) near the project site as a State-designated scenic highway (California Department of Transportation 2018). Similarly, San Joaquin County has identified this portion of I-580 as a scenic route in the County General Plan's Natural and Cultural Resources Element (San Joaquin County 2016). This portion of I-580 is approximately one mile south of the project site and the project site is not visible from I-580 due to existing intervening development at the neighboring TCCPP facility. The proposed project would not include the removal of existing trees, and there are no rock outcroppings or historic buildings on the project site. Therefore, the proposed project would not result in damage to scenic resources within a State Scenic Highway.

NO IMPACT

c. Would the project, 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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project site is in a non-urbanized area;¹ therefore, this discussion analyzes the proposed project's potential to substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project site is adjacent to the existing TCCPP facility. As shown in Figure 5 through Figure 8, the existing electric infrastructure is the prominent feature that is visible from public viewpoints of the project site. The proposed project involves the construction and operation of a BESS facility that would be consistent in form and materiality to the adjacent existing electrical infrastructure. Thus, visible portions of the proposed project would be visually coherent with surrounding infrastructure at the TCCPP facility. Additionally, project infrastructure would be largely obscured from public view by existing vegetation and agricultural uses (e.g., orchards) near the

¹ California Public Resources Code Section 21071 defines an unincorporated area as an "Urbanized area" only when the area is completely surrounded by one or more incorporated cities, or located within an urban growth boundary and has an existing residential population of at least 5,000 persons per square mile. The project site is not surrounded by Tracy city limits and is not within the City's sphere of influence (City of Tracy 2024).

project site. Accordingly, the proposed project would have a less-than-significant impact related to degrading existing visual character or quality of public views of the site and its surroundings.

LESS-THAN-SIGNIFICANT IMPACT

- d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

Construction and future decommissioning of the proposed project would occur during daylight hours and would not require lighting. Permanent operational lighting fixtures would be only in areas where required for safety, security, or operations, would be directed on-site and include shielding as necessary to minimize illumination of the night sky or potential impacts to surrounding viewers, and would be motion activated. Due to the design of the proposed project, the project would not create a new source of substantial light that would adversely affect daytime or nighttime views in the area. This impact would be less-than-significant.

The BESS facility components would be comprised of non-reflective, non-specular finish materials that do not have the potential to cause glare. In addition, given the low visual profile of the proposed project, as shown in Figure 5, views of the BESS facility would be largely obscured to motorists by existing development and neighboring orchards. Therefore, the proposed project would not create a new source of substantial glare that would adversely affect daytime or nighttime views in the area. This impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Tracy Long Duration Energy Storage Project

- a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
- c. Would the project 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. Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. Would the project 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?*

The project site is classified by the California Department of Conservation (DOC) as Vacant or Disturbed Land (DOC 2018). Farmland is located to the east and to the south of the project site; however, the proposed project would not convert or interfere with agricultural operations on this land. The project site is not subject to a Williamson Act contract (DOC 2023, San Joaquin County 2024a). The project site does not contain any forest land, and the project site is not zoned as forest land, timberland, or timberland zoned Timberland Production. Therefore, the proposed project would not result in impacts to agriculture and forestry resources.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following analysis is based upon the Air Quality and Greenhouse Gas Study prepared for the proposed project by Rincon Consultants, Inc. (Rincon) in August 2024 (Appendix A).

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project site is in the San Joaquin Valley Air Basin (SJVAB) and is under the jurisdiction of the Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is in non-attainment for ozone, PM₁₀, and PM_{2.5}. The SJVAPCD has prepared several air quality attainment plans to achieve ozone and particulate matter standards, the most recent of which include the *2020 Reasonably Available Control Technology Demonstration for the 2015 8-Hour Ozone Standard* and the *2013 Plan for the Revoked 1-Hour Ozone Standard, 2007 PM₁₀ Maintenance Plan and Request for Re-designation, 2012 PM_{2.5} Plan, and 2015 Plan for the 1997 PM_{2.5} Standard*. The SJVAB is in attainment for carbon monoxide (CO), sulfur dioxide, and lead, and there are no attainment plans for those pollutants.

Construction, operation, and decommissioning of the proposed project would result in emissions of criteria pollutants including ozone precursors (such as reactive organic compounds [ROG] and nitrogen oxides [NO_x]) and particulate matter. As discussed under criterion 3(b), below, proposed project construction, operation, and decommissioning would not exceed regulatory thresholds and therefore would not have significant impacts with respect to criteria pollutant emissions. Therefore, the proposed project emissions would not conflict with implementation of existing air quality plans at a local level. Impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- b. *Would the project 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?*

Air pollution is largely a cumulative impact. The nonattainment status of the SJVAPCD for regional pollutants is a result of past and present development, and SJVAPCD develops and implements plans for the future attainment of ambient air quality standards. Using the emissions levels required based on the air quality management plans, the SJVAPCD has developed emissions thresholds under which individual projects would not be anticipated to hinder the SJVAPCD's attainment of the ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

The SJVAB is a nonattainment area for ozone, particulate matter with diameters less than 10 microns (PM₁₀), and particulate matter with diameters less than 2.5 microns (PM_{2.5}) under the National Ambient Air Quality Standards (NAAQS) and/or California Ambient Air Quality Standards (CAAQS). The current air quality in the SJVAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., ROG and NO_x for ozone) potentially contribute to poor air quality.

The SJVAPCD provides quantitative thresholds to determine the significance of temporary construction-related pollutant emissions and long-term operational-related pollutant emissions. These thresholds are shown in Table 1.

Table 1 SJVAPCD Air Quality Significance Thresholds

Pollutant	Operation Thresholds (Tons per Year)	Construction Thresholds (Tons Per Year)
NO _x	10	10
ROG ¹	10	10
PM ₁₀	15	15
PM _{2.5}	15	15
SO _x	27	27
CO	100	100

NO_x= nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; SO_x = sulfur oxide; CO = carbon monoxide

¹ ROG are formed during combustion and evaporation of organic solvents. ROG are also referred to as VOC.

Source: San Joaquin Valley Air Pollution Control District 2015a

In addition to the criteria pollutant thresholds outlined above, the SJVAPCD has published the *Ambient Air Quality Analysis Project Daily Emissions Assessment* guidance, which is summarized in Section 8.4.2, *Ambient Air Quality Screening Tools*, of the *Guide for Assessing and Mitigating Air quality Impacts* (GAMAQI). The GAMAQI provides a screening threshold of 100 pounds per day of any of the following pollutants: NO_x, ROG, PM₁₀, PM_{2.5}, sulfur oxide, and CO. The screening threshold was used to evaluate localized construction activities and operational activities separately. The District recommends that an ambient air quality analysis be performed when the increase in on-site emissions from construction activities exceeds the 100 pounds per day screening level of any criteria pollutant. Pursuant to SJVAPCD's GAMAQI and Rule 9510 – Indirect Source Review, when assessing the significance of project-related impacts on local air quality, the impacts may be significant if on-site emissions from construction or operational activities exceed the 100 pounds per day screening level

after implementation of all enforceable mitigation measures. The proposed project would be subject to Rule 9510, because it would develop more than 9,000 square feet, which is the ambient air quality analysis screening level threshold for unconventional land use developments not identified as residential, commercial, or industrial (e.g., a BESS).

Construction and Decommissioning Emissions

Annual Criteria Air Pollutant Emissions

Project construction would generate air pollutant emissions from entrained dust, off-road equipment uses, vehicle emissions, and architectural coatings. Off-site emissions would be generated by construction workers' daily commute trips and heavy-duty diesel haul and vendor truck trips. Project construction would occur over approximately 12 months. Construction emissions would vary substantially from day-to-day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

At the time of preparation of this environmental document, the nature of the equipment available at the time of decommissioning is unknown, as is the extent of activities that would be required during decommissioning. Therefore, for this analysis, it was assumed that decommissioning activities would be similar to those of construction activities and therefore emissions from decommissioning would be equal to that of construction emissions. It is likely that decommissioning activities would be less intensive than construction and given the fact that it is approximately 40 years into the future, and the efficiency of vehicles and equipment would be better and have fewer pollutants.

Table 2 shows the estimated annual construction and decommissioning emissions by construction phase. Most particulate matter emissions are fugitive emissions. As shown, the annual construction and decommissioning emissions would not exceed the SJVAPCD's annual significance thresholds for any criteria pollutant. Impacts would be less-than-significant.

Table 2 Annual Construction and Decommissioning Emissions

Phase	Emissions (Tons per Year by Phase)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2025	<1	2	2	<1	<1	<1
2026	1	5	6	<1	<1	<1
Full year of construction	1	7	8	<1	1	<1
Full year of decommissioning	1	7	8	<1	1	<1
Significance Threshold	10	10	100	27	15	15
Exceed Significance Threshold?	No	No	No	No	No	No

CO = carbon monoxide; NO_x = nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; SO_x = sulfur oxide

Notes: Rounded values shown; columns may not total exactly. See Appendix A for calculations. Bold numbers indicate an exceedance of applicable thresholds.

Furthermore, the proposed project would comply with SJVAPCD Rule 9510, Indirect Source Review, which requires large development projects to reduce exhaust emissions from construction equipment by 20 percent for NO_x and 45 percent for PM₁₀ compared to the statewide average or demonstrate use of a clean fleet (such as United States Environmental Protection Agency [USEPA] Tier 4 equipment). Compliance with SJVAPCD Rule 9510 could result in additional emissions reductions that

were conservatively not included in project estimates. In addition, the project Applicant would create a dust control plan and implement dust control measures pursuant to Rule 8021 which would further reduce dust emissions.

Daily Criteria Air Pollutant Emissions

Construction and decommissioning activities would exceed the SJVAPCD’s recommended 100 pounds per day screening threshold during construction for CO, as shown in Table 3. Because daily emissions from proposed project construction and decommissioning would exceed screening thresholds for CO, the proposed project may contribute cumulatively to a net increase in criteria pollutants. Screening thresholds are used to determine if additional analysis may be required and an exceedance of a screening threshold does not automatically result in a potentially significant impact. In this instance, the exceedance suggests that an ambient air quality analysis may need to be performed to determine if the operational impacts are potentially significant. However, the regional background concentrations of CO are below the NAAQS and CAAQS for CO, and the proposed project only exceeds the screening threshold by 1 pound per day. The proposed project would not contribute to an exceedance of the ambient air quality standards as the background concentrations of CO are approximately 10 percent of the NAAQS, meaning the project would have to produce nearly nine times the emissions of the entire region in order for project emissions combined with background emissions to exceed the NAAQS or CAAQS.² Therefore, the proposed project would contribute to less-than-significant impacts with respect to daily emissions.

Table 3 Maximum Daily Construction and Decommissioning Emissions

	Emissions (lbs/day) by Phase					
	ROG	NO _x	CO	SO _x	PM ₁₀ ¹	PM _{2.5} ¹
1. Access Road	5	32	34	<1	2	1
2. Site Prep and Grading	9	60	71	<1	10	5
3. Install Foundations	17	81	101	<1	5	3
4. Set Modules, Inverters, Switchgear	8	50	51	<1	4	2
5. Electrical Wire Installation/Finish Grading	6	33	45	<1	2	1
6. Commissioning & Testing	2	13	19	<1	1	1
Maximum Emissions						
Maximum Daily Emissions (Construction)	17	81	101	<1	10	5
Maximum Daily Emissions (Decommissioning)	17	81	101	<1	10	5
Screening Threshold	100	100	100	100	100	100
Exceed Screening Threshold?	No	No	Yes	No	No	No

lbs/day = pounds per day; NO_x= nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; SO_x = sulfur oxide

¹Includes compliance with Rule 8021 dust control measures, which accounts for watering.

Bold values indicate where thresholds are exceeded.

Source: Appendix A

² According to USEPA monitoring data from the Stockton-University Park monitoring site location, the maximum recorded one-hour CO concentration was 2.3 parts per million (ppm) and the maximum recorded eight-hour CO concentration was 1.4 ppm (USEPA 2024). This is approximately 10 percent of the NAAQS (9 ppm for eight-hour NAAQS and CAAQS, 20 ppm for one-hour CAAQS and 35 for one-hour NAAQS), so the proposed project would not produce enough emissions to cause an exceedance of the standards.

Operational Impacts

Annual and Daily Criteria Air Pollutants

The project would generate criteria pollutants during operations resulting from area sources (e.g., consumer products used during maintenance activities), and mobile sources (e.g., vehicle emissions). As shown in Table 4, operational emissions from the proposed project would not exceed SJVAPCD annual significance thresholds for any criteria pollutant. In addition, Table 5 demonstrates that daily operational emissions would not exceed SJVAPCD daily screening thresholds for any criteria pollutant. Impacts would be less-than-significant.

Table 4 Estimated Annual Operational Emissions

Source	Emissions (tons/year)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area ¹	<1	<1	<1	<1	<1	<1
Energy	0	0	0	0	0	0
Mobile	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
Significance Threshold	10	10	27	100	15	15
Exceed Significance Threshold?	No	No	No	No	No	No

NO_x = nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; lbs/day = pounds per day; SO_x = sulfur oxides

¹Area source emissions are associated with emissions of consumer products used for cleaning and landscaping emissions, and are conservatively included for this analysis

Totals may not add up due to rounding vehicles. See Appendix A for calculations.

Table 5 Estimated Daily Operational Emissions

Source	Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Combined Total Daily Operations	<1	<1	1	<1	<1	<1
SJVAPCD Operational Screening Threshold	100	100	100	100	100	100
Exceed Screening Threshold?	No	No	No	No	No	No

NO_x = nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; lbs/day = pounds per day; SO_x = sulfur oxides

Totals may not add up due to rounding vehicles. See Appendix A for calculations. Bold numbers indicate an exceedance of applicable thresholds

Furthermore, energy storage systems, such as the proposed BESS, assist utilities like PG&E and the State of California in achieving criteria air pollutant emission reductions by providing the means of storing excess electricity (e.g., renewable solar energy) generated during off-peak hours for use during peak hours as an alternative to operating resources such as a peaker plant, which generates air quality emissions from fossil fuel combustion.³ By expanding PG&E's access to energy storage systems, the proposed project would increase the stability and reliability of the existing electrical grid, thereby reducing the need for additional electricity to be generated by fossil fuel power plants during peak hours. The energy conservation achieved by the proposed project would reduce fossil fuel consumption, thereby reducing criteria air pollutant emissions from the electricity sector.

San Joaquin Valley Air Pollution Control District Review

In a letter dated April 17, 2025 (Montelongo 2025), the SJVAPCD approved the Applicant's Air Impact Assessment (AIA) for the proposed project. The SJVAPCD determined that the emissions for construction and operation would be less than two tons NO_x per year and two tons PM₁₀ per year. Pursuant to SJVAPCD Rule 9510 Section 4.3, the SJVAPCD determined that the proposed project is exempt from the requirements of Section 6.0 (General Mitigation Requirements) and Section 7.0 (Off-site Emission Reduction Fee Calculations and Fee Schedules) of the rule. As such, the SJVAPCD determined that the proposed project complies with the emission reduction requirements of District Rule 9510 and is not subject to payment of off-site fees. The SJVAPCD's determination is based on the proposed project construction details provided with the application. Changes in the construction details may result in increased project-related emissions and loss of this exemption from the SJVAPCD.

In addition, the SJVAPCD requirements for maintaining the exemption require compliance with the applicable conditions identified in Table 6. The SJVAPCD requires notification of any changes to the project as identified in the approved AIA for this project.

Other requirements specified by the SJVAPCD and an assessment of the applicability include:

- **Change in Developer Form.** If all or a portion of the project changes ownership, a completed Change in Developer form is required by the SJVAPCD and must be submitted to the SJVAPCD within thirty (30) days following the date of transfer.
- **Dust Control Plan.** The project may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in District Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities. The applicant has committed to the lead CEQA Agency, San Joaquin County, to prepare a Fugitive Dust Control Plan (see Appendix G, Mitigation Monitoring and Reporting Program, Measure AQ-3: Minimize Personnel and Public Exposure to Valley Fever).
- **Permits.** The Project does not include installation of equipment that controls or may emit air contaminants, including but not limited to emergency internal combustion engines, boilers, and baghouses. Therefore, permits such as a SJVAPCD Authority to Construct as per District Rule 2010 are not be applicable to the project.

³ Peaker plants are power plants that are operated only when demand for electricity is high (i.e., during times of peak demand).

Table 6 SJVAPCD Enforced Conditions

Enforcing Agency	Measure	Specific Condition	Comment
SJVAPCD	Construction and Operation -Exempt from Off-site Fee	For each project phase, within 30-days of issuance of the first certificate of occupancy, if applicable, submit to the District a summary report of the construction start and end dates, and the date of issuance of the first certificate of occupancy. Otherwise, submit to the District a summary report of the construction start and end dates within 30-days of the end of each phase of construction.	Note: there are no occupied buildings proposed as part of the Tracy LDES BESS Project that will require Occupancy Permits.
SJVAPCD	Construction and Operation - Recordkeeping	For each project phase, all records shall be maintained on site during construction and for a period of ten years following either the end of construction or the issuance of the first certificate of occupancy, whichever is later. Records shall be made available for District inspection upon request.	See above; no applicable occupancy permits.
SJVAPCD	Construction and Operational Dates	For each project phase, maintain records of (1) the construction start and end dates and (2) the date of issuance of the first certificate of occupancy, if applicable.	See above; no applicable occupancy permits.

Impacts would be potentially significant and implementation of Mitigation Measures AQ-1 through AQ-2 would be required.

Mitigation Measure

AQ-1 Construction and Operation -Exempt from Off-site Fee

Within 30 days of the end of construction, submit to the SJVAPCD a summary report of the construction start and end dates of each phase of construction.

AQ-2 Construction and Operation Dates and Recordkeeping

All records of construction start and end dates shall be maintained on site during construction and for a period of ten years following the end of construction. Records shall be made available for SJVAPCD inspection upon request.

Significance After Mitigation

Implementation of Mitigation Measures AQ-1 and AQ-2 would ensure air quality impacts remain less than significant by requiring recordkeeping and reporting to the SJVAPCD. Therefore, impacts would be less than significant after mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

The nearest sensitive receptor is a residential property located approximately 850 feet southwest of the project site border, 950 feet from the existing PG&E substation where the BESS system would connect, and over 1,000 feet from the BESS project location where the majority of construction activity would occur.

Air quality varies based on the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems leading to health impacts arise when the rate of pollutant emissions exceeds the rate of dispersion. Some land uses are more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by the California Air Resources Board (CARB), include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Potential harmful airborne pollutants that could be generated by the proposed project are toxic air contaminants (TAC), CO, and spore-containing fugitive dust that can cause Valley Fever. Therefore, each of these is addressed under this criterion with respect to the proposed project.

Toxic Air Containments

TACs are airborne substances that are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

Construction and Decommissioning

The greatest potential for TAC emissions during construction and decommissioning would be diesel particulate matter (DPM) emissions associated with heavy-duty equipment during the 12-month construction period and decommissioning activities. CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (April 2005) recommends against siting sensitive receptors within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day, and within 1,000 feet of industrial land uses such as warehouses and distribution centers with more than 100 truck trips per day. While these siting distances are not particular to construction activities, the primary source of TAC emissions from both freeways and construction/decommissioning equipment is DPM. As discussed above, the nearest sensitive receptor is approximately 850-feet southwest of the site border, 950 feet from the existing PG&E substation where the BESS system would connect, and over 1,000 feet from the BESS project location where the majority of construction activity would occur. Concentrations of air pollutants from construction and decommissioning emission sources to this distance would drop off rapidly as air dispersion occurs, minimizing potential exposure and potential health risks. Additionally, wind in the area blows generally from west to east, blowing the majority of emissions away from the nearest receptor. Furthermore, the proposed project would adhere to the applicable SJVAPCD requirements and control strategies intended to reduce emissions from construction equipment and activities. The project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. The short-term nature of construction and decommissioning activities, the time between construction and decommissioning activities, typical wind patterns, and the sensitive receptors being more than 1,000 feet from the majority of construction activities that would result in DPM emissions, would result in less-than-significant impacts.

Operation

The BESS project is not a land use typically associated with high health risk, and there are no stationary sources of TAC. The proposed project would not emit substantial amounts of TACs during normal operations, and TACs are not anticipated to be generated at the project site. There is the potential for

minor amounts of DPM to be emitted from maintenance vehicles that will occasionally access the site, but the level of emissions and duration of exposure would be minimal. As such, proposed project operations would not expose sensitive receptors to substantial TAC concentrations and impacts would be less-than-significant.

Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard and is associated with long-term operational emissions. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35 parts per million or the federal and State eight-hour standard of 9 parts per million (SJVAPCD 2024a). The entire SJVAB is in conformance with State and federal CO standards and no air quality monitoring stations report CO levels in the SJVAPCD jurisdiction. Additionally, CARB no longer reports CO concentrations anywhere in California. Based on the low background level of CO in the SJVAB (indicated by the lack of monitoring at State or local levels), the low and the ever-improving emissions standards for new sources in accordance with State and federal regulations, and the fact that the proposed project would result in approximately two worker visits up to twice per week during operational and maintenance activities, the proposed project would not result in a CO hotspot. Additionally, as demonstrated under criterion 3(b), above, CO emissions during construction, operation, and decommissioning for the overall proposed project, including mobile sources, would not exceed ambient air quality standards. Therefore, the proposed project would not expose sensitive receptors to substantial CO concentrations, and localized air quality impacts related to CO hot spots would be less-than-significant.

Valley Fever

Construction activities that include ground disturbance can result in fugitive dust, which can cause fungus *Coccidioides* spores to become airborne if they are present in the soil. These spores can cause Valley Fever, which is a lung infection caused by the fungus *Coccidioides* that is found in the soil in some parts of the United States. Workers who disturb soil where fungal spores are found, whether by digging, operating earthmoving equipment, driving vehicles, or by working in dusty, wind-blown areas, are more likely to breathe in spores and become infected. It is not a contagious disease, and secondary infections are rare. The proposed project is located in San Joaquin County where the risk is approximately 14 to 41 cases per 100,000 people as of 2016 (San Joaquin County 2018).

Construction and decommissioning activities associated with the proposed project would include ground-disturbing activities that could result in an increased potential for exposure of nearby residents and on-site workers to airborne spores, if they are present. Due to their distance from the proposed project, exposure to off-site receptors would be less-than-significant. Compliance with dust control measures required by SJVAPCD Rule 8021 would minimize personnel and public exposure to Valley Fever and reduce the potential risk of nearby resident and on-site worker exposure to Valley Fever. In addition, the proposed project would adhere to the California Code of Regulations (CCR), Title 8, Sections 342, 3203, 5141, 5144, and 14300, related to Valley Fever protection and exposure, which would reduce potential risks by requiring incident reporting; requiring implementation of an Injury and Illness Prevention Program; and providing respiratory protection guidance. However, impacts related to Valley Fever resulting from the proposed project may still be potentially significant, and implementation of Mitigation Measure AQ-3 would be required to reduce impacts to a less-than-significant level.

Mitigation Measures

AQ-3 *Minimize Personnel and Public Exposure to Valley Fever*

Prior to site preparation, grading activities, or ground disturbance, the Applicant shall prepare a Fugitive Dust Control Plan for the proposed project. The Fugitive Dust Control Plan shall include the following at a minimum:

- Equipment, vehicles, and other items shall be cleaned thoroughly of dust before they are moved off-site to other work locations.
- Wherever possible, grading, and trenching work shall be phased, so that earth-moving equipment works well ahead or down-wind of workers on the ground.
- The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area.
- If a water truck runs out of water before dust is dampened sufficiently, ground workers exposed to dust are to leave the area until a full truck resumes water spraying.
- All heavy-duty earth-moving vehicles shall be closed-cab and equipped with a High Efficiency Particulate Arrestance-filtered air system, or High Efficiency masks that can be worn by the vehicle operators.
- N95 respirators shall be provided to on-site workers for the duration of the construction period.
- Workers shall receive training to recognize the symptoms of Valley Fever and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be kept on-site for review as required by regulatory agencies.
- Valley Fever information shall be available on-site for all construction personnel. The information shall provide, at a minimum, a description of the symptoms, health effects, preventative measures, and treatment.

Significance After Mitigation

Mitigation Measure AQ-3 would ensure that personnel and public exposure to Valley Fever is less-than-significant by requiring the preparation and implementation of a Fugitive Dust Control Plan for the proposed project. Therefore, impacts would be less than significant after mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The proposed project would generate oil and diesel fuel odors during construction from equipment use and odors related to asphalt paving. The odors would be limited to the construction and/or decommissioning period and would be intermittent and temporary. Furthermore, these odors would dissipate rapidly with distance from in-use construction equipment. With respect to operation, CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of odors (e.g., sewage treatment plants, landfills, recycling facilities, biomass operations, autobody shops, fiberglass manufacturing, and livestock operations). BESS site operations are not identified on this list and would not have odor sources during normal operations. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people, and impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following analysis is based upon the Biological Resources Assessment (BRA) prepared for the proposed project by Rincon in August 2024 (Appendix B).

Queries of scientific databases, including the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB), Biogeographic Information and Observation System, and California Native Plant Society Online Inventory of Rare and Endangered Plants of California were conducted as part of the BRA for special-status species occurrences within the Tracy, California United States Geological Survey (USGS) 7.5-minute quadrangle and surrounding eight quadrangles (*Vernalis*, *Solyo*, *Lone Tree Creek*, *Cedar Mtn.*, *Midway*, *Clifton Court Forebay*, *Union Island*, *Lathrop*). Other resources reviewed to inform the existing conditions and sensitive biological resources that may occur on-site or nearby, such as the San Joaquin kit fox (*Vulpes macrotis mutica*) Habitat Conservation Area, United States Fish and Wildlife Service (USFWS) National Wetlands Inventory, USGS National Hydrography Dataset, USFWS Information for Planning and Consultation System Unofficial Species List, and USFWS Critical Habitat Portal. Aerial photographs, topographic maps, soil survey maps, geologic maps, and climatic data in the area were also examined. Rincon biologists assessed the potential for each species to occur within the project site based on the existing conditions as observed during the biological field surveys in the context of the specific habitat requirements of each species.

The Biological Resources Study Area (Study Area) is defined as the Project Area (including the proposed development area, access roads, and a construction laydown area), the exclusion of the PG&E Schulte Substation, with an additional 100-foot-survey buffer around the perimeter of the Project Area in all directions. On March 21, 2024, Rincon biologists conducted a field reconnaissance survey (field survey) to assess the habitat suitability for potential special status species, map the existing vegetation communities, map any evidence of sensitive biological resources on-site, note the presence of potential jurisdictional waters or wetlands, document any wildlife connectivity or movement features, and record plant and wildlife species within the project site. The potential for special status species to occur within the project site was assessed based on factors such as historical occurrence, habitat conditions, and presence of plants, wildlife, or wildlife “sign” (e.g., burrows, scat, tracks). The field survey was succeeded by four CDFW protocol surveys for burrowing owl (*Athene cunicularia*) which took place on April 11, May 8, May 30, and June 20, 2024, and yielded negative results. Additionally, a rare plant survey was conducted for big tarplant (*Blepharizonia plumosa*) on September 5, 2024, which also yielded negative results (Appendix B).

Two vegetation communities and four additional land cover types are present within the project site: 1) nonnative annual grassland; 2) freshwater wetland; 3) landscaped, 4) developed, 5) canal, and 6) orchard.

- a. *Would the project 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 Wildlife or U.S. Fish and Wildlife Service?*

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS or the National Marine Fisheries Service under the federal Endangered Species Act; those listed or candidates for listing as Rare, Threatened, or Endangered under the California Endangered Species Act or Native Plant Protection Act; those identified as Fully Protected by the California Fish and Game Code (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern or Watch List by the CDFW; and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank system.

Special-Status Plants

Overall, the project site is highly disturbed and contains marginal habitat for special-status plants to occur. Based on the results of the BRA and the focused survey for rare plants, no special-status species have potential to occur on or within the Study Area. Therefore, the proposed project would result in no impact to special-status species.

Special-Status Wildlife

Based on the results of the BRA, seven special-status wildlife species have the potential to occur on the project site. Table 7 lists each of these species, their status, and their potential to occur within the Study Area. These species are discussed further below.

Table 7 Special-Status Wildlife Species with Potential to Occur within the Study Area

Scientific Name	Common Name	Status	Potential to Occur
Invertebrates			
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	FT	Low Potential
<i>Bombus crotchii</i>	Crotch's bumble bee	SCE	Moderate Potential
Amphibians			
<i>Ambystoma californiense</i> pop. 1	California tiger salamander – California DPS	FT/ST	Low Potential
Birds			
<i>Athene cunicularia</i>	burrowing owl	SSC	Low Potential
<i>Buteo swainsoni</i>	Swainson's hawk	ST	Present
Mammals			
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	FE/ST	Low Potential
<i>Taxidea taxus</i>	American badger	SSC	Low Potential

DPS = Distinct Population Segment

FE = Federally Endangered

FT= Federally Threatened

ST = State Threatened

SCE = State Candidate Endangered

SSC = CDFW Species of Special Concern

Project construction, including, but not limited to, site grading and excavation of soil and removal of vegetation, has the potential to impact special-status wildlife species, including suitable habitat, nests, and/or individual animals. The following is a discussion of anticipated impacts based on the nature of the proposed project. Implementation of the following Mitigation Measures BIO-1 through BIO-5, described below, would reduce project impacts to special-status wildlife species to less-than-significant by requiring a worker environmental awareness program (WEAP), pre-construction surveys to identify if special-status species are on-site prior to construction, and biological monitoring procedures.

Valley Elderberry Longhorn Beetle

This species is found throughout the Central Valley of California, spanning from Shasta County to Madera County. Named for its dependence on the elderberry shrub (*Sambucus* sp.), this beetle is mostly found in riparian areas where elderberry grows. More specifically, this species prefers blue elderberry (*Sambucus mexicana*), which was present within the Study Area, however, it was found

south of the TCCPP outside of the Project limits of disturbance. This species can use the elderberry shrub at all life stages, from feeding on the pith of the stems at the larval stage to the flowers, leaves, and nectar as an adult.

The valley elderberry longhorn beetle was not observed during the field surveys. Although there is a canal within the southern portion of the Study Area, no riparian vegetation is present, as it is lined with concrete. Though the Study Area provides mature elderberry shrubs, riparian habitat is absent, giving this species a low potential to occur within the Study Area. Additionally, the closest documented CNDDDB occurrence is approximately 4-miles south of the Project Area and is considered a historical record. Therefore, project impacts to this species are not anticipated.

Crotch's Bumblebee

There is one documented occurrence of a Crotch's bumble bee within 3.3 miles northeast of the Study Area and no occurrences of western bumble bee within 60 miles of the Study Area. Suitable foraging, nesting, and overwintering habitat occurs within the Study Area. There is a moderate potential for Crotch's bumble bee to occur within the Study Area based on recent occurrences in the region and suitable habitat on-site. Project construction activities may cause direct impacts to Crotch's bumble bee nests, foraging resources, and overwintering habitat. Potential indirect impacts include disturbance due to increased noise and human presence. Mitigation Measure BIO-1 would reduce impacts to Crotch's bumble bee to less-than-significant by requiring focused surveys including a habitat assessment, foraging surveys, and nesting surveys, in accordance with the recommendations described in the *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species*, released by the CDFW on June 6, 2023, to identify if Crotch's bumble bee is present on-site prior to construction. Additionally, if Crotch's bumble bee is identified on-site, Mitigation Measure BIO-1 requires the preparation of an Avoidance Plan to avoid the species during site activities. Furthermore, Mitigation Measure BIO-4 requires implementation of a WEAP, which would be required to be completed by all site personnel prior to the start of construction activities. Within implementation of BIO-1 and BIO-4, impacts would be less-than-significant.

California Tiger Salamander – Central California Distinct Population Segment

This species requires both aquatic and upland habitats throughout their life cycle. During the larval stages, this species uses water bodies holding at least 12 weeks of water for the larvae to develop. To breed, this species uses bodies of fresh water, vernal pools, and other ephemeral permanent water bodies. The upland habitat requirements include small mammal burrows or another similar underground area to use as protection and shelter from predators. The California tiger salamander Central California distinct population segment is an opportunistic feeder, eating insects, tadpoles, frogs, centipedes, crickets, and more.

This species has a low potential to occur in the Study Area during dispersal due to the lack of available aquatic habitat for the larval stage of this species' life cycle. Although a canal is present, this canal is lined with concrete and does not have natural vegetation in or along the edges making it unlikely that this species occurs within the canal. The concrete, in this case, would act as a barrier for this species, if it were to occur within the canal, as it tries to move into the grassland areas for breeding. The closest CNDDDB occurrence is 4-miles southwest of the Study Area. Additionally, the closest breeding habitat is likely Tom Paine Slough, which is over 6-miles northwest of the Study Area. Therefore, project impacts to this species are not anticipated.

Burrowing Owl

No burrowing owls were observed during the field reconnaissance survey or any of the four burrowing owl protocol surveys within the Study Area. However, this site does still contain marginally suitable habitat for burrowing owls. Due to the negative results of the protocol surveys and the marginally suitable habitat on-site, there is a low potential for this species to occur within the Study Area. Project activities are not expected to impact any burrowing owls; however, a pre-construction survey would be completed and avoidance measures and a WEAP will be implemented in accordance with Mitigation Measure BIO-3 and BIO-4 to further ensure no impacts will occur to this species.

Swainson's Hawk

There are known Swainson's hawk (*Buteo swainsoni*) nest sites to the northeast of the Study Area and utility poles within the southeastern portion of the Study Area that could be used as nesting sites for Swainson's hawk. The presence of a pair of Swainson's hawks observed flying above the site during the field survey indicates that there is suitable nesting habitat within the vicinity; however, no nests were present within the Study Area and the utility poles provide only marginally suitable nesting sites. This species could also forage within the non-native annual grassland, which is abundant throughout the Study Area.

Project activities have the potential to impact Swainson's hawk foraging and nesting habitats primarily through increased human activity, ground disturbance, and vegetation removal. The anticipated potential impacts could include harassment and/or injury, nest disturbance if an active nest is found within 0.25-mile of the Study Area, and noise disturbance through increased human disturbance. Mitigation Measure BIO-2 and BIO-4 would reduce impacts to Swainson's hawks to less-than-significant by requiring pre-construction surveys to identify and avoid active nests during construction activities, a WEAP to be completed by all site personnel prior to the start of construction activities, as well as biological monitoring if active nests are found. Furthermore, project impacts to this species would be less than significant due to the small acreage of foraging habitat within the Study Area. Additionally, as discussed in detail under criterion (f) and in Mitigation Measure BIO-5, 34.6 acres of temporary and permanent habitat loss has already been mitigated with the purchase of mitigation credits under the San Joaquin County Multi Species Habitat Conservation Plan and Open Space Plan (SJMSCP) and the remaining acreage will be mitigated through the future purchase of additional credits under the SJMSCP.

Nesting Birds

There is minimal suitable nesting habitat for nesting birds throughout the Study Area, primarily within the existing landscaped/developed areas. Proposed project construction activities have the potential to impact nesting birds. If construction activities are scheduled to occur during the avian nesting season (typically February 1 to August 31), pre-construction surveys would be completed in accordance with Mitigation Measure BIO-3 and if active nests are present, avoidance measures would be implemented. Furthermore, Mitigation Measure BIO-4 would require a WEAP to be implemented by all site personnel prior to the start of construction activities. With implementation of Mitigation Measures BIO-3 and BIO-4, impacts to nesting birds would be reduced to a less-than-significant level.

San Joaquin Kit Fox

The San Joaquin kit fox's range within the San Joaquin Valley stretches from the southern portion of Kern County north to San Joaquin, Alameda, and Contra Costa counties, but also includes the La Grange area of Stanislaus County. Additionally, this species can be found in the valleys within San Luis

Obispo County. This species has experienced a significant population decline due to loss of habitat, disease, wildfire, and predation. An opportunistic hunter, the San Joaquin kit fox's diet consists of kangaroo rats, mice, ground squirrels, ground-nesting birds and rabbits. San Joaquin kit fox begin mating during the months of December and March, and usually begin giving birth between February and March. Female kit foxes typically have a litter of two to six pups.

The Study Area includes a San Joaquin kit fox Habitat Conservation Area along the southwestern edge, which serves as a corridor for individuals that may transit the area. However, no individuals or signs of San Joaquin kit fox were observed during the surveys. There are known CNDDDB occurrences within five miles of the Study Area but the most recent occurrence dates back to 1991. The Study Area's high frequency of human disturbance around these areas would likely prevent San Joaquin kit fox from occupying the area. Additionally, the entirety of the Study Area does not provide adequate habitat to support this species, as the grasses in the non-native grassland areas are too dense and no suitable burrows were observed; thus, this species has a low potential to occur and project impacts to this species are not anticipated.

American Badger

The American badger (*Taxidea taxus*) inhabits drier open stages of most shrub, forest, and herbaceous habits with friable soils. Cropland, desert, grassland, savanna, and shrubland/chaparral are preferred habitat types for the American badger. The species is primarily nocturnal, mostly solitary, and feeds on small rodents that are captured by digging out the rodent burrows. American badgers are an uncommon, permanent resident throughout most of California, except in the northern North Coast area. Threats to the species include habitat loss, collisions with vehicles, and direct persecution.

Some suitable grasslands and soils are present and small rodents, which could be prey for this species, were observed throughout the site. However, minimal suitably sized burrows for badgers are present and the disturbed land cover within the Study Area reduces the potential for this species to be present. There have been nine recorded occurrences of this species within five miles of the Study Area; however, the closest occurrence is approximately 2.6 miles southwest of the Study Area and was from 1993. Therefore, project impacts to this species are not anticipated.

Mitigation Measures

BIO-1 Crotch's Bumble Bee Avoidance

Prior to any vegetation removal, clearing, grading or grubbing, focused surveys for Crotch's bumble bee shall be conducted within the proposed Project footprint by a qualified biologist, with expertise in surveying for bumble bees. The focused surveys shall include: (1) a habitat assessment, (2) foraging surveys, and (3) nesting surveys, in accordance with the recommendations described in the *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species*, released by the CDFW on June 6, 2023. If more than one year after the completion of focused Crotch's bumble bee surveys (i.e., date of last survey) has passed before ground disturbance has been initiated, the focused surveys shall be repeated.

The habitat assessment will be conducted concurrently with the foraging and nesting surveys, and shall at a minimum, include historical and current species occurrences; document potential on-site habitat, including foraging, nesting, and/or overwintering resources; and identify which plant species are in bloom during the foraging and nesting surveys, as well as their percent cover.

Nesting surveys shall occur during the Queen Flight Season through the Colony Active Period (February 1 through August 31 for Crotch's bumble bee). Potential nesting sites shall be surveyed for active Crotch's bumble bee colonies either through observations of queens searching for nesting sites or by looking for concentrated bumble bee activity entering and exiting a given area. Potential nesting sites investigated by colony founding queens shall be GPS marked if the queen exhibits signs of interest in the potential site (e.g., she does not emerge from the site within a few minutes and then continues to nest search). Potential nesting sites identified during the queen nest searching phase shall be evaluated later during the Colony Active Period to determine whether an active colony has been established. Potential nest sites in project areas shall be observed for up to five minutes during the Colony Active Period to monitor for Crotch's bumble bees entering or exiting. If a nest site is confirmed to be occupied by Crotch's bumble bees, the location GPS coordinates shall be recorded.

A qualified biologist who is in possession of a valid Memorandum of Understanding with the CDFW (and valid Scientific Collecting Permit, if applicable) shall conduct capture foraging surveys and record non-lethal photo vouchers of all captured bumble bees in accordance with the CDFW *Survey Considerations for CEQA Candidate Bumble Bee Species* document (June 2023). Foraging surveys shall include at least three on-site surveys that are spaced two to four weeks apart. The timing of these surveys shall coincide with the Colony Active Period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between one hour after sunrise and two hours before sunset. Surveys shall not be conducted during wet conditions (e.g., fog, rain, or drizzle), and surveyors shall wait at least one hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies, temperatures are between 65°F and 90°F, and winds are less than 8 miles per hour. Surveys may be conducted outside these weather parameters if other bees or butterflies are observed flying.

If Crotch's bumble bee is detected during the focused surveys, an Avoidance Plan to fully avoid impacts to Crotch's bumble bee shall be developed. If impacts to Crotch's bumble bee cannot be fully avoided, an Incidental Take Permit shall be obtained from CDFW.

If Crotch's bumble bee is not detected during the focused surveys, or if this species is no longer listed or a Candidate under CESA at the time of construction, no further action or mitigation would be required.

BIO-2 Swainson's Hawk Pre-construction Survey and Avoidance

One pre-construction survey shall be conducted to search for Swainson's hawk nests within 0.25 mile of the proposed Project, generally following guidance laid out by the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000).

If active nests are found within 0.25 mile during the pre-construction survey and construction activities will occur during the Swainson's hawk nesting season (February 15 through September 15), a qualified biologist shall be present daily during any activities within the Project Area, including access routes, that are within 0.25 mile of the active nests to monitor the behavior of the potentially affected Swainson's hawks. The qualified biologist shall have the authority to order the cessation of all project activities if the bird(s) exhibits distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization [distress calls], agitation, failure to remain on nest, failure to deliver prey items for an extended time period, failure to maintain nest, etc.), which may cause reproductive failure (nest abandonment and loss of eggs and/or young).

BIO-3 Pre-construction Nesting Bird Survey and Avoidance

A general pre-construction nesting bird survey shall be conducted by a qualified biologist within seven days prior to the initiation of construction activities. If construction is stopped for more than seven days during the nesting season, a pre-construction survey should be conducted prior to the re-start of construction activities. Surveys shall include the disturbance area plus a 100-foot buffer for passerine species and a 300-foot buffer for raptors.

If active nests are located, an appropriate avoidance buffer shall be established within which no work activity would be allowed which would impact these nests. The avoidance buffer would be established by the qualified biologist on a case-by-case basis based on the species and site conditions. Larger buffers may be required depending upon the status of the nest and the construction activities occurring near the nest. The buffer area(s) shall be closed to all construction personnel and equipment until juveniles have fledged and/or the nest is inactive. A qualified biologist shall confirm that breeding/nesting is complete, and the nest is no longer active prior to removal of the buffer. If work within a buffer area cannot be avoided, then a qualified biologist shall be present to monitor all project activities that occur within the buffer. The biological monitor should evaluate the nesting avian species for signs of disturbance and should have the ability to stop work.

BIO-4 Construction Worker Environmental Awareness Training and Education Program

Prior to any activity on-site and for the duration of construction activities, all personnel at the Project area (including laydown areas and/or linear routes) shall attend a WEAP developed and presented by the Qualified Biologist or authorized designee. New personnel shall receive WEAP training on the first day of work and prior to commencing work on the site. Any employee responsible for the operations and maintenance or decommissioning of the Project facilities shall also attend an operations and maintenance-specific WEAP training.

1. The program shall include information on the life history of Crotch's bumble bee, Swainson's hawk, burrowing owl, and nesting birds, as well as other wildlife and plant species that may be encountered during construction activities.
2. The program shall also discuss the legal protection status of each species, the definition of "take" under the federal Endangered Species Act and California Endangered Species Act, measures the Applicant is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the federal Endangered Species Act or California Endangered Species Act.
3. The program shall include the contact information for the project biologist and on-site environmental compliance manager.
4. The program shall provide information on how and where to bring injured animals for treatment in the case any animals are injured the Project area.
5. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record.
6. A sticker shall be placed on hard hats indicating that the worker has completed the WEAP training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the WEAP training and are wearing hard hats with the required sticker.
7. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms will be made available upon agency request.

Significance After Mitigation

Mitigation Measures BIO-1 through BIO-4 would minimize the proposed project's potential to impact Crotch's bumble bee, Swainson's Hawk, burrowing owls, and nesting birds through required pre-construction surveys, monitoring, avoidance measures, and a WEAP. With implementation of Mitigation Measures BIO-1 through BIO-4, the proposed project's impacts to special-status wildlife species would be reduced to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The freshwater wetland within the project site occurs in a depression. This seasonal wetland was created by a leak in an irrigation pipe and subsequent years of heavy rainfall. The leak has since been repaired. Existing vegetation within the seasonal wetland falls into the Cattail Marsh Alliance (*angustifolia*, *domingensis*, *latifolia* Herbaceous Alliance) based on the structure and composition of the herbaceous layer that is present on-site. The Cattail Marsh Alliance is a CDFW-listed Sensitive Natural Community, but proposed project construction and operation would not adversely affect this sensitive natural community because the freshwater wetland is located approximately 100-feet outside the limits of disturbance for the proposed project. Therefore, this impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- c. *Would the project 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?*

There are no potentially jurisdictional features present. Despite the freshwater wetland supporting riparian vegetation, it is hydrologically isolated from lakes, rivers, or streams; therefore, it is not likely to be considered jurisdictional pursuant to California Fish and Game Code Section 1602. The freshwater wetland is assumed to be exempt from the State Water Resources Control Board's 2021 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State per Section IV.D.2.c.iv, which excludes artificially irrigated areas that would revert to dry land if irrigation were to cease. In addition, even if the freshwater wetland were to be state-regulated, the project would not affect this feature as it is outside the project footprint. Thus, the proposed project would not impact waters or wetlands.

NO IMPACT

- d. *Would the project 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?*

The Study Area is located within an Essential Connectivity Area Rank 1, as determined by the California Essential Habitat Connectivity, described as an area with limited connectivity opportunity. Rank 1 is the lowest quality habitat for wildlife movement within the California Essential Habitat Connectivity ranking system and is reserved for areas with greater than 50 percent urbanization.

Due to the relatively small size of the Study Area, and its location within existing regional industrial and urban development, the proposed project is not anticipated to interfere with regional movement

of wildlife species compared to the existing site conditions. Therefore, no impacts to wildlife movement would occur.

NO IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The proposed project would not conflict with San Joaquin County policies or ordinances protecting biological resources. All existing trees within the Study Area are currently planned to be retained during project activities. Additionally, the proposed Project would be developed in compliance with the San Joaquin County General Plan (San Joaquin County 2016). County ordinances and guidelines protecting significant oak woodlands and heritage trees would not apply because neither are present on site. Therefore, the proposed project would result in no impact.

NO IMPACT

- f. *Would the project 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 is located within the San Joaquin County Multi Species Habitat Conservation Plan and Open Space Plan (SJMSCP) area. The Study Area is mapped as the agriculture land use type per the SJMSCP and is also located in the SJMSCP's Central/Southwest Transition Zone, which provides optional incidental take coverage for several Covered Species. The Central/Southwest Transition zone includes mostly row and field crop habitat with some grassland habitat and small creeks throughout. The proposed project Applicant has opted into the SJMSCP; therefore, avoidance and minimization measures needed to offset impacts to Covered Species shall be added as conditions to the County's Administrative Use Permit. Species within the Central/Southwest Transition Zone that have low potential (i.e., not likely to be found on the site) within the Study Area include valley elderberry longhorn beetle, California tiger salamander-central California distinct population segment, burrowing owl, ferruginous hawk (*Buteo regalis*), northern harrier (*Circus hudsonius*), California horned lark (*Eremophila alpestris actia*), American badger, and the San Joaquin kit fox. Swainson's hawk was observed flying overhead during the field surveys; however, it has moderate potential to forage within the non-native grassland within the Study Area and low potential to nest on power poles in the southeastern portion of the Study Area.

The SJMSCP provides compensation for the effects of conversion of open space to non-open space uses on plant and wildlife species covered by the SJMSCP and non-wildlife resources, such as agriculture, recreation, scenic value. A mitigation fee was paid to San Joaquin Council of Governments to compensate for the 34.6 acres of temporary and permanent habitat loss of Agricultural Lands for the construction of the Tracy Peaker Plant (predecessor to the TCCPP) as part of the CEC licensing process in 2001. The proposed project includes temporary and permanent impacts that fall within the previously mitigated 34.6 acres, as well as small portions outside of the previously mitigated area. To compensate for areas outside of the 34.6 acres, Mitigation Measure BIO-5 would be implemented.

Mitigation Measures

BIO-5 Conversion of Open Space Land

The Applicant shall confer with San Joaquin Council of Governments to confirm the areas of temporary and/or permanent project impacts falling outside the area that was previously mitigated through the SJMSCP for conversion of Agricultural Habitat Land from Open Space use to Non-Open Space. As applicable, the Applicant shall pay the mitigation fees for this acreage to San Joaquin Council of Governments at a 1:1 ratio prior to the start of construction.

Significance After Mitigation

Mitigation Measure BIO-5 would minimize the proposed project's potential to impact provisions of an adopted Habitat Conservation Plan by requiring mitigation fees to be paid at a 1:1 ratio for land converted from Open Space to Non-Open Space. With implementation of Mitigation Measure BIO-5, the proposed project's impacts would be reduced to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The analysis in this section is informed by the Cultural Resources Technical Report prepared by Rincon in August 2024 (Appendix C).

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

As detailed in the Cultural Resources Technical Report (Appendix C), the Cultural Resources Study Area (Study Area) for the proposed project includes the entirety of APN 209-240-32. As described in Appendix C, the field survey and background research identified one built environment historical structure in the Study Area, P-39-004289, consisting of three sets of two transmission towers. However, the towers were recommended ineligible for listing in the National Register of Historic Places and the California Register of Historical Resources (CRHR) under any designation criteria due to a lack of historical or architectural significance. P-39-004289 is thus not considered a historical resource under CEQA. The proposed project would also avoid the towers through project design. Therefore, no impact to historical resources would occur.

NO IMPACT

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The Cultural Resources Technical Report records search of the California Historical Resources Information System, Sacred Lands File search, and the archaeological field survey identified no archaeological resources within the Study Area. However, two previously recorded archaeological sites (one prehistoric and one historic-era) and two isolated artifacts (one prehistoric and one historic-era) were identified within one mile of the Study Area. Although there is no surficial evidence within the Study Area suggesting the proposed project may impact archaeological resources, the presence of two archaeological sites and two archaeological isolates within one mile of the Study Area suggest the Study Area is at least moderately sensitive in terms of the potential to impact such resources that could be present beneath the surface. Therefore, this impact would be potentially significant, and mitigation would be required.

Mitigation Measure

CUL-1 Cultural Resources Sensitivity Training

Prior to the commencement of project-related, ground-disturbing activities, including, but not limited to, site clearing, grubbing, trenching, and excavation, a Qualified Archaeologist who meets or exceeds the Secretary of the Interior's Professional Qualifications Standards for Archaeology (National Park Service 1983) or their designee shall provide a Cultural Resources Sensitivity Training for the general contractor, subcontractors, and construction workers participating in ground-disturbing activity for Project development. The training shall describe the potential of exposing archaeological resources, types of cultural materials that may be encountered, and directions on the steps that shall be taken if such a find is encountered. The project Applicant shall provide a copy of the training materials to the County Planning Division for review. In addition, consulting Tribes shall be given an opportunity to review training materials and provide input. This training may be presented alongside other environmental training programs required prior to construction. A Cultural Resources Sensitivity Training acknowledgment form shall be signed by workers who receive the training.

CUL-2 Unanticipated Discovery

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via Project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The County shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per CCR Section 15126.4(b)(3)(C).

Significance After Mitigation

Implementation of Mitigation Measures CUL-1 would reduce potential impacts to archaeological resources to a less-than-significant level by requiring site personnel to participate in a Cultural Resources Sensitivity Training, led by a qualified archaeologist, prior to the start of ground-disturbing activities. Implementation of Mitigation Measure CUL-2 would reduce potential impacts to archaeological resources to a less-than-significant level by implementing standard procedures in the event archaeological resources are unexpectedly encountered during ground-disturbing activities.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendent. The Most Likely Descendent has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the Most Likely Descendent does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to these regulations, the proposed project would have a less-than-significant impact related to disturbance of human remains.

LESS-THAN-SIGNIFICANT IMPACT

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6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction and Decommissioning

Construction and future decommissioning of the project would result in fuel (diesel and gasoline) and electricity consumption from the use of construction tools and equipment, vendor truck trips, and vehicle trips generated from workers traveling to and from the project site. The consumption of energy would be temporary in nature, as construction and decommissioning would each last approximately 12 months, and would not present a significant demand for available supplies. The project site features no unusual project characteristics or construction or decommissioning processes that would require inordinately higher amounts of energy than for neighboring comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). In addition, as required by State law, idling times of construction vehicles are limited to no more than five minutes, thereby minimizing, or eliminating unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Equipment employed in the construction and future decommissioning of the project would therefore not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts during construction and future decommissioning would be less-than-significant.

Operation

Once the Project is operational, up to 40 MW of energy would be delivered to and stored at the BESS site. Electricity would be required during operation and maintenance, such as for lighting and to power temperature control for the batteries. In addition, gasoline and diesel fuel would be required for occasional maintenance equipment and trips. As described in the *Description of Project*, routine maintenance is expected to necessitate approximately two workers to travel to the facility up to two times per week. Operations would require up to two workers in a medium-duty utility truck to visit the substation up to two times per week, and a crew may need to periodically visit the site to address

any maintenance issues picked up by the remote monitoring system. The associated fuel consumption would be minimal in comparison to the overall county use and would not be considered an inefficient use of fuel, given that it would be associated with enhancing the reliability and resilience of the electrical grid. Thus, although irreversible commitments of small quantities of nonrenewable resources would occur during operation of the project, the amount of diesel and gasoline fuel consumed during project operation would be relatively minimal and would not be considered an inefficient use.

Furthermore, as a BESS sited to support future renewable energy projects, it would indirectly assist the provision of renewable energy available for use within the state. Therefore, due to the inherent nature of the project as a BESS, the project would not result in a wasteful use of energy. Impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed project would assist the State in meeting its energy goals, including those identified in CARB's 2022 Scoping Plan Update, the Renewables Portfolio Standard, and Senate Bill (SB) 100 by implementing a BESS facility sited to support future renewable energy project, and thereby assisting in the increased supply of renewable solar energy within the state.

As discussed under criterion 8(b), the proposed project would be consistent with the following specific electricity goals outlined in CARB's 2022 Scoping Plan Update:

- Greenhouse gas (GHG) target for retail sales load coverage by sector of 38 million metric tons of CO₂e in 2030 and 30 million metric tons of CO₂e in 2035. Storage of electricity from potentially renewable sources allows for the continued use of renewable energy when there is not a direct source, therefore allowing for additional sales of renewable energy.
- Meet increased demand for electrification without new fossil gas-fired resources.

Additionally, as discussed under criterion 8(b), the project would be consistent with SB 100. SB 100 accelerated the state's Renewables Portfolio Standard Program by increasing California's procurement of electricity from renewable sources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. The proposed project would store electricity to be used during peak activity. Overall, the proposed project would increase the efficiency of the existing transmission network while using the energy generated for the PG&E system that would be compliant with the Renewables Portfolio Standard Program. Increasing the efficiency of the existing transmission network would improve California's ability to supply renewable energy to end-use customers specifically within the greater PG&E service area and to achieve statewide renewable energy goals. By creating a new source of energy storage that can aid in the integration of eligible renewable energy sources, the proposed project would be compliant with the battery storage targets in the Renewables Portfolio Standard program. The additional energy storage provided by the proposed project would be added to the power grid and as more and more renewable energy sources come online, would directly support energy goals under SB 100.

The SJVAPCD adopted the Climate Change Action Plan in August 2008. The Climate Change Action Plan directed the District Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project specific GHG emissions on global climate change. In December 2009, the SJVAPCD adopted

the guidance: *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* and the policy: *District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency* (San Joaquin County 2024b). The guidance includes different approaches for estimating GHG impacts, and summarizes potential GHG emission reduction measures, including Best Performance Standards to reduce GHG emissions (San Joaquin County 2009a). The policy establishes processes to evaluate the significance of project specific GHG emission impacts on global climate change and identifies Best Performance Standards used to reduce project specific GHG emissions (San Joaquin County 2009b). For example, some Best Performance Standards focus on measures that improve energy efficiency. The proposed project would help facilitate the expansion of renewable energy into PG&E's energy mix which serves San Joaquin County. Therefore, the proposed project would help implement the guidance from SJVAPCD, and thereby would not conflict with their adopted policy and guidance documents.

Additionally, the San Joaquin County General Plan Public Health and Safety Element sets reduction targets and provides strategies to reduce greenhouse gas emissions and associated impacts. In particular, Goal PHS-6 aims "[t]o reduce greenhouse gas emissions as part of the Statewide effort to combat climate change," and Policy PHS-6.3 (GHG Reduction Strategies) states "The County shall promote greenhouse gas emission reductions by encouraging efficient farming methods (e.g., no-till farming, crop rotation, cover cropping); supporting the installation of renewable energy technologies; and protecting grasslands, open space, oak woodlands, riparian forest and farmlands from conversion to urban uses" (San Joaquin County 2016). The proposed project would help facilitate the expansion of renewable energy into PG&E's energy mix which serves San Joaquin County. Therefore, the proposed project would not conflict with the County's General Plan.

For the reasons described above, the proposed project would have a less-than-significant impact related to conflicts with or obstruction of a State or local plan for renewable energy or energy efficiency.

LESS-THAN-SIGNIFICANT IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a.1. Would the project directly or indirectly cause 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?*

The project site is not intersected by a known earthquake fault, as delineated on the most recent DOC Alquist-Priolo Earthquake Fault Zoning Map (DOC 2021). Therefore, the proposed project would not cause the risk of loss, injury, or death involving rupture of an Alquist-Priolo designated earthquake fault. No impact would occur.

NO IMPACT

- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Although no fault lines intersect the project site, active and potentially active faults in the region could generate strong ground shaking on the project site. These faults include, but are not limited to, the Cedar Mountain Fault located approximately 9-miles west of the project site and the La Costa Valley Fault located approximately 22.5-miles west of the project site (DOC 2021). Due to the project site's proximity to nearby fault zones, it may be subject to seismic ground shaking in the event of an earthquake which could potentially result in damage to the proposed project.

The proposed project would be designed and constructed in accordance with the seismic safety requirements of the California Building Code (CBC), which is adopted as part of Title 8 Division 1 of the San Joaquin County Code. Compliance with the CBC would minimize the risk of loss, injury, or death involving strong seismic ground shaking. Thus, this impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*
- c. Would the project 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?*

The project site is relatively flat and surrounded by flat land, and therefore is not subject to landslide risk. Additionally, the project site is not located within a liquefaction zone (DOC 2021). The proposed project would not create steep slopes or otherwise increase the risk of landslides at the project site. Project design and construction would incorporate standard safety measures from the CBC to address potential seismic hazards, including lateral spreading, subsidence, liquefaction and collapse. Compliance with the CBC would ensure the proposed project would result in a less-than-significant impact related to unstable soils and directly or indirectly causing the risk of loss, injury, or death related to liquefaction or landslides. Impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Soil erosion is the removal of soil by water, wind, and gravity. Construction of the proposed project would result in approximately 6,300 cubic yards of cut soil, 2,000 CY of which will be used as fill onsite; however, 4,300 CY would either be redistributed and stockpiled onsite or hauled offsite. This stored soil could result in substantial soil erosion or the loss of topsoil, as soil would be loosened and exposed to precipitation and wind. As further discussed in Section 10, *Hydrology and Water Quality*, the proposed project would be required to obtain coverage under a Construction Stormwater General Permit to comply with all established regulations of the National Pollutant Discharge Elimination System (NPDES) permitting program to control construction stormwater discharges. Compliance with the conditions of the Construction Stormwater General Permit would require the developer to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to reduce potential erosion and loss of topsoil during project construction activities. Typical Best Management Practices (BMP) required by a SWPPP would include covering of inactive stockpiles, silt fences and gravel bag berms to trap sediments, inlet protection, and slope stabilization to limit discharge of eroded soils from the construction site and sedimentation of surface waters off-site. Pursuant to Title 5 Division 10 of the San Joaquin County Code, all applicable BMPs are required to be implemented to reduce erosion and other stormwater impacts. With adherence to these State and local regulations, the proposed project would not result in substantial soil erosion or the loss of topsoil, and this impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The project site is underlain by Capay Clay and Stomar Clay Loam Clear Lake clay and San Ysidro sandy loam (Web Soil Survey 2024). These soils have high clay contents, which is indicative of a high shrink-swell potential (Web Soil Survey 2024). Therefore, expansive soils underly the project site. Although the proposed project does not involve the construction of habitable structures or placement of permanent on-site personnel, it would still be required to comply with San Joaquin Municipal Code Title 8, which adopts the California Building Code by reference, because the proposed project requires a building permit from the San Joaquin County. Chapter 18 of the California Building Code provides criteria for geotechnical and structural considerations for design and installation of foundation systems, as well as requirements for soil investigations and site preparation. With adherence to the California Building Code, impacts related to expansive soil would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project would not require the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the project site to assess the project's potential for significant impacts to scientifically important paleontological resources. The analysis was based on the results of a review of existing information in the scientific literature regarding known fossils within geologic units mapped at the project site. According to the Society of Vertebrate Paleontology (SVP 2010) classification system, geologic units can be assigned a high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. Following the literature review, a paleontological sensitivity classification was assigned to each geologic unit mapped within the project site. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

Pleistocene alluvial fan deposits underlie the entire project site. Pleistocene alluvial fan deposits have produced several significant fossil localities in San Joaquin County, producing taxa such as camels (*Camelops hesternus*), horses (*Hipparionini* and *Equus*), mastodon (*Mammuth*), and bison (*Bison*). Given this fossil-producing history, the Pleistocene alluvial fan deposits have high paleontological sensitivity.

The project site has been previously used for agriculture and as a construction laydown yard. These activities have likely disturbed the sediments underlying the project site to a depth of at least two feet. Disturbed sediments lack paleontological sensitivity due to the destruction of their original stratigraphic context. Therefore, sediments underlying the project site have no paleontological sensitivity from the surface to two feet below the surface and high paleontological sensitivity greater than two feet below the surface.

Ground-disturbing activities within previously undisturbed sediments with high paleontological sensitivity could result in significant impacts to paleontological resources. Impacts would be significant if construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data. Project-related ground disturbance would include grading for building pads and water basins, overall site grading, and excavation/trenching associated with underground water lines and electrical cables. The maximum depths of these activities are not yet determined, but they are anticipated to reach greater than two feet below the surface, meaning they may significantly impact paleontological resources.

Implementation of Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to less-than-significant level and would effectively mitigate the project's impacts to these resources by monitoring grading in paleontologically sensitive sediments so that any paleontological resources in those sediments may be salvaged, identified, and curated.

Mitigation Measure

GEO-1 Paleontological Resources Monitoring and Mitigation

The project Applicant shall implement the following measures prior to and during construction grading and excavation activities:

- **Qualified Professional Paleontologist.** Prior to the start of construction, the project Applicant shall retain a Qualified Professional Paleontologist, as defined by the Society of Vertebrate Paleontology (SVP 2010). The Qualified Professional Paleontologist shall direct all mitigation measures related to paleontological resources.
- **Paleontological Worker Environmental Awareness Program.** Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction personnel. The Applicant shall provide a resume of the Qualified Professional Paleontologist and a copy of this training to the County Planning Division for review.
- **Paleontological Monitoring and Salvage.** Full-time paleontological monitoring shall be conducted during all excavating or grading that impacts sediments greater than two feet below the current ground surface. Paleontological monitoring shall be conducted by a paleontological monitor with experience with collection and salvage of paleontological resources and who meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor or their designee. The Qualified Professional Paleontologist may recommend that monitoring be reduced in frequency or ceased entirely based on geologic observations. Such decisions shall be subject to review and approval by the County. In the event of a fossil discovery by the paleontological monitor or construction personnel, all construction activity within 50 feet of the find shall cease, and the Qualified Professional Paleontologist shall evaluate the find. If the fossil(s) is (are) not scientifically significant, then construction activity may resume. If it is determined that the fossil(s) is (are) scientifically significant, the following shall be completed:
 - **Fossil Salvage.** The paleontological monitor shall salvage (excavate and recover) the fossil to protect it from damage/destruction. Typically, fossils can be safely salvaged quickly by a single paleontological monitor with minimal disruption to construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically sensitive deposits. After the fossil(s) is (are) salvaged, construction activity may resume.
 - **Fossil Preparation and Curation.** Fossils shall be identified to the lowest (most-specific) possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Professional Paleontologist.
 - **Final Paleontological Mitigation Report.** Upon completion of ground-disturbing activities (or laboratory preparation and curation of fossils, if necessary), the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts. The report shall include a summary of the field and laboratory methods employed; an overview of project geology; and, if fossils were discovered, an analysis of the fossils, including physical description, taxonomic identification, and scientific significance. The report shall be submitted to the County Planning Division and, if fossil curation occurred, the designated scientific institution.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to less-than-significant level and would effectively mitigate the proposed project's impacts to these resources through monitoring grading in paleontologically sensitive sediments so that any paleontological resources in those sediments may be salvaged, identified, and curated.

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following analysis is based upon the Air Quality and Greenhouse Gas Study prepared for the proposed project by Rincon in August 2024 (Appendix A). GHG emissions associated with the construction, operation, and decommissioning of the proposed project were estimated using CalEEMod Version 2022.1.1.21, with the assumptions described in Section 3, *Air Quality*.

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Construction, operation, and decommissioning of the project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from construction, operation, and decommissioning.

Construction and Decommissioning Emissions

Construction and decommissioning of the project would result in GHG emissions, which are primarily associated with use of off-road equipment, on-road vendor and haul trucks, and worker vehicles. As shown in Table 8, construction and decommissioning of the proposed project would result in a total of approximately 2,204 metric tons (MT) CO₂e for the 12-month construction period. Emissions were then amortized over the lifetime of the proposed project (i.e., 40 years). It is assumed that decommissioning GHG emissions would be similar to construction GHG emissions. In actuality, decommissioning emissions would be lower than construction emissions due to the reduced earthwork required and cleaner equipment available during decommissioning of the BESS. As shown in Table 8, construction emissions are calculated to be 55 MT CO₂e per year.

Table 8 Estimated Construction and Decommissioning GHG Emissions

Construction Phase	Project Emissions (MT CO ₂ e)
2025	671
2026	1,533
Subtotal	2,204
Amortized Construction (40 years)	55
Decommissioning	2,204
Amortized Decommissioning (40 years)	55
MT = metric tons; CO ₂ e = carbon dioxide equivalents	
Source: Appendix A.	

Operational Emissions

The proposed project would generate GHG emissions during operation from minimal area source, energy consumption and mobile emissions.⁴ As shown in Table 9, the proposed project would generate approximately 217 MT of CO₂e per year from the operation of the proposed project.

Over the up to 40-year operation of the proposed project (including amortized construction and decommissioning activities), the total GHG emissions would be approximately 8,695 MT CO₂e (217 MT CO₂e times 40 years). As shown, each year the proposed project would offset, or displace, 24,072 MT CO₂e. Therefore, in its first year of operation, the proposed project is anticipated to offset its total 40-year contribution to GHG emissions. The generation of electricity to meet consumer demand is generated not only through renewable resources such as solar, but also through non-renewable resources such as the combustion of natural gas. The use of non-renewable resources to generate electricity results in the emission of greenhouse gases. The displaced emissions represent the amount of GHGs that would not be generated by non-renewable sources due to the implementation of the project.

Table 9 Annual GHG Emissions

Project Operations	Project Emissions (MT CO ₂ e)
Area	<1
Energy	15
Mobile	20
Water	0
Waste	0
Refrigeration (Non-SF ₆)	62
SF ₆	10
Subtotal	109
Amortized Construction	55
Amortized Decommissioning	55
Total	217

⁴ Area sources for this project refer to consumer products (such as aerosol cleaners), and architectural coating (maintenance re-coating activities for battery storage).

Project Operations	Project Emissions (MT CO ₂ e)
Displaced Emissions	(24,072)
Annual Project Emissions with displaced emissions	(23,855)

SF₆ = Sulphur hexafluoride; MT = metric tons; CO₂e = carbon dioxide equivalent
 May not add directly due to rounding. Parenthetical notation indicates a negative number.
 Source: Appendix A

The proposed project would help address the limitations of the electric grid and the increasing demand for renewable energy by increasing storage capability which improves the reliability of the grid and makes it more resilient to disturbances and peaks in energy demand. As the use of renewable energy increases, the need for battery storage to maintain electrical supply during both peak demand and when the renewable systems are not generating electricity also increases. Therefore, the project is anticipated to result in a net benefit and overall reduction with respect to GHG emissions.

Plan Consistency

2022 Scoping Plan

The principal state GHG reduction plans and policies are Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32 and AB 1279. The goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. In 2022, the State passed AB 1279, which declares the State would achieve net-zero GHG emissions by 2045 and would reduce GHG emissions by 85 percent below 1990 levels by 2045. The latest iteration of the Scoping Plan is the 2022 Scoping Plan, which focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities. The 2022 Scoping Plan's strategies that apply to the proposed project include the following:

- Reducing fossil fuel use, energy demand and vehicle miles traveled (VMT)
- Building decarbonization
- Maximizing recycling and diversion from landfills

The proposed project would be consistent with these goals through the expected reduction of fossil fuel use by the implementation of the BESS storage facility that would store electrical energy for additional grid support during peak demand. The proposed project would be served by and work with PG&E to provide additional renewable energy through the BESS system installed on-site reducing the need to ramp-up non-renewable sources during peak demand periods. Therefore, the proposed project would not conflict with the 2022 Scoping Plan and GHG impacts would be less-than-significant.

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located in 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 or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction and Decommissioning

During the construction and decommissioning phases, construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. The transport, use, and storage of hazardous materials would be conducted pursuant to applicable local, State, and federal regulations regarding the handling of potentially hazardous materials, including Title 49 of the Code of Federal Regulations and Title 13 of the CCR. Title 49 of the Code of Federal Regulations requires training of every employee who handles hazardous materials to ensure proper handling, transport, and disposal of the hazardous materials. Title 13 of the CCR regulates transport of hazardous materials to ensure the safe transport of hazardous materials.

As discussed under criterion 10(a), construction contractors would be required to prepare a SWPPP for construction activities according to the NPDES Construction Stormwater General Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe BMPs for controlling site runoff. As such, proposed project construction would not create a significant hazard to the public through the routine transport, use, or disposal of hazardous materials during construction or future decommissioning. Therefore, project impacts would be less-than-significant.

Operation

Once constructed, the operation and maintenance of the project would result in the transportation, use, and disposal of fewer hazardous materials compared to construction. BESS technology proposed for the project would be designed so that battery units would not degrade to the point of needing to be routinely replaced during the project lifetime. However, if removal of defective batteries from the project site is required during operations, this material would be classified mostly as universal waste under the California Department of Toxic Substances Control (DTSC) regulations and guidance (DTSC 2018), which are defined as hazardous wastes that are widely produced by households and many different types of businesses. Transportation of lithium-ion batteries is subject to 49 Code of Federal Regulations 171-180. These regulations include requirements for prevention of a dangerous evolution of heat; prevention of short circuits; prevention of damage to the terminals; and require that no battery comes in contact with other batteries or conductive materials.

If a spill were to occur during project operation, pertinent measures in the project emergency response plan and/or the Spill Containment and Countermeasures Plan would be implemented to contain and clean up the spill. The project would also include a Hazardous Material Business Plan to manage and report hazardous materials for the project. Furthermore, the project would be required to comply with all applicable rules and regulations involving hazardous materials, including CCR Title 23 Health and Safety Regulations, the California Division of Occupational Safety and Health requirements, Hazardous Waste Control Act, California Accidental Release Prevention Program, and California Health and Safety Code. Compliance with these regulations would reduce any potential risk or impact associated with the transport, use, or disposal of hazardous materials. Therefore, project impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- b. *Would the project 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?*

The primary hazard associated with lithium-ion batteries is fire. In general, the off-nominal conditions that can cause the occurrence of hazard events with lithium-ion batteries can be categorized into electrical, mechanical, and environmental types. The most common electrical hazards are over-charge, over-discharge, and external and internal short circuits. Environmental hazards include off-nominal conditions, such as temperatures beyond the manufacturer's recommended range. Other environmental hazard causes include floods and rain entering the batteries. Mechanical hazards include vibration, shock, and impact encountered under transportation conditions.

Numerous regulations exist for the construction, operation, and decommissioning of BESSs. These include requirements for the components that comprise the systems, installation of the systems, enclosures within which the systems are contained, hazard detection systems, fire protection systems, temperature and venting components, and training to evaluate for and respond to hazards. The project Applicant would implement fire protection, prevention, and detection measures and design features in accordance with the 2022 California Fire Code. These measures and design features include redundant separate methods of failure detection; remote alarms; ventilation, overcurrent protection, and battery controls; compliance with National Fire Protection Association (NFPA) standards; and equipment of thermal management systems. In addition, the project Applicant would develop an Emergency Action and Emergency Response Plan in coordination with the South San Joaquin County Fire Authority (SSJCFA) pursuant to SB 38 to identify emergency action and response procedures and train local emergency response personnel during development and operation of the facility. Additional project-specific details regarding coordination with the SSJCFA, design features that reduce project-risk, and emergency response planning and training are detailed in the following paragraphs.

Applicant representatives coordinated with South San Joaquin County Fire Authority (SSJCFA) representatives (Spears 2024⁵) in June 2024 to obtain SSJCFA comments and input regarding the Project design relative to fire protection considerations. Specific items discussed with the SSJCFA representatives included:

- Need for all weather access roads of adequate width and turning radii
- Electronically operated versus manual entrance gate
- Inclusion of knox boxes for SSJCFA access and communication capability with BESS operations
- Need for onsite water storage to supply 60 minutes of water at 20 pounds per square inch (psi) at hydrant for two engines (i.e., 175 gallons per minute [gpm] or 350 gpm combined which equates to approximately 21,000 gallons)
- Any fire pumps needed must have a reliable energy supply such as local electrical connection
- Need for water supply line to connect to dedicated BESS fire water tank (minimum 21,000 gallon capacity tank)
- More detailed review to occur during building permit and fire permit process

The Applicant has considered the comments received from the SSJCFA and incorporated the pertinent fire safety related items into the Project design.

⁵ Spears, Tim. 2024. Fire Marshall, South San Joaquin Fire Authority. Teleconference with applicant representatives and SSJCFA consultants (Code Concepts Group) to discuss the fire design considerations for the Tracy LDES BESS Project. June 24, 2024.

Given the concern regarding recent battery fires in California, the Applicant (Tracy BESS LLC) has provided the following information that differentiates the Tracy LDES BESS facility design, including technology and safety design parameters as well as emergency response planning and training. Tracy BESS LLC is committed to designing, constructing, and operating the Tracy LDES BESS Project in a safe and responsible manner. Separate from recent battery fires in California, the design for the Tracy LDES BESS Project exceeds design and code requirements in furtherance of safety. Recent BESS fires have been attributed to several factors that have been addressed for in the Tracy LDES BESS design as discussed below.

BESS Design

Recent BESS incidents have included facilities that use lithium nickel manganese cobalt (NMC) batteries which are more prone to thermal runaway, a hazardous and rapid exothermic reaction that triggers sudden fires. The Tracy LDES BESS Project would use lithium iron phosphate (LFP) battery technology, a modern chemistry and technology with minimal thermal runaway risk and history. LFP technology is the new standard in utility-scale storage with a lower energy density and chemistry less likely to release flammable gasses in the event of overheating.

BESS incidents that have occurred recently also involved BESS installations inside of buildings with minimal spacing between each battery and difficult access for containment. The proposed Tracy LDES BESS Project design includes an installation that is outside with significant separation between modular battery containers for more convenient and safer firefighting access. The proposed Tracy LDES BESS Project design far exceeds the required spacing between battery blocks. The proposed Tracy LDES BESS Project installation includes battery blocks that are spaced 26 feet apart (required is 8 feet) via an alternating PCS - BESS container layout design. The PCS equipment does not present a fire risk and will serve as a barrier between the alternating battery containers. This configuration exceeds NFPA 855 standards, reduces fire propagation risk, and should an event occur allows safe access to neighboring containers to contain the spread of a thermal event. The BESS containers are placed back-to-back, which is a tested configuration via the UL 9540A test. The 1-hour fire rating protects the adjacent container in the event of a fire incident. In addition, the battery containers will contain internal aerosols that are event activated to extinguish any fires as soon as they are detected.

BESS incidents at other facilities have also involved air-cooled battery containers with limiting cooling and thermal management safety margin. The Tracy LDES BESS Project containers will be liquid-cooled with significantly improved heat transfer ability compared to air-cooled configurations, keeping cells cool during charge/discharge. As an added safety mechanism for the Tracy LDES BESS Project design, any failure in the liquid cooling system would result in an automatic derate and in certain cases a shutdown of the applicable container.

The Tracy LDES BESS installation design includes an independent fire loop with a water tank and hydrants which exceeds the code requirements. Beyond internal fire suppression in each container, the Project design includes onsite fire water available to deluge the adjacent containers to avoid propagation should an event occur.

Emergency Response Plan and Training

In early October 2023, California's governor signed into law [Senate Bill 38](#) (SB 38), which amends Section 761.3 of the California Public Utilities Code to address safety issues for the BESS industry in the state. The law requires that every battery energy storage facility located in California establish an emergency response and emergency action plan that covers the facility. The owner/operator of the facility must coordinate with local emergency management agencies, unified program agencies, and

local first responders to develop the response and action plan and must submit the plan to the county and, if applicable, the city where the facility is located. Specifically, under the new law, the emergency response and action plans shall:

- Be consistent with Sections 142.3 and 6401 of the Labor Code and any related regulations;
- Be consistent with the regulatory requirements applicable to emergency action plans pursuant to Section 3220 of Title 8 and California Code of Regulations;
- Establish response procedures for an equipment malfunction or failure;
- Include procedures that provide for the safety of surrounding residents, neighboring properties, emergency responders, and the environment (procedures to be established in consultation with local emergency management agencies); and
- Establish notification and communication procedures between the battery storage facility and local emergency management agencies.

Additionally, a facility's emergency response and emergency action plan may consider responses to potential offsite impacts (e.g., poor air quality, threats to municipal water supplies, water runoff, and threats to natural waterways) and may include procedures for the local emergency response agency to establish shelter-in-place orders and road closure notifications (where appropriate).

Prior to the start of BESS operations, an Emergency Operations Plan will be developed in coordination with the County and the SSJCFA. The Emergency Operations Plan will also be coordinated and integrated with the existing Emergency Response Plan for the adjacent Tracy Combined Cycle Power Plant. Considerations to be addressed in the Emergency Operations Plan include procedures for BESS personnel and emergency response personnel to safely shut down the systems, procedures to remove damaged equipment, general emergency procedures, and annual staff training.

Coordination with the SSJCFA is planned to include development of a pre-incident plan for responding to potential accidental fires, explosions, and other emergency conditions associated with the BESS installation, and the pre- incident plan is expected to include the following elements:

- Understanding the procedures included in the facility operation and emergency response plan
- Identifying the types of BESS technologies present, the potential hazards associated with the systems, and methods for responding to fires and incidents associated with the particular BESS
- Identifying the location of all electrical disconnects at the facility and understanding that electrical energy stored in BESS equipment cannot always be removed or isolated
- Understanding the procedures for shutting down and de-energizing or isolating equipment to reduce the risk of fire, electric shock, and personal injury hazards
- Understanding the procedures for dealing with damaged BESS equipment in a post-fire incident, including the following:
 - Recognizing that stranded electrical energy in fire-damaged storage batteries and other BESS has the potential for reignition long after initial extinguishment
 - Contacting personnel qualified to safely remove damaged BESS equipment from the facility (this contact information will be included in the facility operation and emergency response plan)

Compliance with applicable federal, State, and local requirements, and implementation of fire protection protocols, would ensure the proposed project does not create a significant hazard to the public through the accidental release of hazardous materials. Therefore, this impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The project site is not located within 0.25 mile of an existing or proposed school. The closest school to the project site, Kelly Elementary School, is located approximately 1.5 miles northeast of the project site. Therefore, the proposed project would not emit hazardous emissions or handle hazardous materials within 0.25 mile of a school. No impact would occur.

NO IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material 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?*

The project site does not appear on the California Environmental Protection Agency's Cortese List (California Environmental Protection Agency 2024). However, there are two hazardous material sites within one mile of the project site. According to the California Department of Toxic Substances Control's EnviroStor database, the nearest hazardous material site to the project site on the above lists is a Soil Cleanup Site, located approximately 0.65-mile north of the project site, which has been designated "Completed – Case Closed" since 2009, meaning remedial action has been undertaken (DTSC 2024). Additionally, according to the State Water Resources Control Board's Geotracker database, a Leaking Underground Storage Tank Cleanup Site is located approximately 0.8-mile northeast of the project site (State Water Resources Control Board 2024a). The site has been designated "Completed – Case Closed" since 2002.

Furthermore, a Phase I Environmental Site Assessment, prepared by AECOM in September 2022 did not identify evidence of hazardous material pollution at the project site (Appendix E).

Therefore, the project site would not be located on a hazardous materials site. No impact would occur.

NO IMPACT

- 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 or excessive noise for people residing or working in the project area?*

The proposed project would be remotely operated and does not include any residential uses, nor are residential land uses proximate to the project site. The project site is located approximately 3-miles northwest of the Tracy Municipal Airport but outside the Tracy Municipal Airport influence area. Therefore, the proposed project would not be located in an area subject to additional review for potential hazards due to proximity to an airport. The proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area. No impact would occur.

NO IMPACT

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The project site is within the jurisdiction of the San Joaquin County Local Hazard Mitigation Plan (San Joaquin County 2023).

The proposed project would not involve the development of structures or infrastructure that would potentially impair implementation of or physically interfere with these plans. During construction, equipment and construction worker vehicles would be staged in the temporary staging and laydown area located adjacent to the eastern border of the BESS facility and therefore would not result in substantial delays on West Schulte Road. The minimal, infrequent vehicle trips associated with construction and operation and maintenance activities would not disturb traffic patterns on West Schulte Road in such a manner that could affect emergency response or evacuations. As described in criterion 9(b), the project Applicant would develop an Emergency Action and Emergency Response Plan pursuant to SB 38 in advance of construction to train local emergency response personnel during development and operation of the facility. The plan would be completed in accordance with existing State regulations (Health and Safety Code Section 25504(b); 19 CCR Section 2731; 22 CCR Section 66262.34(a)(4)). The contents of the Emergency Action and Emergency Response Plan would comply with existing State regulations, be developed in consultation with the Tracy Rural County Fire Protection District and the energy storage system supplier and include defined roles and responsibilities and training for local first responders.

Following compliance with existing regulations, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and potential impacts on emergency response would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

As described in Section 20, *Wildfire*, the project site is not within a State Responsibility Area or lands classified as a Very High Fire Hazard Severity Zone, as delineated by the California Department of Forestry and Fire Protection's (CAL FIRE) Fire Hazard Severity Zone Viewer (CAL FIRE 2024). The nearest fire hazard zone is a moderate fire hazard zone located approximately 0.6-mile southwest of the project site, on the south side of I-580. The project site is bounded by the TCCPP facility and Delta-Mendota Canal to the southwest, a vacant parcel to the west, agricultural property to the south and east, and the Union Pacific Railroad to the north. Immediately north of the railroad are the Owens-Brockway glass container manufacturing plant and the Nutting-Rice warehouse. The proposed project would also be operated remotely. Thus, the proposed project would not expose people or structures to a risk of loss, injury, or death involving wildland fires. No impact would occur.

NO IMPACT

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10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Construction and Decommissioning

As stormwater flows over a construction site, it can pick up sediment, debris, and chemicals and transport them to receiving water bodies. Additionally, soil disturbance during project construction increases the potential for erosion and sedimentation. If construction or future decommissioning activities occur during the rainy season, or in the event of heavy storms, soils from the site could be eroded and transported off-site or downstream to receiving waters. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported off-site via stormwater runoff.

Construction and future decommissioning of the project would involve activities, such as clearing, grading, installation of foundations, installation of wiring, and commissioning, which would result in the generation of potential pollutants, such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction activities in the absence of any protective or avoidance measures. However, on-site construction activities would be required to comply with the requirements of the statewide NPDES Construction Stormwater General Permit (Order No. 2022-0057-DWQ), because project construction would disturb more than one acre of land. Compliance with the Construction Stormwater General Permit would require the creation and implementation of a SWPPP that would include BMPs to prevent polluted stormwater runoff during construction and decommissioning. Construction BMPs would include, but are not limited to, erosion and sediment control BMPs designed to minimize erosion and retain sediment on-site, as well as good housekeeping BMPs that would prevent spills, leaks, and off-site discharge of construction debris and waste. With regulatory compliance, which requires implementation of a SWPPP and construction BMPs to minimize pollutant discharge into stormwater runoff, project construction would not violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality. Additionally, construction of the project would be required to comply with San Joaquin County Code Title 5 Division 10: Stormwater Management and Discharge Control to reduce stormwater impacts by prohibiting discharges into the stormwater system, requiring compliance with applicable federal, State, regional, and County BMPs, and implementing a spill prevention plan. Impacts from project construction and decommissioning would be less-than-significant.

Operation

The proposed project would control stormwater flow by routing runoff around the facility perimeter to an approximately 0.5-acre stormwater management area with a detention basin, located along the northeastern boundary of the project site. The detention basin design includes an outlet control structure, which would be an 18-inch diameter outfall and rip rap protection. The detention basin design criteria are based on a 100-year, 24-hour storm. The grading and drainage plan for the project site considers the results of the site-specific hydrology study. The proposed project on-site detention and infiltration basin has been designed to manage the design stormwater runoff event in accordance with County standards. Site runoff would be limited to no more than allowed above current pre-project development flows.

Construction of the proposed stormwater management area would control and prevent site runoff from degrading water quality through the release of sediment or other pollutants from the project site during project operation and maintenance. Operation of the project would be required to comply

with the San Joaquin ~~Joquin~~ County Code Division 10, as discussed above. With regulatory compliance and construction of the proposed stormwater management area, project operation would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The project site overlies the Tracy Subbasin, which is part of the San Joaquin Valley Groundwater Basin (California State Water Resources Control Board 2006). The Tracy Subbasin is not adjudicated as it is not in condition of critical overdraft (Tracy Subbasin 2024). The subbasin is managed through the Tracy Subbasin Groundwater Sustainability Plan which was approved by the State Water Board in January 2024.

The project would require a water supply during construction and decommissioning. During operation, water use is not expected with the exception of periodic replenishment of the onsite fire water tank requiring minor amounts of water supplied by a pipeline connection to the adjacent TCCPP fire water system that is supplied via a connection to the Delta-Mendota Canal. During construction and decommissioning, approximately 4 acre-feet of water (approximately 5,000 gallons per day) would be used for dust suppression and earthwork. Water for these purposes would be trucked to the project site by a local purveyor. While groundwater from the San Joaquin Valley Basin supplies approximately 30 percent of water in the region (USGS 2024b), groundwater wells within the Tracy Subbasin have a total extraction capacity of approximately 15 million gallons per day, and levels in the wells have remained fairly consistent; with sufficient groundwater reserve sustained through multiple dry years from 2010 to 2020 (San Joaquin County 2014, Tracy Subbasin 2024). The four acre-feet of water required during construction and decommissioning of the proposed project would be temporary and nominal. Therefore, the proposed project would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin.

The project would increase impervious surface areas on the project site by approximately 5.3 acres through the introduction of access roads, the BESS facility, and associated electrical equipment. However, the project would include a stormwater management area in the northeastern corner of the project site, which would enable precipitation to drain from the project site. Project construction and decommissioning is not anticipated to require groundwater dewatering, and project operation would not extract groundwater on-site. Therefore, the project would not substantially interfere with groundwater recharge.

The project would not substantially decrease groundwater supplies or substantially interfere with groundwater recharge. Impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- c.(i) Would the project 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 result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project 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 that would 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?*
- c.(iv) Would the project 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 impede or redirect flood flows?*

The project site is generally flat. Under current conditions, water on the project site flows from slightly higher elevations on the southwestern portion of the site toward the northeastern portion of the site. The proposed project would increase impervious surface areas on the project site through the introduction of BESS facility infrastructure such as roads and concrete pads for BESS and PCS enclosures. Total impervious area on the project site would increase by approximately 5.3 acres.

As described above, the proposed project would route runoff around the facility perimeter to an approximately 0.5-acre stormwater management area with a detention basin, located along the northeastern boundary of the project site. The maximum sheet flow distance for any stormwater on-site is approximately 300 linear feet. Stormwater landing on the project site would primarily sheet flow to the proposed detention basin. The western portion of project site would use a 2-foot wide, 1-foot-deep concrete channel to intercept runoff that would otherwise bypass detention and reroute the runoff to the detention basin (Preliminary Stormwater Management Report, included as Appendix D). As described under criterion 10(a), the proposed project on-site detention and infiltration basin has been designed to manage the design stormwater runoff event in accordance with County standards, and site runoff would be limited to no more than allowed above current pre-project development flows.

The project site is generally flat, and there are no streams or rivers within the project site boundary or immediately adjacent to the project site. An irrigation channel (Delta-Mendota Canal) is located immediately adjacent to the project site to the south, but well outside the project disturbance footprint which is concentrated to the north of the intervening TCCPP facility. To prepare the project site for use as an energy storage facility, site clearing, excavation, and grading would occur. However, the project would not involve any activities which could alter the course of nearby waterways.

Given the project site's relatively flat topography, erosion during construction and decommissioning is unlikely to be substantial. The implementation of the BMPs required for the previously discussed SWPPP (e.g., gravel bags and straw waddles) would control erosion and siltation during construction. Hazardous materials used during construction, operation, maintenance, and decommissioning would be properly stored, used, and disposed of as discussed under criterion 9(a). Furthermore, on-site stormwater capture at the stormwater management area would allow for sediments and sediment-bound pollutants to settle out of runoff prior to outfall, minimizing potential downstream siltation or pollution impacts. Therefore, drainage alterations associated with the project would not result in

substantial erosion or siltation and would not provide substantial additional sources of polluted runoff and would not exceed the capacity of existing or planned stormwater drainage systems.

According to the Federal Emergency Management Agency's Flood Insurance Rate Map, the project site is located in Zone X, an area of minimal flood hazard (Federal Emergency Management Agency 2009). Given that the project is not located in a flood hazard area, would not increase the rate of surface runoff, and would only result in a marginal increase in runoff volume, the project would not impede or redirect flood flows or result in on- or off-site flood impacts.

Overall, impacts associated with the project's proposed drainage alterations would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

As described above, the project site is not located within a flood hazard zone. The project site is located approximately 59-miles east of the Pacific Ocean and 16-miles west of the nearest lake, Bass Lake. Accordingly, the project site is not subject to inundation from tsunamis or seiche, and no impact would occur.

NO IMPACT

- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project site is within the jurisdiction of the Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin and the Solano Subbasin Groundwater Sustainability Plan (Central Valley Regional Water Quality Control Board 2019, Solano Collaborative 2021). As described in criterion 10(a), the proposed project would not violate water quality standards with adherence to regulations such as the NPDES Construction Stormwater General Permit and the San Joaquin County Code. The water quality goals of the Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin are enforced through these policies. With adherence to these regulatory requirements, the proposed project would not interfere with or obstruct achievement of the water quality goals within the Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin.

As described under criterion 10(b), the proposed project would require minimal water usage during construction, operation, and future decommissioning. If groundwater were provided to the proposed project, the groundwater would be distributed in compliance with the management requirements of the *Tracy Subbasin Groundwater Sustainability Plan*. Accordingly, the proposed project's use of groundwater would not conflict with or obstruct implementation of a sustainable groundwater management plan. Therefore, this impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project physically divide an established community?

Projects that have the potential to divide an established community include the construction of a new freeway or highway through an established neighborhood. The proposed project consists of the construction, operation, and decommissioning of a BESS facility on an undeveloped portion of the TCCPP parcel. The project site is surrounded by industrial and commercial uses to the north, vacant land to the west and south, and agricultural land to the east. The project does not involve construction of freeways, walls, or other features that would divide an established community. Therefore, no impact would occur.

NO IMPACT

b. Would the project 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?

The applicable plans and policies relating to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project (including, but not limited to, the General Plan and development title) adopted for the purpose of avoiding or mitigating an environmental effect are summarized below.

San Joaquin County General Plan

Community Development Element

The project site is located within the jurisdiction of the County's General Plan and subject to the policies of the General Plan Land Use Element. Under the County's General Plan, allowable uses in the A/G land use area include BESSs. The proposed project includes development of a BESS that would not be incompatible with the County-designated allowable uses in the A/G land use area.

Public Facilities and Services

The County's Public Facilities and Services Element includes goals and policies related to transportation and mobility, and infrastructure and services. The proposed project would not result in substantial impacts to transportation and mobility or public infrastructure and services. Refer to Environmental Checklist Section 17, *Transportation*, for further discussion on the proposed project's potential impacts to transportation and mobility. Refer to Environmental Checklist Section 15, *Public Services*, and Section 19, *Utilities and Service Systems*, for further discussion on the proposed project's potential impacts to public infrastructure and services.

Public Health and Safety

The County's Public Health and Safety Element includes policies related to air quality, geologic hazards, flooding, hazardous materials, noise, and wildfire. These environmental topics have been addressed under the applicable section throughout this analysis. The proposed project would not conflict with the Public Health and Safety Element of the General Plan.

Natural and Cultural Resources Element

The County's Natural and Cultural Resources Element contains policies addressing biological resources, water quality, energy, cultural and historic resources, scenic resources, and recreation. These environmental topics have been addressed under the applicable section throughout this Initial Study. In cases where impacts were identified as potentially significant, mitigation is identified to reduce impacts to a less-than-significant level. The proposed project would not conflict with the Natural and Cultural Resources Element of the General Plan.

San Joaquin County Code

The project site is zoned AG-40 (General Agriculture; 40-acre minimum parcel). Pursuant to the San Joaquin County Development Title Update, published December 2022, utility-scale BESSs are permitted in the A/G zone with approval of an Administrative Use Permit by the Zoning Administrator. The project Applicant would submit an application for an Administrative Use Permit from the County and comply with the provisions set forth in the Administrative Use Permit. Therefore, the proposed project would not conflict with the San Joaquin County Code. For reference, the applicant has submitted an Administrative Use Permit application to the County for the Tracy LDES Project.

In summary, the proposed project would not 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 and no impact would occur.

NO IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project 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. *Would the project 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?*

The San Joaquin County General Plan indicates there are sand and gravel deposits of regional significance in the county, primarily in rivers and creeks (San Joaquin County 2016). There are no known mineral resources or resource recovery sites on the project site (DOC 2022). Therefore, the proposed project would not result in the loss of availability of a known mineral resource or locally important mineral resource recovery site. No impact would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project result in:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following analysis is based upon the Noise and Vibration Technical Report prepared for the proposed project by Rincon in August 2024 (Appendix F).

- a. *Would the project result in 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?*

Construction and Decommissioning

Construction Equipment

Operation of heavy equipment during construction would result in a temporary noise level increase. Project construction activities would involve the use of a variety of construction equipment throughout various phases of construction; these include transport of personnel and materials to and from the project site, use of heavy machinery for grading and clearing, operation of pile drivers for pile foundations, and operation of other equipment used during construction on the project site.

The San Joaquin County has established criteria and standards to regulate noise levels in the County in the Municipal Code Chapter 9-404. Section 9-404.020(c) of the Municipal Code exempts specified activities from the provisions of Chapter 9-1025, so long as construction activities do not take place before 6:00 a.m. or after 9:00 p.m. on any day. The San Joaquin General Plan Public Health and Safety Element incorporates the County Municipal Code requirements by reference.

While the County does not have established noise level thresholds for assessing construction noise impacts, the Federal Transit Administration (FTA) has developed guidance for determining if construction of a project would expose various land uses to significant noise levels or if a project would result in a substantial temporary increase in noise levels. Based on FTA guidance, project-generated construction and decommissioning noise should not exceed the eight-hour 80 decibels using the A-weighted sound pressure level (dBA) equivalent noise level (L_{eq}) noise limit at nearby residences.

The nearest noise-sensitive receptor is a residence located approximately 1,280-feet south of the proposed project BESS site. Based on the noise modeling detailed in Appendix F, construction equipment would generate an unshielded noise level of up to 61 dBA L_{eq} at the nearest residential use which would not exceed the FTA's 80 L_{eq} guidance. Therefore, construction noise impacts would be less-than-significant.

This analysis assumes that project decommissioning impacts would be similar to project construction impacts. Therefore, noise impacts to adjacent sensitive receiver during decommissioning of the project would not exceed the FTA's 80 L_{eq} guidance and would be less-than-significant.

Table 10 shows estimated construction noise levels at sensitive receptors by phase of construction. Note that noise levels in Table 10 conservatively do not account for shielding from any intervening buildings, terrain, or other nearby structures or site features.

As shown in Table 10, construction noise levels at the nearest noise-sensitive receptors would not exceed the FTA's construction noise threshold of 80 dBA L_{eq} (eight-hour). Therefore, temporary noise impacts associated with Project construction would be less-than-significant.

This analysis assumes that decommissioning noise impacts would be similar to construction noise impacts. Therefore, noise impacts to adjacent sensitive receptors during decommissioning of the proposed Project would also be less-than-significant.

Table 10 Estimated Construction Noise Levels at Sensitive Receptors

Construction Phase	dBA L _{eq} (8-hour)			
	RCNM Reference Noise Level	Single-Family Residence to the South	Single-Family Residence to the West	Single-Family Residence to the Southwest
Distance (feet)	50	1,600	2,815	3,080
Access Road Construction ¹	86	56	51	50
Site Preparation and Grading ²	88	57	52	52
Foundation Installation ³	91	61	56	56
Set Modules, Inverters, and Switchgear ⁴	86	55	51	50
Electrical Wire Installation/Finish Grading ⁵	86	56	51	51
Commission/Testing ⁶	78	48	43	43

dBA = A-weighted sound pressure level; L_{eq} = equivalent noise level; RCNM = Roadway Construction Noise Model

¹ Access Road Construction phase was evaluated assuming simultaneous operation of a backhoe, compactor, dozer, dump truck, and grader.

² Site Preparation and Grading phase was evaluated assuming simultaneous operation of a backhoe, compactor, dozer, dump truck, two graders, and a pump.

³ Foundation Installation phase was evaluated assuming simultaneous operation of a backhoe, auger drill rig, two concrete mixer trucks, two compactors, compressor, crane, dozer, front end loader, and impact pile driver.

⁴ Set Modules, Inverters, and Switchgear phase was evaluated assuming simultaneous operation of a backhoe, forklift, compressor, two cranes, generator, and a front-end loader.

⁵ Electrical Wire Installation/Finish Grading phase was evaluated assuming simultaneous operation of a backhoe, forklift, compactor, compressor, dump truck, and grader.

⁶ Commission/Testing phase was evaluated assuming simultaneous operation of a front-end loader, compactor, compressor, pickup truck, and welder torch.

Source: Roadway Construction Noise Model. See Appendix B for modeling outputs.

Construction Vehicle Trips

During construction, the proposed project would generate new, temporary vehicle trips that would increase noise levels on nearby roadways (primarily West Schulte Road). The proposed project is anticipated to generate a maximum of 402 daily one-way vehicle trips (201 roundtrips) between worker trips, haul trips, and equipment delivery trips during the peak phases of construction. The proposed project would not make alterations to roadway alignments or substantially change the vehicle classifications mix on the surrounding roadways (i.e., West Schulte Road). Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes primarily on West Schulte Road, which carries an average daily traffic volume of 8,065 vehicles. A temporary increase of 402 daily vehicle trips on this roadway (increasing daily trips from 8,065 to 8,467 vehicles) would result in a daily traffic noise level increase of approximately 0.2 dBA, which is below the 5 dBA threshold for an ambient noise environment below 60 dBA. Additionally, a noise increase of 0.2 dBA would not be perceptible to the average human ear, which can only detect changes of 3 dBA or more. Therefore, impacts would be less-than-significant.

This analysis assumes that decommissioning noise impacts would be similar to construction noise impacts and would be completed with up to 402 daily one-way vehicle trips. Therefore, temporary off-site traffic noise impacts during project decommissioning would also be less-than-significant.

Operation

Operational Noise

Operations and maintenance of the proposed project would require up to two workers in a medium-duty utility truck to visit the proposed project facility up to two times per week. Operation of the proposed project would be required to comply with the County's noise standards set forth in Municipal Code Chapter 9-404.050, which limits noise levels to 50 dBA between 7:00 a.m. to 10:00 p.m. and 45 dBA between 10:00 p.m. to 7:00 a.m. Because project noise generating equipment may operate at any time of the day, the operational analysis compares project-generated noise to the more stringent noise level of 45 dBA.

Project operation would generate noise from point sources, including battery containers, transformers, inverters, and the substation. Noise modeling was conducted (as provided in Appendix F) to evaluate whether operation of the project would exceed the County's noise standards. As modeled in Appendix F and shown in Table 11, project operational noise would not exceed 45 dBA at the receiving property lines of nearby sensitive receptors. Therefore, operational noise would not exceed County standards, and impacts would be less-than-significant.

Table 11 Operational Noise Levels

Receiver Name	Receiver Description	Modeled Noise Level (dBA L_{eq})	Exceeds Daytime Noise Threshold? ¹	Exceeds Nighttime Noise Threshold? ¹
R1	Single-family residence along West Schulte Road, 0.5-mile west of Project site	39.8	No	No
R2	Single-family residence along Hansen Road, 0.6-mile southwest of Project site	38.8	No	No
R3	Single-family residence Hansen Road, directly west of California Aqueduct, 0.3-mile south of Project site	45.0	No	No

dBA = A-weighted sound pressure level; L_{eq} = equivalent noise level

¹ Pursuant to the San Joaquin 2035 General Plan Public Health and Safety Element, the applicable daytime (7:00 a.m. to 10:00 p.m.) noise threshold is 50 dBA at residential properties, while the applicable nighttime (10:00 p.m. to 7:00 a.m.) noise threshold is 45 dBA at residential properties.

Off-Site Traffic Noise

During operation, the proposed project would generate new vehicle trips that would increase noise levels on nearby roadways (primarily West Schulte Road). New vehicle trips would be from regular maintenance visits, generating up to four trips per week. However, when compared with the existing average daily traffic volume of 8,065 vehicles on West Schulte Road, these four additional daily maintenance worker trips would result in a negligible traffic noise increase (much less than 0.1 dBA) on this roadway. Therefore, impacts would be below the impact threshold (5 dBA Community Noise Equivalent Level increase for ambient noise environments below 60 dBA) and off-site traffic noise impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Construction and Decommissioning

Construction activities known to generate excessive ground-borne vibration, such as pile driving, may be conducted during construction. Pile driving construction equipment may be used at the BESS development area and BESS switchyard, as close as approximately 1,280 feet of the nearest off-site structures (i.e., the single-family residence located south of the project site). Based on FTA recommendations, limiting vibration levels to below 0.2 inches per second (in/sec) peak particle velocity (PPV) at residential structures would prevent structural damage regardless of building construction type.

As described in Appendix F, vibratory pile driving generates a vibration level of approximately 1.518 in/sec PPV at a distance of 25 feet. At a distance of 1,280 feet, this vibration level would attenuate to approximately 0.004 in/sec PPV and would therefore not exceed the threshold of 0.2 in/sec PPV at this vibration-sensitive receptor. Therefore, temporary vibration impacts associated with construction would be less-than-significant.

Operation

Operation of the proposed project would not include any substantial vibration sources; therefore, operational vibration impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- 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?*

The project site is not located within an airport land use plan or within two miles of a public or private airport. The closest major airport to the project site is the Tracy Municipal Airport, located approximately three miles to the southeast. The project site is located outside the year 2028 55 dBA Community Noise Equivalent Level noise contour of the airport, according to Exhibit 2TM-3 of the Airport Land Use Compatibility Plan Update for San Joaquin County's Aviation System (Coffman Associates, Inc. 2009). In addition, the proposed project does not include any noise-sensitive outdoor use areas (e.g., courtyards, outdoor recreation areas) or interior spaces. Therefore, no impact would occur.

NO IMPACT

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14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned 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)?*

The project does not include any housing or business development that would directly induce population growth. Because construction and decommissioning of the project would be temporary in nature, it is anticipated that construction workers would live locally and would not relocate to the area. Long-term operation of the project would not require any on-site employees as the facility would be operated remotely. Routine maintenance of the facility would require two workers to visit the substation up to two times per week. It is anticipated that maintenance workers would live locally and would not relocate to the area. If workers were required to relocate to the area, the additional population would not represent a substantial population change. While the project would develop new energy system infrastructure, the project would store, and discharge energy derived from renewable sources to support existing energy demand and projected population growth to ensure grid reliability. Because the project would support growth that is already anticipated to occur, the project would not indirectly encourage new development or induce population growth in the region due to the development of energy infrastructure. The project would not induce substantial unplanned population growth and impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed project would not displace any existing housing or people as the project site is currently vacant and undeveloped. Therefore, no impact would occur.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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, or the 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:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The nearest fire stations to the project site are Tracy Fire Station 94 and CAL FIRE Station 26, Tracy Fire Station 97, and Tracy Fire Station 91, located 1.4-miles northwest, 3-miles southeast, and 3-miles northeast, respectively. Construction and future decommissioning of the project would not introduce uses that would necessitate the need for new or physically altered fire protection facilities. As discussed in Section 14, *Population and Housing*, the proposed project would not result in population growth and therefore, would not result in increased demand for fire protection services. However, operation of the project would include the use of lithium-ion batteries which can be explosive and flammable.

In the event of a fire, the project could temporarily increase demand for fire protection. Numerous regulations exist for fire protection during the operation of BESSs to prevent a fire due to the lithium-ion batteries. These fire protection systems would be designed in accordance with the 2022 California Fire Code (CCR Title 24, Part 9) or the version of the Fire Code that is current at the time of construction. The project would implement fire protection, prevention, and detection measures and design features in accordance with the 2022 California Fire Code, including redundant separate methods of failure detection. These redundant separate methods of failure detection would include installation of remote alarms for operations personnel and emergency response teams, including

voltage, current, and temperature alarms from the battery management system. Other protective measures proposed in the BESS include ventilation, overcurrent protection, battery controls to operate the batteries within designated parameters, temperature and humidity controls, smoke detection, and maintenance in accordance with manufacturer guidelines. With implementation of relevant fire regulations and fire systems, the risk of a fire of the batteries requiring an emergency response would be reduced.

In addition, the project Applicant would develop an Emergency Action and Response Plan in advance of construction, pursuant to SB 38, to train local emergency response personnel during development and operation of the facility. Comprehensive training of local emergency response personnel would ensure emergency personnel are well-equipped and proficient in handling potential incidents at the BESS facility. Given the potential risk, particularly with lithium-ion batteries that may undergo explosive reactions in the presence of intense heat or fire, specialized emergency response protocols are essential for effectively addressing such emergencies. The Emergency Action and Response Plan would be completed in accordance with existing state regulations (Health and Safety Code Section 25504(b); 19 CCR 2731; 22 CCR 66262.34[a][4]) and would be developed in consultation with the local fire departments and BESS supplier. The plan would also include defined roles and responsibilities and training for local first responders.

Implementation of the above fire protective measures during the project's operation would ensure the proposed project would not generate significant new demand for fire protection services beyond the demand that is already generated in the broader service area. The project would not require frequent action from emergency response or fire protection services to the extent that it would affect service ratios in a manner that would require expansion or construction of new facilities. Therefore, this impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The project site is served by the San Joaquin County Sheriff's Department. The nearest police stations to the project site are the Tracy Police Department, located at 1000 Civic Center Drive (approximately 4.3 miles from the project site) and the Tracy Police Department North Annex at 1325 North MacArthur Drive (approximately 4.5 miles from the project site). The proposed project consists of a remotely operated BESS facility that would not have any permanent on-site employees and would include security fencing to secure the facility. Therefore, the proposed project would not generate substantial population growth and would not result in an increased demand for police protection services. As such, the proposed project would not result in the need for new or altered police protection facilities that could cause significant environmental impacts. This impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*
- a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*
- a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The proposed project consists of the construction, operation, and future decommissioning of a BESS facility, electrical switchyard, and fire water and gen-tie lines. As described in Section 14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly result in population growth. Therefore, the proposed project would not increase demand for new or altered schools, parks, or public facilities, the construction of which could cause significant environmental impacts. No impacts would occur.

NO IMPACT

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*

As described in Section 14, *Population and Housing*, the project does not include development of housing or businesses that would directly or indirectly result in population growth. Therefore, the project would not increase the population served by local recreation facilities or otherwise result in increased demand for or degradation of those facilities. No impact would occur.

NO IMPACT

- 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?*

As described in Section 14, *Population and Housing*, the proposed project does not include development of housing or businesses that would directly or indirectly result in population growth. Therefore, the project would not 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. In addition, the proposed project would not include or require the construction or expansion of recreational facilities, the construction of which could have an adverse physical effect on the environment. Therefore, no impact would occur.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Regional and local plans addressing the circulation system include the San Joaquin Council of Governments 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), and San Joaquin Regional Transit District's San Joaquin Coordinated Public Transportation Plan. Access to the project site during construction, operation, and decommissioning would be provided by West Schulte Road. There are no transit stops located adjacent to the project site; the nearest transit stop is located approximately 1.7-miles northeast of the project site at the intersection of Mabel Josephine Drive and Veneto Lane, near Kelly Elementary School. There are no existing bicycle facilities on West Schulte Road, and none are proposed for future installation on the portion of West Schulte Road nearest to the project site. This portion of West Schulte Road does not contain sidewalks adjacent to the project site; the nearest sidewalk on West Schulte Road is located approximately 0.6-mile northwest of the project site.

On average approximately 50 construction workers would be on the project site daily during construction. During construction, construction equipment and construction worker vehicles would be staged in the temporary staging and laydown area located adjacent to the eastern border of the BESS facility and thus would not require the partial or full closure of West Schulte Road. Construction traffic would be temporary and limited to the duration of the approximately 12-month construction schedule. After construction is complete, operation of the proposed project would not generate substantial amounts of traffic, because the proposed project would be operated remotely. Routine operations would require up to two workers in a medium-duty utility truck to visit the facility up to twice per week on average; however, this minimal level of additional trips generated would not have

the potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, this impact would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state VMT exceeding an applicable threshold of significance may indicate a significant impact. In 2018, the Governor's Office of Planning and Research (OPR) published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* which provides on evaluating the potential significance of a project's VMT impacts. As stated in the Technical Advisory, projects that generate or attract fewer than 110 passenger vehicle trips per day generally are assumed to have a less-than-significant impact related to VMT (OPR 2018).

Overall, the proposed project is expected to generate an average of 30 truck trips and 50 worker trips per day during the 12-month construction phase. The estimated number of construction-phase trips is based on the planned work activities, construction schedule, and Applicant experience on similar projects. After construction is complete, the proposed project would function as an unmanned facility that is controlled remotely from an off-site location. No daily operational trips would typically be generated by the proposed project. Routine operations and maintenance would require up to two workers in a medium-duty utility truck to visit the project facility up to two times per week, resulting in approximately four round trips per week during the operational lifespan of the proposed project. Accordingly, vehicle trips would not exceed the OPR threshold of 110 passenger vehicle trips per day, and the project can be presumed to result in a less-than-significant VMT impact without conducting a detailed traffic study based on OPR's recommendations for small projects. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and no impact would occur.

NO IMPACT

- c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*
- d. Would the project result in inadequate emergency access?*

The proposed project would not require work in public rights-of-way or the reconfiguration or closure of any existing roads. During construction and decommissioning, equipment and construction worker vehicles would be staged in the temporary staging and laydown area located adjacent to the eastern border of the BESS facility and therefore would not result in substantial delays on West Schulte Road. As discussed under criterion 17(a), construction and operational traffic would be minimal and therefore would not result in transportation hazards or substantial delays in emergency access. In addition, the proposed project would be required to comply with San Joaquin County Code Standards related to emergency access, including Municipal Code Chapter 4-1006, which sets standards for emergency access for fire apparatuses and emergency vehicles based on the San Joaquin County Fire Chiefs Association, Fire Apparatus Access Road Standard. Therefore, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible use or result in inadequate emergency access. No impact would occur.

NO IMPACT

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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:				
a. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. 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 Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

On July 1, 2015, California AB 52 went into effect, expanding CEQA by defining a new resource category of “tribal cultural resources.” AB 52 establishes that “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1) (A-B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

1. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American Tribe.

AB 52 establishes a formal consultation process for California Tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project,” specifically with those Native American Tribes that have requested notice of projects proposed within the jurisdiction of the lead agency. Consultation begins with a written notification that must include a brief description of the proposed project, the project’s location, the lead CEQA agency contact information, and notification that the California Native American Tribe has 30 days to request consultation. Upon receipt of a written response from a California Native American Tribe requesting consultation, the lead CEQA agency and the California Native American Tribe requesting consultation shall begin the AB 52 process.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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?*

On May 16, 2024, the NAHC responded to Rincon’s Sacred Lands File request, stating the Sacred Lands File search results were negative. Meaning, there is no documentation of resources of Native American origin within the NAHC’s Sacred Lands File database near the Cultural Resources Study Area, which encompasses the entirety of APN 209-240-32.

The NAHC also provided a list of 16 individuals from seven tribal groups in the region, which is included in the Cultural Resources Technical Report (Appendix C).

A referral was sent to the North Valley Yokuts Tribe, the United Auburn Indian Community, the Buena Vista Rancheria, and the California Native American Heritage Commission on October 25, 2024 for review. The Community Development Department did not receive any responses requesting a consultation under AB 52.

LESS-THAN-SIGNIFICANT IMPACT

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project 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?*

Water

As described in the *Description of Project*, the proposed project would have an on-site fire water tank and a fire water line to the BESS facility that would be self-filling through a new pressurized pipeline connection to the TCCPP raw water service, the environmental effects of which are considered throughout this document. No additional new or expanded water facilities would be required other

than those analyzed herein. Consequently, no additional impacts related to water facilities would occur

Wastewater Treatment

The proposed project would not require permanent on-site personnel and does not include the installation of permanent restroom facilities. Portable restrooms would be used for workers during construction and decommissioning. Therefore, the project would not require or result in the relocation or construction of new or expanded wastewater treatment. No impact would occur.

Stormwater Drainage

The project would include a new stormwater management area located in the northeastern corner of the project site, the environmental effects of which are analyzed and mitigated throughout this Initial Study. No additional new or expanded stormwater drainage facilities would be required other than those analyzed herein, and impacts would be less-than-significant.

Electric Power

The proposed project is a BESS facility that would connect to the PG&E Schulte Substation, the environmental effects of which are analyzed and mitigated throughout this document. No additional new or expanded electric power facilities would be required other than those analyzed herein. Consequently, no additional impacts related to electric power facilities would occur.

Natural Gas

The proposed project does not involve any components requiring natural gas service. Consequently, no impact related to natural gas facilities would occur.

Telecommunications

The proposed project includes remote data collection systems for monitoring production, system health, and weather conditions, the environmental effects of which are analyzed and mitigated throughout this Initial Study-Mitigated Negative Declaration. No additional new or expanded telecommunications facilities would be required other than those analyzed herein, and impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

As discussed under criterion 19(a), the proposed project would not require permanent on-site personnel and does not include the installation of potable water service connections or groundwater wells. The proposed project would connect to the TCCPP raw water service line for an approximately 27,000-gallon, on-site fire water tank. However, this water would be designated for emergency purposes only, not ongoing use. Water required for construction and decommissioning for dust suppression would be delivered to the site by truck by a local purveyor.

As discussed in Section 10, *Hydrology and Water Quality*, the Tracy Subbasin underlies the project site. Groundwater wells within the Tracy Subbasin have a total extraction capacity of approximately 15 million gallons per day, and levels in the wells have remained fairly consistent; with sufficient

groundwater reserve sustained through multiple dry years from 2010 to 2020 (San Joaquin County 2014, Tracy Subbasin 2024). Water demand during construction, primarily for dust suppression, would be temporary and total approximately 4 acre-feet. The minimal quantities of water required during construction would not substantially impact regional water supplies. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, and impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- c. *Would the project 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?*

As discussed under criterion 19(a), the proposed project would not require permanent on-site personnel and does not include the construction of on-site restroom facilities. Therefore, no wastewater would be generated, and no impact related to wastewater treatment would occur.

NO IMPACT

- d. *Would the project 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. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The project site is currently undeveloped and would not require any demolition during construction. Construction and decommissioning activities would generate typical construction waste, such as equipment packaging, construction scrap, and debris. Construction debris would be hauled by truck to the Foothill Sanitary Landfill located approximately 37 miles from the project site. The Foothill Sanitary Landfill has a remaining capacity of 125 million cubic yards (CalRecycle 2010). Construction of the proposed project would result in a maximum of approximately 4,300 cubic yards of soil export which could be accommodated by the remaining capacities of the Foothill Sanitary Landfill. Furthermore, the construction contractor would adhere to State regulations pertaining to construction waste and recycling requirements, such as the California Green Building Standards Code, which requires diversion of at least 65 percent of construction debris.

The project site would be an unmanned facility with personnel on-site only for periodic maintenance. Therefore, the proposed project would not generate solid waste in excess of State or local standards, local infrastructure capacity, or otherwise impair the attainment of solid waste regulation goals and would comply with applicable statutes and regulations related to solid waste. These impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, 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. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is not within a State Responsibility Area or lands classified as a Very High Fire Hazard Severity Zone, as delineated by CAL FIRE's Fire Hazard Severity Zone Viewer (CAL FIRE 2024). The nearest fire hazard zone is a moderate fire hazard zone located approximately 0.6-mile southwest of the project site. Vacant lands and existing agricultural development, roads, and two aqueduct crossings separate the moderate fire hazard zone from the project site. The project site is not considered to be near a State Responsibility Area or lands classified as a Very High Fire Hazard Severity Zone and would therefore not substantially impair an adopted emergency response plan or emergency evacuation plan, exacerbate wildfire risks, or expose people or structures to significant risks such as flooding, slope instability, or drainage changes. No impact would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially 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, substantially 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. 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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to substantially 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, substantially 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?*

As discussed in 4, *Biological Resources*, the proposed project would not impact the total mapped habitat area of a species or result in the loss of a locally or regionally important population of any of these species. Therefore, the project would not have the potential to substantially 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

As discussed in Section 5, *Cultural Resources*, the project would not substantially alter the potentially historical built environment resources on-site. Therefore, the project would not eliminate important examples of the major periods of California history or prehistory. Impacts would be less-than-significant.

LESS-THAN-SIGNIFICANT IMPACT

- 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)?*

As described throughout the Initial Study with respect to all environmental issues, the proposed project would not result in significant and unmitigable impacts to the environment. All anticipated impacts associated with project construction, operation, and decommissioning would be either less-than-significant or less than significant with mitigation incorporated. The proposed project would have no impact on aesthetics (scenic vistas and scenic resources within a State Scenic Highway), agriculture and forestry resources, biological resources (protected wetlands, migratory species, and conflict with local policies and ordinances), cultural resources (significance of historical resources), geology and soils (septic tanks or alternative wastewater disposal systems), hazards and hazardous materials (hazards within 0.25 mile of a school, location on a hazardous materials site, hazards within two miles of an airport, and exposure to wildland fire risks), land use and planning, mineral resources, noise (exposure within two miles of an airport), population and housing (displacement of people or housing), public services (schools, parks, and other public facilities), recreation, transportation (conflict with *CEQA Guidelines* 15064.3, subdivision (b), hazards due to geometric design or incompatible uses, and inadequate emergency access), utilities and service systems (wastewater treatment capacity), or wildfire. Thus, the proposed project would not contribute to cumulative impacts for these resource topics and these topics are not discussed further.

Section 15355 of the *CEQA Guidelines* defines a cumulative impact as the condition under which “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (CCR Section 15355). A list of projects within a 5-mile radius of the project site are included in Table 12, below.

Table 12 Planned and Pending Projects within 5 Miles of Proposed Project

Project Name/Description	Project Description ¹	Distance from Project Site (in miles)	Status
Hansen Road Improvements	Includes temporary road closures for road improvements along Hansen Road, with traffic studies anticipated to be complete by Summer 2025	2.3	Approved
Schulte Road Extension	Construct 4 lane extension of Schulte Road between west of Corral Hollow Road and Lammers Road including construction of median and sidewalk.	0.9	Approved
I-205 Widening	Widen from 6 to 8 lanes (in the median) between Interstate 580 and Interstate 5.	2.15	Approved
I-205/Lammers Road Interchange	Construct new interchange of Interstate 205 and Lammers Road.	2.6	Approved
Tracy Boulevard Sidewalk	Construct concrete sidewalk on the east side of the street to close the gap of missing sidewalk between south of Valpico Road and Whispering Wind Drive.	3.15	Approved
Mountain House Subdivisions	Three independent Major Tentative Subdivision Maps to create 5, 61, and 115 new residential lots within the College Park Neighborhood.	3.75 to 4.4	Approved
Route 97 Tracy-Stockton	RTD Bus Route 97 servicing Tracy to Stockton.	3.8	Under Construction
RTD Regional Bus Route 173	Takes passengers from Stockton, Manteca, and Tracy to stops in Pleasanton and Sunnyvale.	3.8	Under Construction
International Park of Commerce Phase 2	Construction and operation of warehouse and distribution facility with internal traffic circulation and vehicle, truck, and trailer parking and outdoor storage, as well as on-site water and wastewater treatment facilities.	1	Under Review
PA-2300198 Phase 1	Agricultural development.	2.7	Under Review
PA-2300198 Phase 2	Agricultural development.	3.7	Under Review
Pacific Gateway Project	Four Development districts with private University, a Veterans of Foreign Wars of the U.S. post, and open space, park, pedestrian, and bicycle facilities.	4.5 to 5.0	Under Review

¹ Cumulative project details were sources from: City of Tracy 2024, San Joaquin County 2024b, San Joaquin Council of Governments 2024

Project impacts are primarily temporary or localized effects that would occur from project construction. The potential for the project to contribute to cumulative impacts would be limited to the temporary periods of project construction activities and would be limited to the following issues:

Aesthetics

The geographic area used to assess cumulative impacts to aesthetics includes the viewshed of the agricultural environment experienced from public views on surface streets proximate to the project site. Cumulative development includes foreseeable projects from Table 12, above, that could have a direct connection to the visual environment of the proposed project. As shown in Table 12, there are approved development projects proximate to the project site, including the Schulte Road Extension and International Park of Commerce Projects. These projects could result in cumulative changes to the visual environment by introducing development that are visually inconsistent with its surroundings, or introduce substantial light and glare. However, these projects would be subject to the County's applicable regulations related to scenic quality, including the policies within the San Joaquin County General Plan Community Development and Public Facilities and Services Element, as well as height limitations and minimum setbacks established in the Municipal Code. These projects would implement County Municipal Code lighting standards to shield lighting from spilling over onto adjacent sites and reduce glare. With adherence to County regulations related to aesthetics, cumulative development would have a less-than-significant impact related to aesthetics.

Air Quality

The geographic area used to assess cumulative impacts to air quality is the SJVAB. The evaluation of the project's potential to result in impacts to air quality is, in itself, a cumulative analysis, as the *CEQA Guidelines* Appendix G thresholds asks if the project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region is in non-attainment. The SJVAB is a nonattainment area for ozone, PM₁₀, and PM_{2.5} under the NAAQS and/or CAAQS. Therefore, cumulative air quality impacts currently exist for these pollutants. As discussed in Section 3, *Air Quality*, proposed project construction, operation, and decommissioning would not generate emissions of these criteria air pollutants exceeding SJVAPCD's significance thresholds, which are intended to assess whether a project's contribution to existing cumulative air quality impacts is considerable. Therefore, the proposed project's contribution to cumulative air quality impacts would not be cumulatively considerable.

Biological Resources

The geographic area used to assess cumulative impacts to biological resources is the nonnative annual grasslands within the SJMSCP's Central/Southwest Transition Zone within San Joaquin County. Cumulative impacts consider impacts that would occur from the cumulative projects identified in Table 12. Most cumulative impacts to biological resources occur when a disproportionate number of development projects occur at once and regionally impact a local population of a special-status wildlife species. Impacts to special-status species like habitat loss can aggregate across a region as a result of a disproportionate number of development projects in one area, and can therefore cause cumulative impacts. All cumulative development would comply with all applicable laws and regulations governing biological resources. However, regulatory compliance does not guarantee a reduction of potential impacts to biological resources, particularly the special-status species that are present in the environment of the cumulative setting. Cumulative development would have the potential to disturb special-status species and their habitats or conflict with the SJMSCP, which would contribute to the decline of species population, including the potential to result in a decline of a listed species. Accordingly, cumulative impacts to biological resources would be potentially significant. The proposed project would adhere to all applicable regulatory requirements to minimize potential impacts to special-status species. Specifically, the project would not contribute to cumulative impacts

to biological resources such as the aggregation of habitat loss, due to the fact that the resources the project could affect are common, and because the project footprint is small. Furthermore, the project Applicant would be required to implement Mitigation Measures BIO-1 through BIO-5 which would require a preconstruction surveys, implementation of avoidance measures, biological monitoring, a WEAP, and payment of mitigation fees if required to reduce project-level impacts to less-than-significant. Implementation of these measures would ensure the proposed project would not contribute considerably to cumulative biological resources impacts.

Cultural Resources

The geographic area used to assess cumulative impacts to cultural resources in San Joaquin County. Cumulative development includes foreseeable projects from Table 12 that could potentially disturb sensitive areas for cultural resources. Cumulative projects near the project site, such as the International Park of Commerce, could potentially be located in a sensitive area for cultural resources. In addition, unknown resources may be uncovered at other cumulative sites. Existing County regulations within Chapter 9-1053 of the Municipal Code and the San Joaquin County General Plan Natural and Cultural Resources Element would protect any unknown resources that might be uncovered during project development. General Plan Policy NCR-6.5 requires an archeological report be prepared prior to permits and approvals. In the event that future cumulative development would result in impacts to known or unknown cultural resources, impacts to such resources would be addressed on a case-by-case basis. For the purposes of this analysis, cumulative impacts to cultural resource are assumed to be significant. The project Applicant would be required to implement Mitigation Measures CUL-1 and CUL-2 which would require retaining a qualified archaeologist to implement Cultural Resources Sensitivity Training and provide cultural resources monitoring services to reduce project-level impacts to less-than-significant. With implementation of these measures, the proposed project would not have a cumulatively considerable contribution to cumulative impacts associated with cultural resources.

Energy

The geographic area used to assess cumulative impacts to energy considers the cumulative effects of energy use in San Joaquin County. Cumulative projects would be subject to State requirements for energy efficiency, such as the California Building Energy Efficiency Standards and the California Green Building Standards Code which would ensure projects are designed and constructed to be energy efficient. Construction of cumulative development would be carried out in accordance with CCR Title 13 Sections 2449 and 2485 which would ensure construction would not use energy in a wasteful, inefficient, or unnecessary manner. Because cumulative development would be required to comply with existing state regulations for energy-efficiency, cumulative development would not result in a significant impact related to energy.

Geology and Soils

Geologic hazards are dependent on site-specific conditions, such that development at one project site would not increase another project's geologic hazards impacts. Therefore, this discussion pertains to cumulative impacts to paleontological resources. The geographic area used to assess cumulative impacts to paleontological resources is development within the San Joaquin Valley. Cumulative development within the San Joaquin Valley would continue to disturb areas with the potential to contain paleontological resources. Cumulative development projects have undergone or would be required to undergo CEQA review, which would determine the extent of potential paleontological

resources impacts and mitigate those impacts appropriately. This analysis conservatively assumes a significant cumulative impact to paleontological resources would occur. The proposed project would be required to implement Mitigation Measure GEO-1 which would require WEAP training, paleontological monitoring, and fossil salvage, preparation and curation, and preparation of a final paleontological mitigation report, if necessary to reduce project-level impacts to less-than-significant. Implementation of Mitigation Measure GEO-1 would ensure the proposed project would not result in a cumulatively considerable contribution to cumulative paleontological resources impacts.

Greenhouse Gas Emissions

GHG emissions and climate change are, by definition, cumulative impacts. The adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed in Section 8, *Greenhouse Gas Emissions*, the proposed project would be consistent with plans to minimize GHG emissions, including the 2022 Scoping Plan, Renewables Portfolio Standard, SB 100, and the SJVAPCD Climate Change Action Plan. Additionally, operation of the proposed project would ultimately result in an expansion of renewable energy technology which would promote the reduction of fossil fuel use and associated GHG emissions. Therefore, the proposed project's impact would not be cumulatively considerable.

Hazards and Hazardous Materials

The geographic area used to assess cumulative impacts to hazards and hazardous materials includes the area within five miles of the project site, as hazardous materials releases from cumulative development could result exposure of people to hazardous materials proximate to the project site. Cumulative development, detailed in Table 12, would use hazardous materials, such as fuels and solvents during construction and includes agricultural and industrial projects with the potential to handle hazardous wastes during operation. The use, disposal, and transportation of hazardous materials for cumulative projects could potentially result in the release of hazardous materials which could create a significant hazard to the public within five miles of the proposed project. Cumulative projects would be required to comply with regulations applicable to the use, disposal, and transportation of hazardous materials during construction and operation. Compliance with applicable regulations would reduce potential cumulative impacts to a less-than-significant level.

Hydrology and Water Quality

The geographic area used to assess cumulative impacts to surface water is the San Joaquin River watershed. The geographic area used to assess cumulative impacts to groundwater is land overlying the Tracy Subbasin. A cumulative impact could occur if projects listed in Table 12 would discharge pollutants to the same watershed and violate water quality standards, or if these projects underly the same groundwater basin and would result in substantially decreased groundwater supplies. The Delta-Mendota Canal, located along the southern boundary of the project site, is identified as impaired on the Clean Water Act Section 303(d) list for acidity, sulfates, and total dissolved solids. Cumulative projects PA-2300198 Phase 1 and Phase 2 are located proximate to the Delta-Mendota Canal and could potentially discharge stormwater into the Delta, thereby resulting in cumulative impacts to hydrology and water quality. Cumulative projects would be required to comply with federal, State, and County water quality requirements, such as the Construction Stormwater General

Permit and Chapter 9-1125 of the County's Municipal Code. These regulations would require implementation of BMPs to maintain and treat stormwater and prohibit waste discharge in or adjacent to water bodies. Cumulative impacts to hydrology and surface water quality would be minimized with adherence to these regulations. Therefore, cumulative impacts would be less-than-significant.

Cumulative development could result in increased water demand from the Tracy Subbasin. However, all water use would occur in compliance with the Tracy Subbasin Sustainable Groundwater Management Act. The proposed project would not require regular water use during operation and maintenance activities. As a result, cumulative impacts related to sustainable groundwater management would be less-than-significant.

Noise

Construction noise and vibration are localized and rapidly attenuate. Cumulative construction noise and vibration impacts would therefore occur if projects listed in Table 12 are located proximate to the project such that overlapping construction schedules could result in increased construction noise and vibration at the same sensitive receptors. However, as described in Table 12, the closest cumulative projects, the Schulte Road Extension and International Park of Commerce, are located approximately one mile from the project site. Due to the distance between the projects, construction noise and vibration would attenuate such that they would not combine to result in cumulatively louder noise or more intensive vibration. The Schulte Road Extension project is a road widening and improvement project anticipated to result in noise from mechanical equipment and heavy truck use. Similarly, the International Park of Commerce project is a warehouse and distribution facility project, which also is anticipated to result in noise from mechanical equipment and heavy truck use. Operational noise from these sources is localized and rapidly attenuates because of distance. However, similar to the proposed project, cumulative development projects would be subject to compliance with the noise level limits established in the San Joaquin County or City of Tracy Municipal Code. Therefore, operational noise from the proposed project, the Schulte Road Extension project, and International Park of Commerce project would not combine to create a substantial cumulative increase in noise levels. Therefore, cumulative noise impacts would be less-than-significant.

Population and Housing

Cumulative development within the county, detailed in Table 12, would include transportation, residential, commercial, and industrial projects which could result in direct impacts to population growth (due to the proposal of new homes and businesses) and indirect impacts to population growth (due to the expansion of transportation services and related infrastructure). The development of cumulative projects could potentially result in substantial population growth within the County. However, cumulative projects would be developed in accordance with the population and housing projections of the San Joaquin County General Plan goals and policies and the San Joaquin Council of Governments Regional Housing Needs Plan. Compliance with applicable regulations would result in a less-than-significant cumulative impact.

Public Services

The geographic area used to assess cumulative transportation impacts is San Joaquin County. A cumulative impact to public services could occur if cumulative development would result in substantial adverse physical impacts to existing facilities or the need for new governmental facilities, or would adversely affect acceptable service ratios, response times, or other performance objectives.

As detailed in Table 12, cumulative projects such as the Mountain House Subdivisions would create additional residential development within the County. Additional populations sustained from new residential development would require the use of public services, such as fire and police protection. Therefore, cumulative impacts are potentially significant. The proposed project would not result in an increase in population and would not require frequent action from emergency services. Therefore, the proposed project would not contribute to substantial public service impacts.

Transportation

The geographic area used to assess cumulative transportation impacts is San Joaquin County. A cumulative transportation impact could occur if cumulative development would result in exceedance of long-term countywide VMT. Cumulative development in San Joaquin County includes residential, commercial, and industrial projects which could increase population, employment, and subsequently citywide VMT. Therefore, cumulative impacts are potentially significant. The proposed project would be remotely monitored during operations and would only generate trips during maintenance activities. This minimal generation of trips would not exceed the County's threshold for VMT screening and therefore is presumed to not generate substantial VMT. Therefore, the proposed project would not contribute to substantial cumulative VMT increases.

Tribal Cultural Resources

The geographic area for considering cumulative impacts to tribal cultural resources is based on the ethnographic use patterns of the project site and surrounding region. This extent includes the traditional territories of the Penutian-speaking Yokuts. Cumulative development could cumulatively contribute to the erasure of tribal cultural resources important to these Tribes from the landscape. However, compliance with the provisions of AB 52 would ensure that any known or potential tribal cultural resources are treated in consultation with local Native American groups. Compliance with AB 52, implementation of project-specific measures to protect tribal cultural resources on a case-by-case basis, and continued involvement by local Native American groups in regional planning would generally limit the destruction of tribal cultural resources such that cumulative impacts would be less-than-significant.

Utilities and Service Systems

The project would have no impact on wastewater, electric, natural gas, or telecommunications infrastructure; therefore, these utilities are not discussed herein. The geographic area used to assess cumulative utilities and service systems impacts is the Tracy Subbasin service area for water and San Joaquin County for solid waste disposal. A cumulative utilities and service systems impact could occur if cumulative development listed in Table 12 would increase water demand in the Tracy Subbasin service area such that the Tracy Subbasin cannot adequately meet cumulative demands, or generate solid waste that exceeds the current capacity of the Foothill Sanitary Landfill. According to the Tracy Subbasin Groundwater Sustainability Plan, groundwater wells within the Tracy Subbasin have a total extraction capacity of approximately 15 million gallons per day, and levels in the wells have remained fairly consistent; with sufficient groundwater reserve sustained through multiple dry years from 2010 to 2020 (San Joaquin County 2014, Tracy Subbasin 2024). Therefore, cumulative development would be adequately served by the Tracy Subbasin's existing supply, and cumulative water supply impacts would be less-than-significant. The Foothill Sanitary Landfill has a remaining capacity of 125,000,000 cubic yards and an anticipated cease operation date of 2082 (San Joaquin County 2024b). Accordingly,

sufficient landfill capacity exists to serve cumulative development. Therefore, cumulative impacts to solid waste would be less-than-significant.

Based on the above, the project does not have impacts that are individually limited, but cumulatively considerable.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Adverse effects on human beings are typically associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in Section 3, *Air Quality*; Section 9, *Hazards and Hazardous Materials*; and Section 13, *Noise*, the proposed project would not result, either directly or indirectly, in substantial adverse effects related to air quality, hazardous materials, and noise with implementation of Mitigation Measure AQ-1 through AQ-3. Therefore, impacts to human beings would be less than significant with mitigation incorporated.

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References

Bibliography

- AECOM. 2022. Phase I Environmental Site Assessment Tracy Combined Cycle Power Plant. September 2022.
- California Department of Conservation (DOC). 2018. California Important Farmland Finder. <https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed July 2024).
- _____. 2021. Earthquake Zones of Required investigation. <https://maps.conservation.ca.gov/cgs/EQZApp/app/> (accessed September 2024).
- _____. 2022. CGS Information Warehouse: Mineral Land Classification. <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>. (accessed July 2024).
- _____. 2023. California Williamson Act Enrollment Finder. <https://gis.conservation.ca.gov/portal/home/webmap/viewer.html?webmap=18f7488c0a9d4d299f5e9c33b312f312> (accessed July 2024).
- California Department of Fish and Wildlife (CDFW). 2024a. California Natural Diversity Database (CNDDB), RareFind 6. Available from <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx> (accessed June 2024).
- California Department of Forestry and Fire Protection (CAL FIRE). 2024. Fire Hazard Severity Zone Viewer Map. <https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/>. (accessed September 2024).
- California Department of Resources Recycling and Recovery (CalRecycle). 2010. SIWS facility/ Site Activity Details Foothill Sanitary Landfill. <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1424?siteID=3097> (accessed July 2024). California Department of Toxic Substances Control (DTSC). 2024. EnviroStor Database Search. https://www.envirostor.dtsc.ca.gov/public/search?CMD=search&city=Tracy&zip=95377&county=San+Joaquin&case_number=&business_name=&FEDERAL_SUPERFUND=True&STATE_RESPONSE=True&VOLUNTARY_CLEANUP=True&SCHOOL_CLEANUP=True&CORRECTIVE_ACTION=True&tiered_permit=True&evaluation=True&operating=True&post_closure=True&no_n_operating=True&inspections=True&inspectionsother=True (accessed September 2024).
- California Department of Transportation. 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. (CT-HWANP-RT-13-069.25.2) September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf.
- _____. 2018. California State Scenic Highway System Map. <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. (accessed July 2024).
- _____. 2020. Transportation and Construction Vibration Guidance Manual. Available at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>.

- California Energy Commission. 2009. *GWF Tracy Combined Cycle Power Plant Project Final Staff Assessment*. October.
- _____. 2010. *GWF Tracy Combined Cycle Power Plant Project Final Commission Decision*. March.
- California Environmental Protection Agency. 2024. Cortese List.
<https://calepa.ca.gov/sitecleanup/corteselist/> (accessed September 2024).
- California Geological Survey. 2002. Note 36 – California Geomorphic Provinces.
<https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf>
- California Native Plant Society. 2024a. Inventory of Rare and Endangered Plants of California (online edition, v9-01 0.0). Website <https://www.rareplants.cnps.org> (accessed June 2024).
- California Regional Water Quality Control Board (RWQCB). 2019. The Sacramento River Basin and San Joaquin River Basin Plan.
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201902.pdf (accessed July 2024).
- California State Water Resources Control Board. 2006. San Joaquin Valley Groundwater Basin Tracy Subbasin. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_022_15_TracySubbasin.pdf (accessed July 2024).
- _____. 2024. Geotracker Database Search.
<https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Sacramento> (accessed September 2024).
- Coffman Associates, Inc. 2009. Airport Land Use Compatibility Plan Update, San Joaquin County Aviation System. July.
- Crocker, Malcom J. (Editor). 2007. *Handbook of Noise and Vibration Control Book*, ISBN: 978-0-471-39599-7, Wiley-VCH. October.
- Delattre, M.P., Graymer, R.W., Langenheim, V.E., Knudsen, K.L., Dawson, T.E., Brabb, E.E., Wentworth, C.M., and Raymond, L.A. 2023. Geologic and Geophysical Maps of the Stockton 30' x 6' Quadrangle, California. [map]. California Geological Survey, Regional Geologic Map No. 5, scale 1:100,000.
- ESRI, 2024. ArcMap Aerial Imagery Basemap. Software available at:
<https://www.esri.com/enus/arcgis/products/index> (accessed June 2024).
- Federal Aviation Administration. 2020. *1050.1F Desk Reference*. February.
- Federal Emergency Management Agency. 2009. Flood Map Service Center.
https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/agolprintb_gpserver/jf393c22588cc4b0cb20cfbde90de157/scratch/FIRMETTE_3037694b-2650-4dcc-b5e0-edd79cf8a8bc.pdf (accessed July 2024).
- Federal Highway Administration (FHWA). 2006. *FHWA Highway Construction Noise Handbook*. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). Available at:
http://www.fhwa.dot.gov/environment/construction_noise/handbook (accessed July 2024).
- _____. 2011. *Highway Traffic Noise Analysis and Abatement Policy and Guidance*. (FHWA-HEP-10-025). December.

- Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.
- Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. https://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf (accessed September 2024).
- Jefferson, G.T. 2010. A catalogue of late Quaternary vertebrates from California. *Natural History Museum of Los Angeles County Technical Report*. Volume 7, pp. 5–172.
- Jepson Flora Project (eds.). 2022. Jepson eFlora. <https://ucjeps.berkeley.edu/eflora/> (accessed June 2024).
- Kinsler, Lawrence E. and R. Frey, Austin and B. Coppers, Alan and V. Sanders, James. 1999. *Fundamentals of Acoustics*, 4th Edition. ISBN 0-471-84789-5. Wiley-VCH, December 1999.
- Paleobiology Database. 2024. The Paleobiology Database. <http://paleobiodb.org/> (accessed June 2024).
- Rincon Consultants, Inc. (Rincon). 2024a. Air Quality and Greenhouse Gas Emissions Technical Report. August.
- _____. 2024b. Special Status Plant Survey Report. September.
- San Joaquin County Council of Governments. 2022. 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) <https://www.sjcog.org/610/Final-2022-Program-EIR> (accessed September 2024).
- _____. 2024. Interactive Project Map. <https://www.sjcog.org/396/Interactive-Map> (accessed September 2024).
- San Joaquin, County of. 2014. General Plan 2035 Draft EIR. <https://www.sjgov.org/commdev/cgi-bin/cdyn.exe/file/Planning/Environmental%20Impact%20Reports/GENERAL%20PLAN%202035%20-%20DRAFT%20EIR.pdf> (accessed September 2024).
- _____. 2016. General Plan. <https://www.sjgov.org/commdev/cgi-bin/cdyn.exe/file/Planning/General%20Plan%202035/GENERAL%20PLAN%202035.pdf>. (accessed July 2024).
- _____. (Department of Public Works). 2017. Average Daily Traffic Volumes. Available at: <https://www.sjgov.org/departments/pwk/traffic-engineering> (accessed July 2024).
- _____. 2018. What you need to know about Valley Fever in San Joaquin County & California. https://sjcphs.org/assets/20180620_HS_What%20You%20Need%20to%20know%20VF%20Brochure_Eng.pdf (accessed August 2024).
- _____. 2019. San Joaquin County Geographic Information Systems (GIS) Data Download. Available at: <https://sjmap.org/GISDataDownload.htm> (accessed July 2024).
- _____. 2023. San Joaquin County Local Hazard Mitigation Plan. https://www.sjgov.org/docs/default-source/covid-19/2023-lhmp-final-approved.pdf?Status=Master&sfvrsn=f64fc505_3 (accessed September 2024).
- _____. 2024a. San Joaquin County Assessment Map Viewer. <https://sjmap.org/AssessmentMapView/> (accessed September 2024).

- _____. 2024b. Department of Public Works - Solid Waste - Foothill Sanitary Landfill. <https://www.sjgov.org/departments/pwk/solid-waste/san-joaquin-county-solid-waste-facilities/foothill-sanitary-landfill> (accessed September 2024).
- San Joaquin Regional Transit District. 2021. San Joaquin County Coordinated Transportation Plan. <https://sanjoaquinrtd.com/wp-content/uploads/2022/01/Coordinated-Public-Transit-Human-Services-Transportation-Plan-08202021-Final.pdf> (accessed September 2024).
- San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009a. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. <https://ww2.valleyair.org/media/dnsnicdv/3-ccap-final-lu-guidance-dec-17-2009.pdf> (accessed September 2024).
- _____. 2009b. District Policy: Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. <https://ww2.valleyair.org/media/disb2jna/2-ccap-final-district-policy-ceqa-ghg-dec-17-2009.pdf> (accessed September 2024).
- _____. 2015a. Guide for Assessing and Mitigating Air Quality Impacts, March 19, 2015. www.valleyair.org/transportation/GAMAQI_3-19-15.pdf (accessed July 2021).
- _____. 2024a. Ambient Air Quality Standards & Valley Attainment Status. <https://ww2.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/> (accessed January 2024).
- _____. 2024b. Climate Change Action Plan Home Page. <https://ww2.valleyair.org/permitting/climate-change-action-plan/> (accessed September 2024).
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition* (MCV2). California Native Plant Society, Sacramento, CA. 1300 pp.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.
- Tracy, City of. 2011a. Sustainability Action Plan. <https://www.cityoftracy.org/home/showpublisheddocument/2950/637514921184370000> (accessed September 2024).
- _____. 2022. Citywide Roadway & Transportation Master Plan. <https://www.cityoftracy.org/home/showpublisheddocument/16827/638374706905230000> (accessed September 2024).
- _____. 2024a. GIS Viewer. <https://cityoftracy.maps.arcgis.com/apps/webappviewer/index.html?id=4887f49856a846f4923ee99275b335bf> (accessed July 2024).
- _____. 2024b. Major Projects and Construction Updates. <https://www.cityoftracy.org/our-city/departments/engineering/major-projects-construction-updates> (accessed September 2024).
- Tracy Subbasin. 2024. FAQs. <https://tracysubbasin.org/faqs/> (accessed July 2024).

- United States Fish and Wildlife Service (USFWS). 2024a. National Wetlands Inventory wetlands mapper. Available at: <https://www.fws.gov/wetlands/data/mapper.html> (accessed June 2024).
- _____. 2024b. Information for Planning and Consultation. Available at: <https://ecos.fws.gov/ipac/> (accessed June 2024).
- _____. 2024c. Critical Habitat Portal. Available at: <http://criticalhabitat.fws.gov> (accessed June 2024).
- United States Geological Survey (USGS). 2024a. National Hydrography Dataset. Available at <http://nhd.usgs.gov/> (accessed June 2024).
- _____. 2024b. The Central Valley: San Joaquin Basin. <https://ca.water.usgs.gov/projects/central-valley/san-joaquin-basin.html> (accessed July 2024).
- University of California, Berkeley. 2022. University and Jepson Herbaria. Available at <https://ucjeps.berkeley.edu/interchange/> (accessed June 2024).
- Web Soil Survey. 2024. Soil Data Explorer. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> (accessed September 2024).
- Weissmann, G.S., G.L. Bennett, and A.L. Lansdale. 2005. Factors controlling sequence development on Quaternary fluvial fans, San Joaquin Basin, California, USA. pp. 169–186 in *Alluvial Fans: Geomorphology, Sedimentology, Dynamics* (eds: A.M. Harvey, A.E. Mather, and M. Stokes). Geological Society, London, Special Publications.

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Appendix A

Air Quality and Greenhouse Gas Study



Tracy Long Duration Energy Storage Project

Air Quality and Greenhouse Gas Emissions Study

prepared for

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August 2024

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1 Project Description

1.1 Introduction

This study analyzes the air quality and greenhouse gas (GHG) emissions impacts of the proposed Tracy Long Duration Energy Storage (LDES) Project (proposed Project) in San Joaquin County, California. The purpose of this study is to analyze the proposed Project's air quality and GHG impacts related to both temporary construction activity and long-term operation of the proposed Project. Table 1 provides a summary of potential proposed Project impacts.

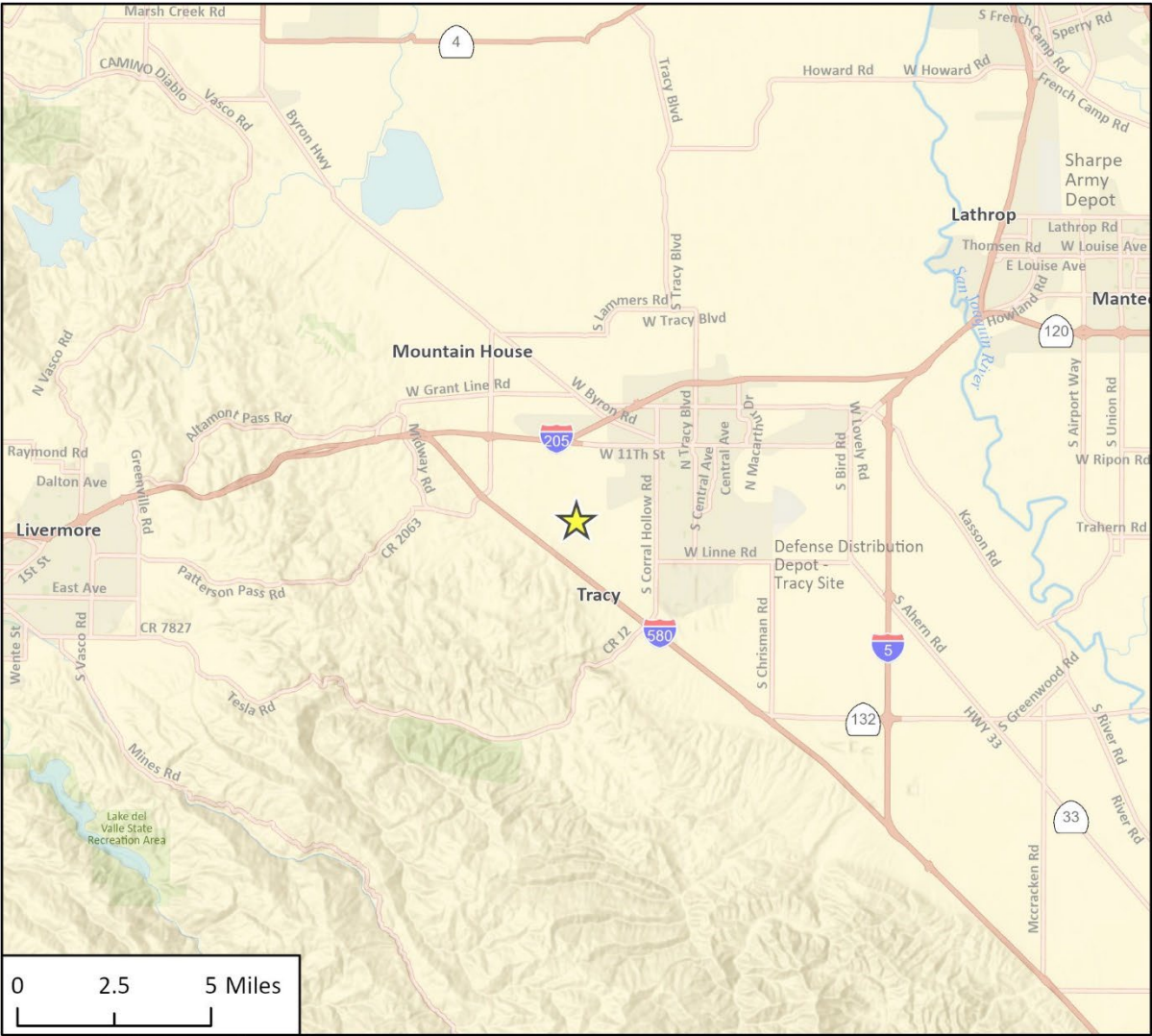
Table 1 Summary of Impacts

Impact Statement	Proposed Project's Level of Significance	Mitigation
Air Quality		
Conflict with or obstruct implementation of the applicable air quality plan?	Less-than-significant impact	None
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	Less-than-significant impact	None
Expose sensitive receptors to substantial pollutant concentrations?	Potentially significant impact	Less than Significant with Mitigation (AQ-1)
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less-than-significant impact	None
Greenhouse Gas Emissions		
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less-than-significant impact	None
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less-than-significant impact	None

1.2 Project Location

The proposed Tracy LDES Project site is located in an unincorporated portion of southwestern San Joaquin County, California (Figure 1). The proposed Project site encompasses approximately 12.8 acres within a larger, approximately 39-acre parcel (Assessor's Parcel Number 209-240-32). The proposed Project would be located adjacent to and northeast of the existing Tracy Combined Cycle Power Plant (TCCPP) on the same parcel (Figure 2). The Tracy LDES site is currently undeveloped and consists of ruderal non-native grassland. The proposed Project site is surrounded by industrial land uses to the north and general agricultural land uses to the east, south, and west.

Figure 1 Regional Location



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Fig 1 Regional Location

★ Project Location

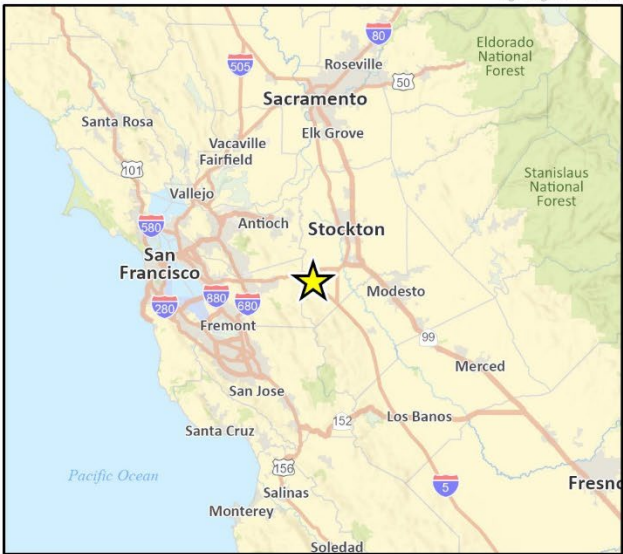


Figure 2 Study Area



1.3 Project Description

The proposed Tracy LDES Project would include the development of a nominal 40-megawatt (MW) Battery Energy Storage System (BESS) of eight-hour duration storage (i.e., 320 MW hours) within an approximately 12.8-acre site area north of the existing TCCPP and would be constructed, owned, and operated by Tracy BESS LLC. Figure 3 shows a preliminary site plan for the proposed Project. The proposed Project would be constructed to support California's current need for additional electrical energy supply capacity during high peak load demand time periods. The key components of the proposed Project are listed below:

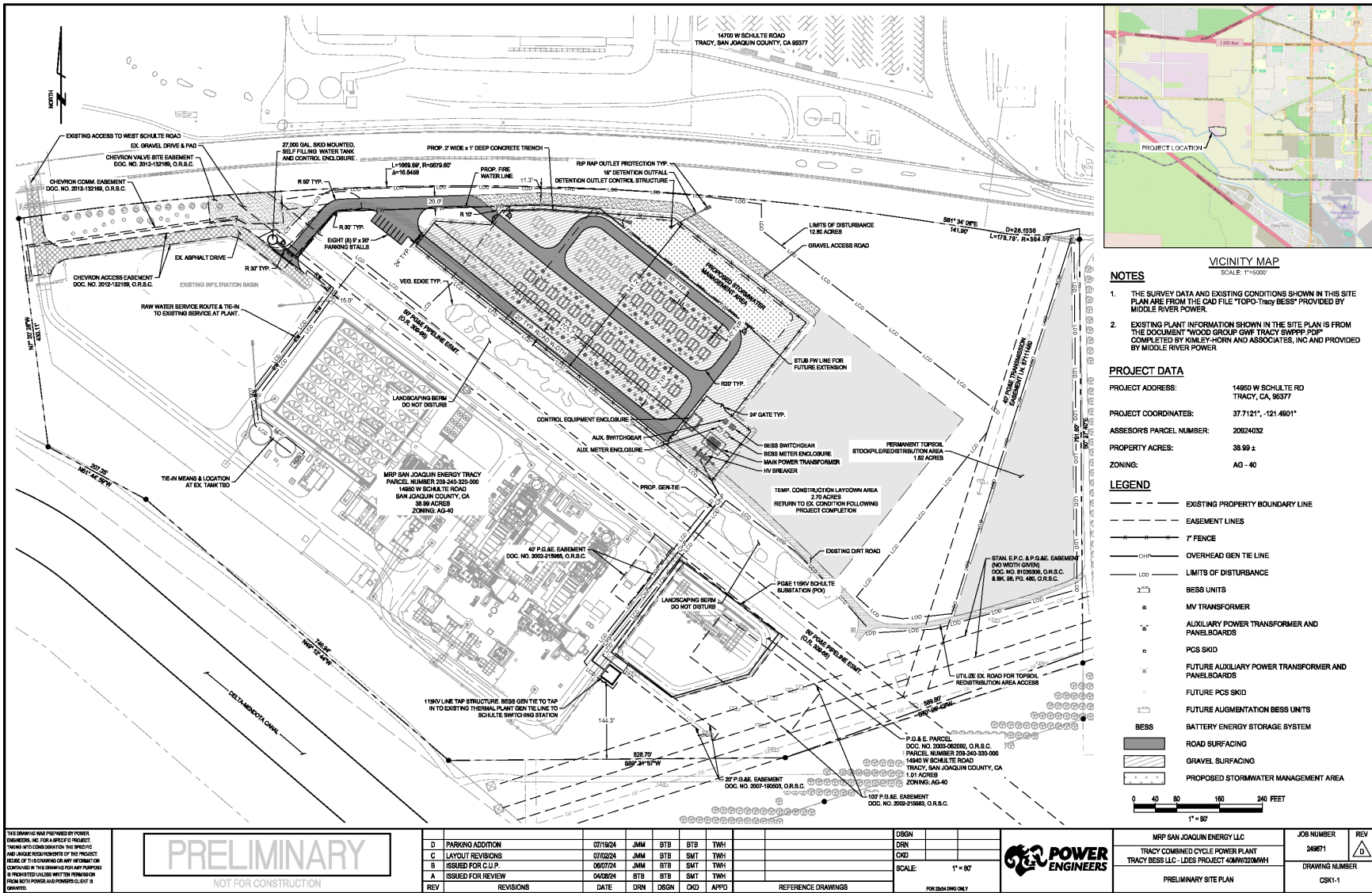
- Nominal 40-MW BESS facility to include approximately 88 battery container enclosures (each with internal heating, ventilation, and air conditioning systems, internal fire detection and suppression systems, and battery management systems), 44 inverter/power conversion system (PCS) enclosures on skids, and 34 medium voltage (MV) transformers on skids located adjacent to the PCS enclosures
- Electrical switchyard for connection to the electrical grid via a tap of the existing 115-kilovolt (kV) generation tie line that connects the TCCPP to the nearby Pacific Gas and Electric Company Schulte Substation
- Extension of the existing access road on the Project site
- Addition of a stormwater detention basin

1.3.1 Construction

Construction of the proposed Project is anticipated to begin in the fourth quarter of 2025 and begin commercial operation in the first quarter of 2027. Construction activities would occur Monday through Friday between 6:00 a.m. and 9:00 p.m. in accordance with San Joaquin County noise standards. Weekend work and nighttime construction are not expected to be required. During construction, construction equipment and construction worker vehicles would be staged in the temporary staging and laydown area located adjacent to the eastern border of the BESS facility. A workforce of up to approximately 50 construction workers is anticipated to be on-site during construction. Truck trips are expected to include up to approximately 30 trips per day during construction.

Construction activities would include extending the access road to the Project site, site preparation and grading, installation of foundations and equipment, installation of wiring, and commissioning. Although the Project site is fairly level, grading would be required throughout most of the site to prepare the ground surface for the construction of roads, switchgear, the BESS enclosures, and BESS container pads. Construction would result in approximately 6,300 cubic yards of cut topsoil and native soil and require approximately 3,730 cubic yards of fill materials, which would be sourced off-site. Delivery of construction materials and supplies would reach the Project site by truck delivery routed along I-580, to International Parkway/Mountain House Parkway, to the Project site on West Schulte Road. Construction debris is proposed to be hauled to the Tracy Material and Recovery Facility located approximately 8.5-miles southeast of the Project site.

Figure 3 Defined Project Area



1.3.2 Operation and Maintenance

The proposed Project would operate seven days per week, 365 days per year. The BESS facility would be operated remotely. Only occasional, on-site maintenance is anticipated following commissioning; such activities would include, but not be limited to, replacement of BESS equipment, filter replacement, and miscellaneous electrical repairs on an as-needed basis. Operation and maintenance staff would visit the switchgear periodically during operation to perform routine maintenance. Maintenance trucks would be used to perform routine maintenance, including, but not limited to, equipment testing, monitoring, repair, routine procedures to ensure service continuity, and standard preventative maintenance. Routine operations would require up to two workers in a medium duty utility truck to visit the Project facility up to two times per week. Operation and maintenance personnel would access the Project site from the onsite access road connecting to West Schulte Road. Existing parking is available at the TCCPP facility in addition to the parking spaces that are included as part of the proposed BESS facility development.

1.3.3 Decommissioning

At the end of the proposed Project's useful life (anticipated to be up to approximately 40 years), the proposed Project would be decommissioned. Currently, standard decommissioning practices include dismantling and repurposing, salvaging/recycling, or disposing of the proposed Project components in accordance with applicable laws and regulations. However, actual decommissioning for the proposed Project would be conducted in accordance with all applicable local, state, and federal requirements in effect at the time of decommissioning, and a final decommissioning plan, based on then-current technology, site conditions, and regulations, would be prepared prior to actual decommissioning.

2 Setting

2.1 Environmental Setting

2.1.1 Local Climate and Meteorology

The overall Study Area is located within an unincorporated, agricultural area of San Joaquin County that includes other agricultural land uses in the surrounding area and power plants and substations in the immediate vicinity. The Study Area is part of the San Joaquin Valley Air Basin (SJVAB). The SJVAB encompasses the southern half of the California Central Valley and is comprised of eight counties: San Joaquin, Stanislaus, Fresno, Merced, Madera, Kings, Tulare, and western Kern County. The SJVAB is approximately 250-miles long and 35 miles in width (on average) and is bordered by the Sierra Nevada Mountains in the east (8,000 to 14,500 feet in elevation), the Coast Ranges in the west (averaging 3,000 feet in elevation), and the Tehachapi Mountains in the south (6,000 to 8,000 feet in elevation).

The overall climate in the SJVAB is warm and semi-arid. The San Joaquin Valley is in a Mediterranean climate zone. Mediterranean climate zones occur on the west coast of continents at 30 to 40 degrees latitude and are influenced by a subtropical high-pressure area most of the year. Mediterranean climates are characterized by sparse rainfall, which occurs mainly in the winter. There is only one wet season during the year and 90 percent of the precipitation falls during October through April. Snow in the San Joaquin Valley is infrequent, and thunderstorms seldom occur. Summers are hot and dry. Summertime maximum temperatures often exceed 100 degrees Fahrenheit (°F) in the San Joaquin Valley. The SJVAB's topography has a dominating effect on wind patterns. Winds tend to blow somewhat parallel to the valley and mountain range orientation. In spring and early summer, thermal low-pressure systems develop over the interior basins east of the Sierra Nevada mountain range, and the Pacific High (a high-pressure system that develops over the central Pacific Ocean near the Hawaiian Islands) moves northward. These meteorological developments and the topography produce the high incidence of relatively strong northwesterly winds in the spring and early summer.

The subtropical high-pressure cell is strongest during spring, summer, and fall and produces subsiding air, which can result in temperature inversions in the San Joaquin Valley. A temperature inversion can act like a lid, inhibiting vertical mixing of the air mass at the surface. Any emissions of pollutants can be trapped below the inversion. Most of the surrounding mountains are above the normal height of summer inversions (1,500 to 3,000 feet). Winter-time high-pressure events can often last many weeks with surface temperatures lowering to 30°F. During these events, fog can be present, and inversions are extremely strong. These wintertime inversions can inhibit vertical mixing of pollutants to a few hundred feet (San Joaquin Valley Air Pollution Control District [SJVAPCD] 2015a).

2.1.2 Air Pollutants of Concern

Criteria Air Pollutants

The United States Environmental Protection Agency (USEPA) has identified criteria air pollutants that are a threat to public health and welfare. These pollutants are called "criteria" air pollutants, because standards have been established for each of them to meet specific public health and welfare standards. Criteria pollutants that are a concern in the SJVAB are described below.

Ozone

Ozone is a highly oxidative unstable gas produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic compounds (ROC)/reactive organic gases (ROG)/volatile organic compounds (VOC).¹ ROG/ROC is composed of non-methane hydrocarbons (with specific exclusions), and NO_x is composed of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and nitrogen dioxide (NO_2). NO_x is formed during the combustion of fuels, while ROC is formed during the combustion and evaporation of organic solvents. As a highly reactive molecule, ozone readily combines with many different atmosphere components. Consequently, high ozone levels tend to exist only while high ROC and NO_x levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant. In addition, because ozone requires sunlight to form, it mainly occurs in concentrations considered serious between April and October. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors (USEPA 2023a). Depending on the level of exposure, ozone can cause coughing and a sore or scratchy throat; make it more difficult to breathe deeply and vigorously and cause pain when taking a deep breath; inflame and damage the airways; make the lungs more susceptible to infection; and aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.

Nitrogen Dioxide

NO_2 is a by-product of fuel combustion. The primary sources are motor vehicles and industrial boilers, and furnaces. The principal form of NO_x produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2 , creating the mixture of NO and NO_2 , commonly called NO_x . NO_2 is a reactive, oxidizing gas and an acute irritant capable of damaging cell linings in the respiratory tract. Breathing air with a high concentration of NO_2 can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases leading to respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma and children and the elderly are generally at greater risk for the health effects of NO_2 (USEPA 2023a). NO_2 absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of ozone/smog and acid rain.

Sulfur Dioxide

Sulfur dioxide (SO_2) is included in a group of highly reactive gases known as “oxides of sulfur.” The largest sources of SO_2 emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of SO_2 emissions include industrial processes such as extracting metal from ore and burning fuels with a high sulfur content by locomotives, large ships, and off-road equipment. Short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO_2 (USEPA 2023a).

¹ The California Air Resources Board defines VOC and ROG/ROC similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” (40 Code of Federal Regulations 51.100) with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG/ROC and VOC are considered comparable in terms of mass emissions, and the term ROC is used in this document.

Carbon Monoxide

Carbon monoxide (CO) is a localized pollutant found in high concentrations only near its source. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic's incomplete combustion of petroleum fuels. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces during the winter. When CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability to get oxygenated blood to their hearts in situations where they need more oxygen than usual. As a result, they are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain, also known as angina (USEPA 2023a).

Particulate Matter

Particulates less than 10 microns in diameter (PM₁₀) and less than 2.5 microns in diameter (PM_{2.5}) are comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. Both PM₁₀ and PM_{2.5} are emitted into the atmosphere as by-products of fuel combustion and wind erosion of soil and unpaved roads. The atmosphere, through chemical reactions, can form particulate matter. The characteristics, sources, and potential health effects of PM₁₀ and PM_{2.5} can be very different. PM₁₀ is generally associated with dust mobilized by wind and vehicles. In contrast, PM_{2.5} is generally associated with combustion processes and formation in the atmosphere as a secondary pollutant through chemical reactions. PM₁₀ can cause increased respiratory disease, lung damage, cancer, premature death, reduced visibility, and surface soiling. For PM_{2.5}, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases (California Air Resources Board [CARB] 2023a).

Lead

Lead (Pb) is a metal found naturally in the environment, as well as in manufacturing products. The major sources of Pb emissions historically have been mobile and industrial. However, due to the USEPA's regulatory efforts to remove lead from gasoline, atmospheric Pb concentrations have declined substantially over the past several decades. The most dramatic reductions in Pb emissions occurred before 1990 due to the removal of Pb from gasoline sold for most highway vehicles. Pb emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least partly due to national emissions standards for hazardous air pollutants (USEPA 2013). As a result of phasing out leaded gasoline, metal processing is currently the primary source of Pb emissions. The highest Pb level in the air is generally found near Pb smelters. Other stationary sources include waste incinerators, utilities, and Pb-acid battery manufacturers. Pb can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and cardiovascular system depending on exposure. Pb exposure also affects the oxygen-carrying capacity of the blood. The Pb effects most likely encountered in current populations are neurological in children. Infants and young children are susceptible to Pb exposures, contributing to behavioral problems, learning deficits, and lowered intelligence quotient (USEPA 2023a).

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TAC) are a diverse group of airborne substances that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than 1 micron in diameter (about 1/70th the diameter of a human hair) and thus is a subset of PM_{2.5}. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (CARB 2023b). TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health. People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include asthma, respiratory symptoms, and decreased lung function (CARB 2023b).

Dust-Related Concerns

Valley Fever

Valley Fever or coccidioidomycosis is caused locally by the microscopic fungus *Coccidioides immitis* (*C. immitis*). The *Coccidioides* fungus resides in the soil in southwestern United States, northern Mexico, and parts of Central and South America. During drought years, the number of organisms competing with *C. immitis* decreases, as *C. immitis* remains alive but dormant. When rain finally occurs, the fungal spores germinate and multiply more than usual because of fewer other competing organisms. Later, the soil dries out in the summer and fall, and the fungi can become airborne and potentially infectious (Kirkland and Fierey 1996).

Infection occurs when the spores of the fungus become airborne and are inhaled. The fungal spores become airborne when contaminated soil is disturbed by human activities, such as construction and agricultural activities, and natural phenomena, such as windstorms, dust storms, and earthquakes. About 60 percent of infected people have no symptoms. The remainder develop flu-like symptoms that can last for a month and tiredness that can sometimes last for longer than a few weeks. Common symptoms include fatigue, cough, chest pain, fever, rashes on upper body or legs, headaches, muscle aches, night sweats, and unexplained weight loss (California Department of Public Health 2023). A small percentage of infected persons (less than 1 percent) can develop disseminated disease that spreads outside the lungs to the brain, bone, and skin. Without proper treatment, Valley Fever can lead to severe pneumonia, meningitis, and even death. Symptoms may appear between one to four weeks after exposure (Los Angeles County Health Department 2013). Both humans and animals can become infected with Valley Fever, but the infection is not contagious and cannot spread from one person or animal to another (California Department of Public Health 2023).

Diagnosis of Valley Fever is conducted through a sample of blood, other body fluid, or biopsy of affected tissue. Valley Fever is treatable with anti-fungal medicines. Once recovered from the disease, the individual is protected against further infection. Persons at highest risk from exposure are those with compromised immune systems, such as those with human immunodeficiency virus and those with

chronic pulmonary disease. Farmers, construction workers, and others who engage in activities that disturb the soil are at highest risk for Valley Fever. Infants, pregnant women, diabetics, people of African, Asian, Latino, or Filipino descent, and the elderly may be at increased risk for disseminated disease. Historically, people at risk for infection are individuals not already immune to the disease and whose jobs involve extensive contact with soil dust, such as construction or agricultural workers and archeologists (Los Angeles County Health Department 2013). Most cases of Valley Fever (over 65 percent) are diagnosed in people living in the Central Valley and Central Coast regions (California Department of Public Health 2023).

There is no vaccine to prevent Valley Fever. However, the California Department of Public Health recommends the following practical tips to reduce exposure (2021):

- Stay inside and keep windows and doors closed when it is windy outside and the air is dusty, especially during dust storms.
- Consider avoiding outdoor activities that involve close contact to dirt or dust, including yard work, gardening, and digging, especially if you are in one of the groups at higher risk for severe or disseminated Valley Fever.
- Cover open dirt areas around your home with grass, plants, or other ground cover to help reduce dusty, open areas.
- While driving in these areas, keep car windows closed and use recirculating air, if available.
- Try to avoid dusty areas, like construction or excavation sites.
- If you cannot avoid these areas, or if you must be outdoors in dusty air, consider wearing an N95 respirator (a type of face mask) to help protect against breathing in dust that can cause Valley fever.

However, if in situations where digging dirt or stirring up dust will happen, then the following tips are recommended:

- Stay upwind of the area where dirt is being disturbed.
- Wet down soil before digging or disturbing dirt to reduce dust.
- Consider wearing an N95 respirator (mask).
- After returning indoors, change out of clothes if covered with dirt.
 - Be careful not to shake out clothing and breathe in the dust before washing. If someone else is washing your clothes, warn the person before they handle the clothes.

In 2022, approximately 448 cases of Valley Fever were reported in Fresno County. This is an increase of 43 cases compared to 2021 (405 cases) (California Department of Public Health 2024).

2.1.3 Sensitive Receptors

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater than average sensitivity include preexisting health problems, proximity to emissions sources, or duration of exposure to air pollutants. Title 20, California Code of Regulations [CCR], Section 1704, Appendix B defines a sensitive receptor as infants and children, the elderly, and the chronically ill, and any other member of the general population who is more susceptible to the effects of the exposure than the population at large. Schools, hospitals, and convalescent homes are considered relatively sensitive to poor air quality, because children, elderly people, and the infirmed are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential

areas are considered sensitive to poor air quality because people usually stay home for extended periods, with greater associated exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system. Ambient air quality standards were established to represent the levels of air quality considered sufficient, with a margin of safety, to protect public health and welfare. Standards are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases.

The nearest sensitive receiver includes the single-family residence located, approximately 850 feet to the south of the overall Study Area, 950 feet from the existing Pacific Gas and Electric Company (PG&E) substation area, and 1,300 feet from the proposed Tracy LDES BESS area.

2.1.4 Greenhouse Gases

Gases that trap heat in the atmosphere are known as greenhouse gases (GHGs). GHGs allow sunlight to enter the atmosphere but trap a portion of the outward-bound infrared radiation that warms the air. The process is similar to the effect greenhouses have in raising the internal temperature of the structure. Both natural processes and human activities emit GHGs. The accumulation of GHGs in the atmosphere regulates the Earth's temperature, but emissions from human activities (such as fossil fuel-based electricity production and the use of motor vehicles) have elevated the concentration of GHGs in the atmosphere. Scientists agree that this accumulation of GHGs has contributed to an increase in the temperature of the Earth's atmosphere and to global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most scientists agree there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFC) and perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs, because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are usually by-products of fossil fuel combustion, and CH₄ results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆.

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally 100 years) (USEPA 2021). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO₂e), which is the amount of GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, CH₄ has a GWP of 30, meaning its global warming effect is 30 times

greater than CO₂ on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021a).²

The use of SF₆ in electric utility systems and switchgear, including circuit breakers, poses a concern because this pollutant has an extremely high GWP (1 pound of SF₆ is the equivalent warming potential of approximately 24,600 pounds of CO₂) (IPCC 2021b).³ SF₆ is inert and non-toxic, and is encapsulated in circuit breaker assemblies. SF₆ is a GHG with substantial global warming potential because of its chemical nature and long residency time within the atmosphere. However, under normal conditions, it would be completely contained in the equipment and SF₆ would only be released in the unlikely event of a failure, leak, or crack in the circuit breaker housing. New circuit breaker designs have been developed over the past several years to minimize the potential for leakage, compared to that of past designs.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) from 2015 to 2017 was approximately 1° Celsius (C) higher than the average GMST over the period from 1880 to 1900 (National Oceanic and Atmospheric Administration 2020). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations jointly indicate that LSAT and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions have increased global mean surface temperature at a rate of approximately 0.1°C per decade since 1900. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2023).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally-specific climate change case studies (California Natural Resource Agency 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that could be experienced in California as a result of climate change.

² The IPCC's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2022 Climate Change Scoping Plan published by the CARB uses a GWP of 25 for methane, consistent with the IPCC's (2007) *Fourth Assessment Report*. Therefore, this analysis uses the GWPs from the Fourth Assessment Report.

³ A GWP of 23,900 was used to convert emissions to CO₂e. This value is based on the GWP in the USEPA Mandatory Reporting Program Regulations (40 Code of Federal Regulations Part 98, Subpart A), and deviates from the use of GWPs from the IPCC Sixth Assessment Report which was used for the conversion of CH₄ and N₂O.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (California Natural Resource Agency 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them (California Natural Resources Agency 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the Central and Southern California coasts (California Natural Resource Agency 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (California Natural Resource Agency 2018).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels between 2006 and 2018 is approximately 3.7 millimeters per year, approximately two times the average rate of sea level rise in the twentieth century (IPCC 2023). Global mean sea levels increased by 0.20 meter between 1901 and 2018 (IPCC 2023). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise of 0.28 to 0.55 meter by 2100 (IPCC 2021a). Between the years of 1901 and 2018, the global mean sea level increased by 0.20 meter with human influence as the likely driver of said increase since at least 1971 (IPCC 2021a). A rise in sea levels could

erode 31 to 67 percent of Southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (California Natural Resource Agency 2018). Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has an over \$50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2020). Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (California Natural Resource Agency 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions as a result of higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (California Natural Resource Agency 2018).

Emissions Inventories

Global Emissions Inventory

Worldwide anthropogenic GHG emissions totaled 47,000 million metric tons (MMT) of CO₂e in 2015, which is a 43 percent increase from 1990 GHG levels (USEPA 2023b). Specifically, 34,522 MMT of CO₂e of CO₂, 8,241 MMT of CO₂e of CH₄, 2,997 MMT of CO₂e of N₂O, and 1,001 MMT of CO₂e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and fuel use from vehicles and buildings, which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and 6 percent, respectively. Waste sources contributed 3 percent and international transportation sources contributed 2 percent. These sources account for approximately 98 percent because there was a net sink of 2 percent from land use change (including afforestation/reforestation and emissions removals by other land use activities) (USEPA 2023b).

United States Emissions Inventory

Total U.S. GHG emissions were estimated at 6,558 MMT of CO₂e in 2019. Emissions decreased by 1.7 percent from 2018 to 2019. Since 1990, total U.S. emissions have increased by an average annual rate of 0.06 percent for a total increase of 1.8 percent between 1990 and 2019. The decrease from 2018 to 2019 reflects the combined influences of several long-term trends, including population changes, economic growth, energy market shifts, technological changes such as improvements in energy

efficiency, and decrease carbon intensity of energy fuel choices. In 2019, the industrial and transportation end-use sectors accounted for 30 percent and 29 percent, respectively, of nationwide GHG emissions; while the commercial and residential end-use sectors accounted for 16 percent and 15 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (USEPA 2023c).

California Emissions Inventory

Based on the CARB California GHG Inventory for 2000–2019, California produced 418.2 MMT of CO₂e in 2019, which is 7.2 MMT of CO₂e lower than 2018 levels. The major source of GHG emissions in California is the transportation sector, which comprises 40 percent of the State’s total GHG emissions. The industrial sector is the second largest source, comprising 21 percent of the State’s GHG emissions, while electric power accounts for approximately 14 percent (CARB 2021). The magnitude of California’s total GHG emissions is due in part to its large size and large population compared to other states. However, its relatively mild climate is a factor that reduces California’s per capita fuel use and GHG emissions as compared to other states. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels, as emissions fell below 431 MMT of CO₂e (CARB 2021).

2.2 Regulatory Setting

2.2.1 Air Quality

Federal and State Criteria Air Pollutants

The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) establish ambient air quality standards and establish regulatory authorities designed to attain those standards. As required by the CAA, the USEPA has identified criteria pollutants and has established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and Pb.

Under the CCAA, California has adopted the California Ambient Air Quality Standards (CAAQS), which are more stringent than the NAAQS for certain pollutants and averaging periods. Table 2 presents the current federal and State standards for regulated pollutants and the SJVAB’s attainment status for each standard. California has also established CAAQS for sulfates, hydrogen sulfide, and vinyl chloride.

As required by the federal CAA and the CCAA, air basins or portions thereof have been classified as either “attainment” or “nonattainment” for each criteria air pollutant, based on whether the standards have been achieved. In some cases, an area’s status is unable to be determined, in which case the area is designated “unclassified”. The air quality in an attainment area meets or is better than the NAAQS or CAAQS. A non-attainment area has air quality that is worse than the NAAQS or CAAQS. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS.

As shown in Table 2, the SJVAB currently is classified as nonattainment for the one-hour state ozone standard as well as for the federal and state eight-hour ozone standards. The SJVAB is also designated as nonattainment for the federal and state annual arithmetic mean and federal 24-hour PM_{2.5} standards. Additionally, the SJVAB is classified as nonattainment for the state 24-hour and annual arithmetic mean PM₁₀ standards. The SJVAB is unclassified or classified as attainment for all other pollutant standards (SJVAPCD 2024a).

Table 2 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	State Standard		National Standard	
		Concentration	SJVAB Attainment Status	Concentration	SJVAB Attainment Status
Ozone	8-Hour 1-Hour	0.070 ppm 0.090 ppm	Nonattainment/ Severe Nonattainment	0.070 ppm –	Nonattainment/ Extreme ¹
Carbon Monoxide (CO)	8-Hour 1-Hour	9.0 ppm 20 ppm	Attainment/ Unclassified	9.0 ppm 35 ppm	Attainment/ Unclassified
Nitrogen Dioxide (NO ₂)	1-Hour Annual	0.180 ppm 0.030 ppm	Attainment	0.100 ppm 0.053 ppm	Attainment/ Unclassified
Sulfur Dioxide (SO ₂)	1-Hour 3-Hour 24-Hour Annual	0.25 ppm – 0.04 ppm –	Attainment	0.075 ppm 0.5 ppm* 0.14 ppm 0.03 ppm	Attainment/ Unclassified
Respirable Particulate Matter (PM ₁₀)	24-Hour Annual	50 µg/m ³ 20 µg/m ³	Nonattainment	150 µg/m ³ –	Attainment
Fine Particulate Matter (PM _{2.5})	24-Hour Annual	– 12 µg/m ³	Nonattainment	35 µg/m ³ 9 µg/m ³	Nonattainment
Lead (Pb)	30-Day Quarterly	1.5 µg/m ³ –	Attainment	– 1.5 µg/m ³	No Designation/ Classification

ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter

¹ Though the San Joaquin Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

Source: San Joaquin Valley Air Pollution Control District 2024a

Regional

San Joaquin Valley Air Pollution Control District

The Study Area is located within the jurisdiction of the SJVAPCD, which regulates air pollutant emissions throughout the SJVAB. The SJVAPCD enforces regulations and administers permits governing stationary sources. The following regional rules and regulations are related to the proposed Project:

- **Regulation VIII (Fugitive PM₁₀ Prohibitions)** contains rules developed pursuant to USEPA guidance for “serious” PM₁₀ nonattainment areas. Rules included under this regulation limit fugitive PM₁₀ emissions from the following sources: construction, demolition, excavation, extraction, and other earth moving activities, bulk materials handling, carryout and track-out, open areas, paved and unpaved roads, unpaved vehicle/equipment traffic areas, and agricultural sources. Table 3 contains control measures that the Applicants would implement during Project construction activities pursuant to *Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities*.
- **Rule 2201 (New and Modified Stationary Source Review Rule)** applies to all new stationary sources or modified existing stationary sources that are subject to the SJVAPCD permit requirements. The rule requires review of the new or modified stationary source to ensure that the source does not interfere with the attainment or maintenance of ambient air quality standards.
- **Rule 4101 (Visibility)** limits the visible plume from any source to 20 percent opacity.

- **Rule 4102 (Nuisance)** prohibits the discharge of air contaminants or other materials in quantities that may 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 person or the public.
- **Rule 4601 (Architectural Coatings)** limits VOC emissions from architectural coatings. This rule specifies architectural coatings storage, cleanup, and labeling requirements.
- **Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving, and Maintenance Operations)** limits VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations and applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.
- **Rule 9510 (Indirect Source Review)** requires certain development projects to mitigate exhaust emissions from construction equipment greater than 50 horsepower to 20 percent below statewide average NO_x emissions and 45 percent below statewide average PM₁₀ exhaust emissions. This rule also requires applicants to reduce baseline emissions of NO_x and PM₁₀ emissions associated with operations by 33.3 percent and 50 percent respectively over a period of 10 years (SJVAPCD 2017).

In addition to reducing a portion of the development project's impact on air quality through compliance with District Rule 9510, a developer can further reduce a project's impact on air quality by entering a Voluntary Emission Reduction Agreement with the SJVAPCD to further mitigate project impacts under CEQA. Under a Voluntary Emission Reduction Agreement, the developer may fully mitigate project emission impacts by providing funds to the SJVAPCD, which then are used by the SJVAPCD to administer emission reduction projects (SJVAPCD 2015b).

Table 3 SJVAPCD Rule 8021 Measures Applicable to the Project

No.	Measure
A.1	Pre-water site sufficient to limit VDE to 20 percent opacity.
A.2	Phase work to reduce the amount of disturbed surface area at any one time.
B.1	Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20 percent opacity.
B.2	Construct and maintain wind barriers sufficient to limit VDE to 20 percent opacity. If using wind barriers, control measure B1 above shall also be implemented.
B.3	Apply water or chemical/organic stabilizers/suppressants to unpaved haul/access roads and unpaved vehicle/equipment traffic areas sufficient to limit VDE to 20 percent opacity and meet the conditions of a stabilized unpaved road surface.
C.1	Restrict vehicular access to the area.
C.2	Apply water or chemical/organic stabilizers/suppressants, sufficient to comply with the conditions of a stabilized surface. If an area having 0.5 acre or more of disturbed surface area remains unused for seven or more days, the area must comply with the conditions for a stabilized surface area as defined in Section 3.58 of Rule 8011.
5.3.1	An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.
5.3.2	An owner/operator shall post speed limit signs that meet state and federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.

No.	Measure
5.4.1	Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20 percent opacity. Indoor activities such as electrical, plumbing, dry wall installation, painting, and any other activity that does not cause any disturbances to the soil are not subject to this requirement.
5.4.2	Continue operation of water trucks/devices when outdoor construction excavation, extraction, and other earthmoving activities cease, unless unsafe to do so.
6.3.1	An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include ten acres or more of disturbed surface area for residential developments, or five acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. Construction activities shall not commence until the APCO has approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all such activities conducted for residential and non-residential (e.g., commercial, industrial, or institutional) purposes or conducted by any governmental entity.
6.3.3	The Dust Control Plan shall describe all fugitive dust control measures to be implemented before, during, and after any dust generating activity.
6.3.4	A Dust Control Plan shall contain all the [administrative] information described in Section 6.3.6 of this rule. The APCO shall approve, disapprove, or conditionally approve the Dust Control Plan within 30 days of plan submittal. A Dust Control Plan is deemed automatically approved if, after 30 days following receipt by the District, the District does not provide any comments to the owner/operator regarding the Dust Control Plan.
APCO = Air Pollution Control Officer; VDE = visible dust emissions	
Source: San Joaquin Valley Air Pollution Control District 2004	

Air Quality Management Plan

As required by the federal CAA and the CCAA, air basins or portions thereof have been classified as either “attainment” or “nonattainment” for each criteria air pollutant, based on if the standards have been achieved. Jurisdictions of nonattainment areas also are required to prepare an air quality management plan that includes strategies for achieving attainment. The SJVAPCD has approved management plans demonstrating how the SJVAB will reach attainment with the federal one-hour and eight-hour ozone and PM_{2.5} standards.

OZONE ATTAINMENT PLANS

The *Extreme Ozone Attainment Demonstration Plan*, adopted by the SJVAPCD Governing Board October 8, 2004, sets forth measures and emission-reduction strategies designed to attain the federal one-hour ozone standard by November 15, 2010, as well as an emissions inventory, outreach, and rate of progress demonstration. This plan was approved by the USEPA on March 8, 2010; however, the USEPA’s approval was subsequently withdrawn effective November 26, 2012, in response to a decision issued by the United States Court of Appeals for the Ninth Circuit (*Sierra Club v. EPA*, 671 F.3d 955) remanding USEPA’s approval of these SIP revisions. Concurrent with the USEPA’s final rule, CARB withdrew the 2004 Plan. The SJVAPCD developed a new plan for the one-hour ozone standard, the *2013 Plan for the Revoked 1-Hour Ozone Standard*, which it adopted in September 2013.

The *2007 Ozone Plan*, approved by CARB on June 14, 2007, demonstrates how the SJVAB would meet the federal eight-hour ozone standard. The *2007 Ozone Plan* includes a comprehensive list of regulatory and incentive-based measures to reduce emissions of ozone and particulate matter precursors throughout the SJVAB. Additionally, this plan calls for major advancements in pollution control technologies for mobile and stationary sources of air pollution, and an increase in state and federal

funding for incentive-based measures to create adequate reductions in emissions to bring the entire SJVAB into attainment with the federal eight-hour ozone standard (SJVAPCD 2007a).

On April 16, 2009, the SJVAPCD Governing Board adopted the *Reasonably Available Control Technology Demonstration for Ozone State Implementation Plans (2009 RACT SIP)* (SJVAPCD 2009a). In part, the 2009 RACT SIP satisfied the commitment by the SJVAPCD for a new reasonably available control technology analysis for the one-hour ozone plan (see discussion of the USEPA withdrawal of approval in the *Extreme 1-Hour Ozone Attainment Demonstration Plan* summary above) and was intended to prevent all sanctions that could be imposed by USEPA for failure to submit a required SIP revision for the one-hour ozone standard. With respect to the eight-hour standard, the plan also assesses the SJVAPCD's rules based on the adjusted major source definition of 10 tons per year (due to the SJVAB's designation as an extreme subsequently nonattainment area), evaluates SJVAPCD rules against new *Control Techniques Guidelines* promulgated since August 2006, and reviews additional rules and amendments that had been adopted by the Governing Board since August 17, 2006, for reasonably available control technology consistency.

The *2013 Plan for the Revoked 1-Hour Ozone Standard* was approved by the Governing Board on September 19, 2013 (SJVAPCD 2013b). Based on implementation of the ongoing control measures, preliminary modeling indicated that the SJVAB would attain the one-hour standard before the final attainment year of 2022 and without relying on long-term measures under the federal CAA Section 182(e)(5) (SJVAPCD 2013b). The 2013 plan is replaced by the 2023 plan detailed below.

On June 19, 2014, the Governing Board adopted the *2014 Reasonably Available Control Technology Demonstration for the 8-Hour Ozone State Implementation Plan* (SJVAPCD 2014) that includes a demonstration that the SJVAPCD rules implement reasonably available control technology (RACT). The plan reviews each of the NO_x reduction rules and concludes that they satisfy requirements for stringency, applicability, and enforceability, and meet or exceed RACT. The plan's analysis of further ROG reductions through modeling and technical analyses demonstrates that added ROG reductions will not advance the SJVAB's ozone attainment. Each ROG rule evaluated in the 2009 RACT SIP has been subsequently approved by the USEPA as meeting RACT within the last two years. The subsequent attainment strategy, therefore, focuses on further NO_x reductions.

SJVAPCD adopted the *2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard* in June 2020. This plan satisfies CAA requirements and ensures expeditious attainment of the 70 parts per billion eight-hour standard (SJVAPCD 2020).

SJVAPCD adopted the *2022 Plan for the 2015 8-Hour Ozone Standard* on December 15, 2022. This plan uses extensive science and research, state of the art air quality modeling, and the best available information in developing a strategy to attain the federal 2015 NAAQS for ozone of 70 ppb as expeditiously as practicable. Building on decades of developing and implementing effective air pollution control strategies, this plan demonstrates that the reductions being achieved by the SJVAPCD and CARB strategy (72 percent reduction in NO_x emissions by 2037) ensures expeditious attainment of the 2015 eight-hour ozone standard by the 2037 attainment deadline.

SJVAPCD adopted the *2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard* on June 15, 2023. This maintenance plan demonstrates SJVAPCD's consistency with all five criteria of Section 107(d)(3)(E) of the CAA to terminate all anti-backsliding provisions for the revoked one-hour ozone standard, including Section 185 nonattainment fees. This Maintenance Plan also includes a demonstration that would ensure the area remains in attainment of the 1-hour ozone NAAQS through 2036.

PARTICULATE MATTER ATTAINMENT PLANS

In June 2007, the SJVAPCD Board adopted the *2007 PM₁₀ Maintenance Plan and Request for Redesignation* (SJVAPCD 2007b). This plan demonstrates how PM₁₀ attainment in the SJVAB will be maintained in the future. Effective November 12, 2008, USEPA redesignated the SJVAB to attainment for the PM₁₀ NAAQS and approved the 2007 PM₁₀ Maintenance Plan (USEPA 2008).

In April 2008, the SJVAB Board adopted the *2008 PM_{2.5} Plan* and approved amendments to Chapter 6 of the *2008 PM_{2.5} Plan* on June 17, 2010 (SJVAPCD 2008a). This plan was designed to address USEPA's annual PM_{2.5} standard of 15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), which was established by USEPA in 1997. In December of 2012, the SJVAPCD adopted the *2012 PM_{2.5} Attainment Plan*, which addresses USEPA's 24-hour PM_{2.5} standard of 35 $\mu\text{g}/\text{m}^3$, which was established by USEPA in 2006 (SJVAPCD 2012). In April 2015, the SJVAPCD Board adopted the *2015 Plan for the 1997 PM_{2.5} Standard* that addresses the USEPA's annual and 24-hour PM_{2.5} standards established in 1997 after the SJVAB experienced higher PM_{2.5} levels in winter 2013–2014 due to the extreme drought, stagnation, strong inversions, and historically dry conditions, and the SJVAPCD was unable to meet the initial attainment date of December 31, 2015 (SJVAPCD 2015c).

SJVAPCD adopted the *2016 Moderate Area Plan for the 2012 PM_{2.5} Standard* on September 15, 2016. This plan addresses the USEPA federal annual PM_{2.5} standard of 12 $\mu\text{g}/\text{m}^3$, established in 2012. This plan includes an attainment impracticability demonstration and request for reclassification of the Valley from Moderate nonattainment to Serious nonattainment (SJVAPCD 2016).

SJVAPCD adopted the *2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards* in November 2018. This plan addresses the USEPA federal 1997 annual PM_{2.5} standard of 15 $\mu\text{g}/\text{m}^3$ and the 24-hour PM_{2.5} standard of 65 $\mu\text{g}/\text{m}^3$; the 2006 24-hour PM_{2.5} standard of 35 $\mu\text{g}/\text{m}^3$; and the 2012 annual PM_{2.5} standard of 12 $\mu\text{g}/\text{m}^3$. The plan demonstrates attainment of the federal PM_{2.5} standards as expeditiously as practicable as required under the federal CAA (SJVAPCD 2018).

The *2024 Plan for the 2012 Annual PM_{2.5} Standard (Plan)* was adopted on June 20, 2024. The Plan includes the attainment strategy, emissions reduction commitments, milestones and contingency measures needed to fulfill the CAA requirements. The Plan demonstrates attainment of the 2012 PM_{2.5} standard by 2030 (SJVAPCD 2024b).

Existing Ambient Air Quality

The SJVAPCD operates three air quality monitoring stations in the SJVAB within San Joaquin County. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The nearest monitoring station is the Tracy-Airport monitoring station, located at 5749 South Tracy Boulevard, approximately 2.5-miles southeast of the project site. This monitoring station measures only ozone, NO₂, PM₁₀ and PM_{2.5}. Because monitoring is not generally conducted for pollutants for which the SJVAB is in attainment, there is no recent monitoring data available for CO or SO₂.

Table 4 indicates the number of days that each of the federal and State standards has been exceeded at Tracy-Airport monitoring station in each of the last three years for which data is available. The federal and State eight-hour ozone standards were exceeded in 2021 and 2022. Additionally, the PM₁₀ state standards were exceeded all three years. The federal PM₁₀ standards were exceeded in 2021. The PM_{2.5} federal standards exceedances were not available. No other federal or State standards were exceeded at this monitoring station.

Table 4 Ambient Air Quality at the Monitoring Station

Pollutant	2021	2022	2023
Ozone			
8-Hour Ozone (ppm), 8-Hour Maximum	0.077	0.074	0.063
Number of Days of State exceedances (>0.070)	3	1	0
Number of days of Federal exceedances (>0.070)	3	1	0
Ozone (ppm), Worst Hour	0.089	0.082	0.075
Number of Days above State Standard (>0.09 ppm)	0	0	0
Respirable Particulate Matter, PM₁₀			
Particulate Matter 10 microns, µg/m ³ , Worst 24 Hours	176	75	72
Number of Days above State Standard (>50 µg/m ³)	23	10	11
Number of Days above Federal Standard (>150 µg/m ³)	1	0	0
Fine Particulate Matter, PM_{2.5}			
Particulate Matter <2.5 microns, µg/m ³ , Worst 24 Hours	54	25	29
Number of days above Federal standard (>35 µg/m ³)	*	*	*
Nitrogen Dioxide, NO₂			
Nitrogen Dioxide (ppb), Worst Hour	36	35	27
Number of Days above State Standard (>180 ppb)	0	0	0
Number of Days above Federal Standard (>100 ppb)	0	0	0

µg/m³ = micrograms per cubic meter; ppb = parts per billion; PM₁₀ = particulates less than 10 microns in diameter; PM_{2.5} = particulates less than 2.5 microns in diameter

* data not available

Source: California Air Resources Board 2024

2.2.2 Greenhouse Gases

Federal Regulations

Federal Clean Air Act

The United States Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the USEPA has the authority to regulate motor vehicle GHG emissions under the federal CAA. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that established the GHG permitting thresholds that determine when CAA permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the United States Supreme Court held the USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of

Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026.

The USEPA finalized the federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026 in February 2022. These standards will leverage current and future technologies to result in the avoidance of more than 3 billion tons of GHGs through 2050.

State Regulations

CARB is responsible for the coordination and oversight of state and local air pollution control programs in California. There are numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

California Advanced Clean Cars Program

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the USEPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles, beginning with the 2009 model year, which allows California to implement more stringent vehicle emission standards than those promulgated by the USEPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as "LEV (Low Emission Vehicle) III GHG," regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels.

Assembly Bill 1007 (State Alternative Fuels Plan)

AB 1007 (Chapter 371, Statutes of 2005) required the California Energy Commission (CEC) to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other federal, State, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality. The SAF Plan provided a framework for subsequent legislation, including AB 118 (Chapter 750, Statutes of 2007), to be passed, which currently provides \$690 million in funding for medium- and heavy-duty battery-electric and hydrogen infrastructure, and \$77 million for hydrogen refueling infrastructure (CARB 2007, CEC 2021b).

California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies

for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO₂e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

The CARB approved the 2013 Scoping Plan update in May 2014. The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100. The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of 6 MT of CO₂e by 2030 and 2 MT of CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (City, County, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state.

CARB published the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan Update) in November 2022, as the third update to the initial plan that was adopted in 2008. The 2022 Scoping Plan Update is the most comprehensive and far-reaching Scoping Plan developed to date. It identifies a technologically feasible, cost-effective, and equity-focused path to achieve new targets for carbon neutrality by 2045 and to reduce anthropogenic GHG emissions to at least 85 percent below 1990 levels, while also assessing the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan (CARB 2022). The 2030 target is an interim but important stepping-stone along the critical path to the broader goal of deep decarbonization by 2045. The relatively longer path assessed in the 2022 Scoping Plan Update incorporates, coordinates, and leverages many existing and ongoing efforts to reduce GHGs and air pollution, while identifying new clean technologies and energy. Given the focus on carbon neutrality, the 2022 Scoping Plan Update also includes discussion for the first time of the natural and working lands sectors as sources for both sequestration and carbon storage, and as sources of emissions as a result of wildfires.

The 2022 Scoping Plan Update reflects existing and recent direction in the Governor's Executive Orders and State Statutes, which identify policies, strategies, and regulations in support of and implementation of the Scoping Plan. Among these include Executive Order B-55-18 and AB 1279 (the California Climate

Crisis Act), which identify the carbon neutrality and GHG reduction targets for 2045 incorporated into the Scoping Plan.

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPO) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO's Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as "transit priority projects") can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The San Joaquin County of Governments (SJCOG) is the regional planning agency for San Joaquin County and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SJCOG most recently prepared the *2022 Regional Transportation Plan and Sustainable Communities Strategy (2022 RTP/SCS)* for the region. Project consistency with the 2022 RTP/SCS would therefore support AB 32 and SB 32 GHG reduction goals.

The 2022 RTP/SCS (2022 RTP) was approved by the San Joaquin COG on August 25, 2022. The 2022 RTP/SCS comprehensively assess all forms of transportation available in San Joaquin County as well as travel and goods movement. Implementation of the goals set forth in the 2022 RTP will help achieve the state health standards and climate goals associated with transportation impacts.

Senate Bill 1383

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statutes of 2016) requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery, in consultation with CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, former Governor Brown issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

17 California Code of Regulations Section 95350 et seq.

In 2010, CARB adopted the *Regulation for Reducing Sulfur Hexafluoride Emissions From Gas Insulated Switchgear* (Section 17 CCR Section 95350 et seq.). The purpose of this regulation is to achieve GHG emission reductions by reducing SF₆ emissions from gas-insulated switchgear. Owners of such switchgear must not exceed maximum allowable annual emissions rates, reduced each year until 2020, after which annual emissions must not exceed 1 percent. Owners must regularly inventory gas-insulated switchgear equipment, measure quantities of SF₆, and maintain records of these for at least three years. Additionally, by June 1 of each year, owners also must submit an annual report to CARB's Executive Officer for emissions that occurred during the previous calendar year.

In December 2021, CARB adopted amendments to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear, to update the phase-out of SF₆ in gas-insulated switchgear. The new phase out schedule begins in January 2025 with all switchgear needing to be SF₆ free by January 2033. Under this resolution, CARB has developed a timeline for phasing-out SF₆ equipment in California and created incentives to encourage owners to replace SF₆ equipment. The California Office of Administrative Law approved this rulemaking in December 2021 and the Resolution went into effect January 1, 2022.

California Advanced Clean Trucks Program

In March 2021, CARB approved the Advanced Clean Trucks regulation, which requires manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. In addition, the regulation requires company and fleet reporting for large employers and fleet owners with 50 or more trucks. By 2045, all new trucks sold in California must be zero-emission. Implementation of this regulation would reduce consumption of nonrenewable transportation fuels as trucks transition to alternative fuel sources.

California Advanced Clean Fleets Regulation

In April 2023, CARB approved the Advanced Clean Fleets (ACF) regulation. The ACF regulation is part of California's strategy to accelerate the adoption of medium- and heavy-duty ZEVs. It complements the Advanced Clean Trucks regulation and aims to achieve public health, air quality, and climate goals. The ACF regulation applies to fleets performing drayage operations, those owned by State, local, and federal government agencies, and high priority fleets. The ACF regulation includes components such as a manufacturer sales mandate, drayage fleet registrations, requirements for drayage fleets to transition to zero-emission vehicles, and mandates for high priority and government fleets to purchase increasing percentages of ZEVs over time. The regulation provides flexibility and exemptions for cases where zero-emission trucks are not yet available. The ACF regulation is expected to significantly increase the number of ZEVs on California roads, leading to emissions reductions and health benefits. The Advanced Clean Trucks and ACF regulations together are expected to result in about 510,000, 1,350,000 and 1,690,000 ZEVs in California in 2035, 2045, and 2050, respectively.

Executive Order B-48-18 (Zero-Emission Vehicles)

On January 26, 2018, Governor Brown signed Executive Order B-48-18 requiring all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle (EV) charging stations by 2025. It specifies that 10,000 of the EV charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan, along with the 2018 ZEV Action Plan Priorities Update, which includes and extends the 2016 ZEV Action Plan, to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities.

Executive Order N-79-20 (Zero Emissions Vehicles Sales)

Governor Gavin Newsom signed Executive Order N-79-20 in September 2020, which sets a statewide goal that 100 percent of all new passenger car and truck sales in the state will be zero-emissions by 2035. It also sets a goal that 100 percent of statewide new sales of medium- and heavy-duty vehicles will be zero emissions by 2045, where feasible, and for all new sales of drayage trucks to be zero emissions by 2035. Additionally, the Executive Order targets 100 percent of new off-road vehicle sales in the state to be zero emission by 2035. CARB is responsible for implementing the new vehicle sales regulation.

Senate Bill 1020

SB 1020 signed into law on September 16, 2022, requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035, 95 percent by 2040, and 100 percent by 2045. All State agencies facilities must be served by 100 percent renewable and zero-carbon resources by 2030. SB 1020 also requires the California Public Utilities Commission, CEC, and CARB to issue a joint progress report outlining the reliability of the electrical grid with a focus on summer reliability and challenges and gaps. Additionally, SB 1020 requires the California Public Utilities Commission to define energy affordability and use energy affordability metrics to develop protections, incentives, discounts, or new programs for residential customers facing hardships due to energy or gas bills.

Local Regulations

San Joaquin Council of Governments

As discussed above, the SJCOG developed the 2022 RTP/SCS as the region's strategy to fulfill the requirements of SB 375. The 2022 RTP/SCS establishes a development pattern for the region that, when integrated with the transportation network and other policies and measures, would reduce GHG emissions from transportation (excluding goods movement). Specifically, the 2020 RTP/SCS is a financially feasible plan that achieves health standards for clean air and addresses climate goals set by the state. The 2022 RTP/SCS does not require local general plans, specific plans, or zoning be consistent with it but provides incentives for consistency for governments and developers. As discussed above under SB 375, SJCOG the 2022 RTP for was approved on August 25, 2022.

San Joaquin Valley Air Pollution Control District

In August 2008, the SJVAPCD's Governing Board adopted the *Climate Change Action Plan* (SJVAPCD 2008b). The *Climate Change Action Plan* directed the SJVAPCD Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change.

In 2009, the SJVAPCD adopted the *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA* and the *District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project-specific GHG emissions on global climate change during the environmental review process, as required by CEQA (SJVAPCD 2009b, 2009c).

Use of BPS was a method for CEQA streamlining, but they were not required measures. Projects implementing BPS could be determined to have a less than cumulatively significant GHG impact. Another option was to demonstrate a 29 percent reduction in GHG emissions from business-as-usual (BAU) conditions to determine that a project would have a less than cumulatively significant impact and be consistent with AB 32 2020 targets. The guidance does not limit a lead agency's authority in establishing its own thresholds for determining the significance of project-related GHG impacts (SJVAPCD 2009c). Since SJVAPCD's recommended BPS method and 29 percent below BAU method were designed with 2020 GHG reduction targets in mind, compliance with these BPS or demonstration of 29 percent below BAU are no longer applicable to determining the significance of GHG impacts for projects developed after 2020.

3 Methodology and Significance Criteria

This section presents the methodology and significance criteria used for the analysis of construction, operational, and decommissioning emissions for the proposed Project. Criteria pollutant and GHG emissions for proposed Project construction and operation were calculated using the most recent version of the web-based California Emissions Estimator Model (CalEEMod).⁴ CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E (California Air Pollution Control Officers Association 2022). The input data and construction, operation, and decommissioning emission estimates for the proposed Project are discussed below and provided in Appendix A. Emissions calculations made outside CalEEMod, such as determination of SF₆ consumption, are included in Appendix B. CalEEMod output files for the proposed Project are included in Appendix C. The estimated emissions were then compared to applicable significance criteria.

3.1 Methodology

3.1.1 Construction Emissions

Construction site mobilization is currently anticipated to begin in the fourth quarter of 2025. Construction emissions of criteria air pollutants and GHG include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed Project was modeled based on the Applicant-provided construction data.

Construction equipment was provided by the Applicant and estimated to operate up to 12 hours per day and used the CalEEMod defaults for horsepower and load factor. Worker and haul trips schedules were provided by the Applicant and were implemented into CalEEMod such that the daily trip expectations would be captured.

This analysis assumes that the proposed Project would comply with all applicable regulatory standards. In particular, the proposed Project would comply with SJVACPD Rule 8021. Rule 8021 control measures for construction earthmoving activities were included in the model with the assumption that watering would occur twice a day.

Detailed assumptions including schedule and phasing is included in Appendix A.

⁴ CalEEMod Version 2022.1.1.21 was the most recent version of the model available at the time of technical work commencement.

3.1.2 Operational Emissions

In CalEEMod, operational sources of criteria pollutant and GHG emissions include area, energy, and mobile sources. Commercial operation is currently anticipated for the fourth quarter of 2026 with the first full year of operation was assumed to be 2027 based on the construction schedule. The facility was modeled as refrigerated warehouses with square footage based on the size and number of containers to estimate the energy requirements for maintaining stable temperature for optimal battery effectiveness. CalEEMod defaults were used to estimate emissions from annual architectural coating and consumer products use for the proposed Project. Water usage was assumed to be pumped from an on-site system and electricity offset by the proposed Project; therefore, operational water consumption emissions were not quantified. There is no solid waste generation assumed as there is no manned facility. The proposed Project assumes that mobile source emissions would occur from travel by two workers up to twice per week for the facility. The proposed Project does not include stacks, cooling towers, fuels and materials handling processes or delivery and storage systems.

3.1.3 Project Decommissioning

At the end of the proposed Projects' useful life (anticipated to be up to 40 years), the BESS facilities would be decommissioned. Activities required for deconstruction of the on-site facilities would require similar types and levels of equipment as those used during the construction phase. Equipment is likely to have lower emissions due to cleaner equipment fleets available at the time of decommissioning. Therefore, decommissioning was not modeled separately and is conservatively assumed to be consistent with construction emissions estimates. It is anticipated with the nature of decommissioning, that less or the same amount of equipment would be used. Additionally, as equipment would be newer and more efficient at the time of decommissioning, emissions from the equipment is anticipated to be less than the emissions from the same type and number of equipment used for construction. Therefore, using the emissions from construction as a proxy for decommissioning results in conservative emissions estimates associated with decommissioning.

3.1.4 Methodology for Determining Health Risks

Health impacts associated with TACs are generally from long-term exposure. Typical sources of TACs include industrial processes such as petroleum refining operations, commercial operations, such as gasoline stations and dry cleaners, and diesel exhaust. Health impacts from TAC emissions during the operational phase of the proposed Project could result from the use of on-site diesel equipment during proposed Project operation, such as worker vehicles. In addition, the use of large-scale off-road diesel equipment during proposed Project construction may result in a short-term increase of TAC emissions. DPM would be the TAC emitted in the largest quantity during construction and is the primary contaminant of concern for the proposed Project.

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (April 2005) recommends against siting sensitive receptors within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day, and within 1,000 feet of industrial land uses, such as warehouses and distribution centers with more than 100 truck trips per day. While these siting distances are not particular to construction activities, the primary source of TAC emissions from both freeways and construction equipment is DPM. Therefore, for this analysis it is assumed that projects within 1,000 feet of sensitive receptors have the potential to result in a significant impact.

However, emissions during construction and/or decommissioning are relatively small in magnitude, temporary in nature (a proposed Project schedule of approximately one year or less for each) and are

not expected to contribute to health risk due to the location of receptors greater than 1,000 feet from the most intense areas of construction and over 850 feet from the edge of the property.

No significant source of TAC emissions is expected during long-term operation of the proposed Project because there are not any expected stationary sources of TACs nor any routine haul truck trips.

Dispersion of air pollutants to this distance would be expected to dissipate greatly, minimizing potential exposure to potential health risks. Thus, health risks were assessed qualitatively.

3.1.5 Displaced Emissions

Emissions from non-renewable resources would be offset by the operation of the proposed Project. The BESS system stores excess energy from the grid that is generated during off-peak hours and is released back to the grid during peak hours. This is intended to reduce or eliminate the need to ramp up non-renewable production during peak demand times. Emissions offsets from the battery storage are quantified based on the annual storage and release of the BESS facility and takes into account the power mix in California.

3.2 Significance Criteria

The significance criteria used to evaluate the proposed Project impacts to air quality are based on the recommendations provided in Appendix G of the *CEQA Guidelines* (14 CCR 15000 et seq.). For the purposes of this air quality analysis, a significant impact would occur if the proposed Project would:

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the proposed Project region is nonattainment under an applicable federal or state ambient air quality standard.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

3.2.1 Annual Criteria Air Pollutant Emissions

Appendix G of the *CEQA Guidelines* (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to determine whether a project would have a significant impact on air quality. The SJVAPCD recommends the use of quantitative thresholds to determine the significance of temporary construction-related pollutant emissions and long-term operational-related pollutant emissions. These thresholds are shown in Table 5.

Table 5 SJVAPCD Air Quality Significance Thresholds

Pollutant	Operation Thresholds (Tons per Year)	Construction Thresholds (Tons Per Year)
NO _x	10	10
ROG ¹	10	10
PM ₁₀	15	15
PM _{2.5}	15	15
SO _x	27	27
CO	100	100

¹ ROG are formed during combustion and evaporation of organic solvents. ROG are also referred to as VOC.

Source: San Joaquin Valley Air Pollution Control District 2015a

3.2.2 Daily Criteria Air Pollutant Emissions

In addition to the annual SJVAPCD thresholds outlined above, SJVAPCD has published the *Ambient Air Quality Analysis Project Daily Emissions Assessment* guidance, which is summarized in Section 8.4.2, *Ambient Air Quality Screening Tools*, of the SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI)*, adopted in March 2015.

SJVAPCD recommends comparing project attributes with the following screening criteria as a first step to evaluating whether the proposed Project would result in the generation of CO concentrations that could substantially contribute to an exceedance of the significance thresholds. The proposed Project could result in a significant impact to localized CO concentrations if (SJVAPCD 2015a):

1. A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F
2. A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets at more one or more intersections in the project vicinity.

In addition to the criteria pollutant thresholds outlined above, the SJVAPCD has published the *Ambient Air Quality Analysis Project Daily Emissions Assessment* guidance, which is summarized in Section 8.4.2, *Ambient Air Quality Screening Tools*, of the GAMAQI. The GAMAQI provides a screening threshold of 100 pounds per day of any of the following pollutants: NO_x, ROG, PM₁₀, PM_{2.5}, sulfur oxide (SO_x), and CO. The screening threshold was used to evaluate localized construction activities and operational activities separately. Pursuant to SJVAPCD's GAMAQI and Rule 9510 – Indirect Source Review, when assessing the significance of project-related impacts on local air quality, the impacts *may* be significant if on-site emissions from construction or operational activities exceed the 100 pounds per day screening level after implementation of all enforceable mitigation measures. The proposed Project would be subject to Rule 9510 because it would develop more than 9,000 square feet, which is the ambient air quality analysis screening level threshold for unconventional land use developments not identified as residential, commercial, or industrial (e.g., a battery energy storage system).

If the screening criteria is exceeded for any pollutant, an ambient air quality assessment (AAQA) can be conducted following District Rule 2201 *AAQA Modeling*. An AAQA uses air dispersion modeling to determine if emission increases from a project's construction or operational activities would cause or contribute to a violation of the ambient air quality standards. If modeled concentrations combined with background concentrations would result in an exceedance of a NAAQS or CAAQS, then SJVAPCD Rule 2201 requires that the maximum modeled concentration of each pollutant be compared to its

corresponding Significant Impact Level (SIL). If modeled concentrations do not exceed the SIL, then the project would not result in a violation of ambient air quality standards and mitigation for that pollutant is not required.

3.2.3 Health Risk

The SJVAPCD has also established thresholds for health effects from carcinogenic and non-carcinogenic air toxics. The SJVAPCD recommends a carcinogenic (cancer) risk threshold of 20 in a million. The Chronic Hazard Index (HIC) is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The SJVAPCD recommends a HIC significance threshold of 1.0 and an acute hazard index (HIA) of 1.0. No short-term, acute relative exposure values are established and regulated for DPM.

3.2.4 Greenhouse Gases

The significance criteria used to evaluate the proposed Project impacts to GHG emissions are based on the recommendations provided in Appendix G of the *CEQA Guidelines* (14 CCR 15000 et seq.). For the purposes of the GHG analysis, a significant impact would occur if the proposed Project would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines*, Section 15064[h][1]).

Project-Level Significance Threshold

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, consistency with a regional GHG reduction plan, or consistency with statewide regulations adopted to reduce GHG emissions. A project may be found to have a less-than-significant impact related to GHG emissions if it complies with an adopted plan that includes specific measures to sufficiently reduce GHG emissions (14 CCR Section 15064[h][3]). According to the *CEQA Guidelines*, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in that plan. The Association of Environmental Professionals considers this approach in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (Association of Environmental Professionals 2016). However, the SJVAPCD's current GHG reduction strategy presented in the 2008 *Climate Change Action Plan* is based on AB 32 2020 emissions targets and does not address the SB 32 2030 emissions targets or AB 1279 2045 emissions targets. Because the GHG reduction plan does not specifically address the 2030 or 2045 targets and the project would become operational after 2020, tiering from the regional 2008 *Climate Change Action Plan* is not applicable.

Tracy Long Duration Energy Storage Project

Instead, the potential for the proposed Project to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHG was assessed by examining the proposed Project's consistency with the GHG reduction measures detailed in CARB's *2022 Climate Change Scoping Plan*. Under the SJVAPCD's CEQA guidance for GHG, a project would not have a significant GHG impact if it is consistent with an applicable plan to reduce GHG emissions, and a CEQA compliant analysis was completed for the GHG reduction plan (SJVAPCD 2009b, 2015a). Project GHG emissions are quantified for informational purposes.

4 Impact Analysis

4.1 Project-Level Air Quality Impacts

Threshold 1:	Would the Project conflict with or obstruct implementation of the applicable air quality plan?
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Impact AQ-1 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE 2020 REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) DEMONSTRATION FOR THE 2015 8-HOUR OZONE STANDARD AND THE 2013 PLAN FOR THE REVOKED 1-HOUR OZONE STANDARD, 2007 PM₁₀ MAINTENANCE PLAN AND REQUEST FOR RE-DESIGNATION, 2012 PM_{2.5} PLAN, AND 2015 PLAN FOR THE 1997 PM_{2.5} STANDARD WITH THE IMPLEMENTATION OF MITIGATION MEASURE AQ-1. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

4.1.1 Air Quality Management Plan Consistency

Construction, operation, and decommissioning of the proposed Project would result in emissions of criteria pollutants including ozone precursors (such as ROG and NO_x) and PM. The SJVAPCD has prepared several air quality attainment plans to achieve ozone and particulate matter standards, the most recent of which include the *2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard* and the *2013 Plan for the Revoked 1-Hour Ozone Standard, 2007 PM₁₀ Maintenance Plan and Request for Re-designation, 2012 PM_{2.5} Plan, and 2015 Plan for the 1997 PM_{2.5} Standard*. The SJVAB is in attainment for CO, SO₂, and Pb, and there are no attainment plans for those pollutants.

Pursuant to Section 7.12 of the *GAMAQI*, the SJVAPCD has determined that projects with emissions above the thresholds of significance for criteria pollutants would conflict with/obstruct implementation of the SJVAPCD's air quality plans (SJVAPCD 2015a). As discussed under Impact AQ-2, proposed Project construction, operation, and decommissioning would not have significant impacts. Therefore, the proposed Project emissions would not conflict with implementation of existing air quality plans at a local level. Impacts would be less than significant.

Threshold 2	Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?
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Impact AQ-2 PROPOSED PROJECT CONSTRUCTION, OPERATION, AND DECOMMISSIONING WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF A CRITERIA POLLUTANT FOR WHICH THE PROPOSED PROJECT REGION IS IN NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

4.1.2 Construction Impacts

Annual Criteria Air Pollutant Emissions

Construction and decommissioning of the proposed Project would require approximately 12 total months of construction and 12 months of decommissioning activity. Construction and decommissioning

of the proposed Project would generate air pollutant emissions from entrained dust, off-road equipment uses, vehicle emissions, and architectural coatings. Off-site emissions would be generated by construction workers' daily commute trips and heavy-duty diesel haul and vendor truck trips. Construction and decommissioning emissions would vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Table 6 shows the estimated annual construction and decommissioning emissions by construction phase. Most PM emissions are fugitive emissions. Decommissioning would occur up to approximately 40 years after the start of the project, as equipment efficiencies are unknown for that time period, and activities for decommissioning would be similar to construction activities, emissions from construction are assumed to be the same as construction. As shown, construction and decommissioning emissions would be less than the thresholds. Impacts would be less than significant.

Table 6 Annual Construction and Decommissioning Emissions

Phase	Emissions (tons per year by phase)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2025	<1	2	2	<1	<1	<1
2026	1	5	6	<1	<1	<1
Full year of construction	1	7	8	<1	1	<1
Full year of decommissioning	1	7	8	<1	1	<1
Threshold	10	10	100	27	15	15
Exceed Threshold?	No	No	No	No	No	No

CO = carbon monoxide; NO_x = nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; SO_x = sulfur oxide

Notes: Rounded values shown; columns may not total exactly. See Appendix B for calculations. Bold numbers indicate an exceedance of applicable thresholds.

The proposed Project would comply with SJVAPCD Rule 9510, Indirect Source Review, which requires large development projects to reduce exhaust emissions from construction equipment by 20 percent for NO_x and 45 percent for PM₁₀ compared to the statewide average or demonstrate use of a clean fleet (such as USEPA Tier 4 equipment). Compliance with SJVAPCD Rule 9510 could result in additional emissions reductions quantification for this environmental analysis. Furthermore, in addition to the Rule 9510 requirement, the proposed Project would comply with dust mitigation per Rule 8021 which would reduce dust emissions. Requirements of Rule 8021 are detailed in the Regional Setting above; the proposed Project's fugitive dust control plan would comply with all applicable measures required by SJVAPCD in Rule 8021.

Daily Criteria Air Pollutant Emissions

The SJVAB is a nonattainment area for ozone, PM₁₀, and PM_{2.5} under the NAAQS and/or CAAQS. The current air quality in the SJVAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., ROG and NO_x for ozone) potentially contribute to poor air quality. Construction and decommissioning activities would exceed the SJVAPCD's recommended 100 pounds per day screening threshold during construction for CO, as shown in Table 7.

Because daily emissions from proposed Project construction and decommissioning would exceed significance thresholds for CO, the proposed Project may contribute cumulatively to a net increase in criteria pollutants. However, the NAAQS and CAAQS for CO, are so much less than the regional

background concentration of CO, and the proposed Project only exceeds the threshold by 1 lb/day, the Project would not contribute to an exceedance of the ambient air quality standards.⁵ Therefore, the Project would contribute to less than significant impacts with respect to daily emissions.

Table 7 Maximum Daily Construction and Decommissioning Emissions

	Emissions (lbs/day) by Year					
	ROG	NO _x	CO	SO _x	PM ₁₀ ¹	PM _{2.5} ¹
1. Access Road	5	32	34	1	2	1
2. Site Prep and Grading	9	60	71	<1	10	5
3. Install Foundations	17	81	101	<1	5	3
4. Set Modules, Inverters, Switchgear	8	50	51	<1	4	2
5. Electrical Wire Installation/Finish Grading	6	33	45	<1	2	1
6. Commissioning & Testing	2	13	19	<1	1	1
Maximum Emissions						
Maximum Daily Emissions (Construction)	17	81	101	1	10	5
Maximum Daily Emissions (Decommissioning)	17	81	101	1	10	5
Threshold	100	100	100	100	100	100
Exceed Threshold?	No	No	Yes	No	No	No

lbs/day = pounds per day; NO_x = nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = PARTICULATE MATTER with a diameter of 2.5 microns or less; SO_x = sulfur oxide

¹ Includes compliance with Rule 8021 dust control measures, which accounts for watering.

Bold values indicate where thresholds are exceeded.

Operational Impacts

Annual and Daily Criteria Air Pollutants

The proposed Project is expected to only have two workers travel to the facility up to two times per week. The proposed Project assumes operational emissions associated with a refrigerated warehouse land use type assuming CalEEMod defaults. As shown in Table 8, operational emissions from the proposed Project would not exceed SJVAPCD annual thresholds for any criteria pollutant. Table 9 demonstrates that daily SJVAPCD would not exceed daily thresholds. No diesel generators or other non-electric equipment would be used that results in emissions of criteria air pollutants. Impacts would be less than significant.

⁵ According to USEPA monitoring data from the Stockton-University Park monitoring site location, the maximum recorded one-hour CO concentration was 2.3 ppm and the maximum recorded eight-hour CO concentration was 1.4 ppm (USEPA 2024). This is approximately 10 percent of the NAAQS as demonstrated in Table 2, so the Project would not produce enough emissions to cause an exceedance of the standards.

Table 8 Estimated Annual Operational Emissions

Source	Emissions (tons/year)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area ¹	<1	<1	<1	<1	<1	<1
Energy	0	0	0	0	0	0
Mobile	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
Threshold	10	10	27	100	15	15
Exceed Threshold?	No	No	No	No	No	No

NO_x= nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; lbs/day = pounds per day; SO_x = sulfur oxides

¹Area source emissions are associated with emissions of consumer products used for cleaning and landscaping emissions, and are conservatively included for this analysis

Totals may not add up due to rounding vehicles. See Appendix B for calculations.

Table 9 Estimated Daily Operational Emissions

Source	Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Combined Total Daily Operations	<1	<1	1	<1	<1	<1
SJVAPCD Operational Threshold	100	100	100	100	100	100
Exceed Threshold?	No	No	No	No	No	No

NO_x= nitrous oxides; ROG = reactive organic gases; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; lbs/day = pounds per day; SO_x = sulfur oxides

Totals may not add up due to rounding vehicles. See Appendix B for calculations. Bold numbers indicate an exceedance of applicable thresholds

Furthermore, energy storage systems, such as the proposed BESS, assist utilities like PG&E and the State of California in achieving criteria air pollutant emission reductions by providing the means of storing excess electricity (e.g., renewable solar energy) generated during off-peak hours for use during peak hours as an alternative to operating resources such as a peaker plant, which generates air quality emissions from fossil fuel combustion.⁶ By expanding PG&E's access to energy storage systems, the proposed Project would be expected to increase the stability and reliability of the existing electrical grid, thereby reducing the need for additional electricity to be generated by fossil fuel power plants during peak hours. The energy conservation achieved by the proposed Project would reduce fossil fuel consumption, thereby reducing criteria air pollutant emissions from the electricity sector. Impacts would be less than significant.

⁶ Peaker plants are power plants that are operated only when demand for electricity is high (i.e., during times of peak demand).

Threshold 3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 CONSTRUCTION, OPERATION, AND DECOMMISSIONING OF THE PROPOSED PROJECT WOULD NOT RESULT IN EMISSIONS OF TACs SUFFICIENT TO EXCEED APPLICABLE HEALTH RISK CRITERIA. THE PROPOSED PROJECT WOULD NOT INCREASE CARBON MONOXIDE CONCENTRATIONS SUCH THAT IT WOULD CREATE CARBON MONOXIDE HOTSPOTS. HOWEVER, THE PROPOSED PROJECT MAY EXPOSE WORKERS AND NEARBY RECEPTORS TO VALLEY FEVER WITHOUT MITIGATION. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION MEASURE AQ-1.

4.1.3 Toxic Air Containments

Construction and Decommissioning Health Risk Assessment

As described in Section 1.3, *Project Description*, proposed Project components would be constructed over a period of approximately 12 months, with decommissioning potentially occurring up to 40 years later over an additional 12 months. Construction and decommissioning of the proposed Project would require the use of heavy-duty construction equipment and diesel trucks which would emit DPM. CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (April 2005) recommends against siting sensitive receptors within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day, and within 1,000 feet of industrial land uses such as warehouses and distribution centers with more than 100 truck trips per day. While these siting distances are not particular to construction activities, the primary source of TAC emissions from both freeways and construction/decommissioning equipment is DPM. Therefore, for this analysis it is assumed that Projects within 1,000 feet of sensitive receptors have a potential to result in a significant impact. The nearest sensitive receptor is approximately 850-feet southwest of the site border, 950 feet from the existing PG&E substation where the BESS system would connect, and over 1,000 feet from the BESS project location where the majority of construction activity would occur. Concentrations of air pollutants from construction and decommissioning emission sources to this distance would drop off rapidly as air dispersion occurs, minimizing potential exposure and potential health risks. Additionally, wind in the area blows generally from west to east, blowing the majority of emissions away from the nearest receptor. The short-term nature of construction and decommissioning activities, the time between construction and decommissioning activities, typical wind patterns, and the distance of sensitive receptors would result in less than significant impacts.

Operation

As previously discussed, health impacts due to DPM are largely related to construction equipment exhaust. The BESS project is not a land use typically associated with high health risk. Operational activities throughout the defined proposed Project site are not expected to use diesel-fueled, off-road equipment. There are not any stationary sources of TACs expected nor any routinely expected haul truck trips. Operational activities would, therefore, be less than significant.

4.1.4 CO Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration

exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and State eight-hour standard of 9.0 ppm (SJVAPCD 2024a).

The entire SJVAB is in conformance with State and federal CO standards and no air quality monitoring stations report CO levels in the SJVAPCD jurisdiction. Additionally, CARB no longer reports CO concentrations anywhere in California. Based on the low background level of CO in the SJVAB (indicated by the lack of monitoring at State or local levels), the low and the ever-improving emissions standards for new sources in accordance with State and federal regulations, and the fact that the proposed Project would result in approximately two worker visits up to twice per week, during operational and maintenance activities. The proposed Project would not cause the LOS on affected roadways to be reduced to LOS E or F and would not substantially worsen an existing LOS F roadway. Therefore, the proposed Project would not create new CO hotspots. Additionally, as demonstrated under Impact AQ-2, CO emissions during construction, operation, and decommissioning for the overall proposed Project, including mobile sources, would not exceed ambient air quality standards. Therefore, the proposed Project would not expose sensitive receptors to substantial CO concentrations, and localized air quality impacts related to CO hot spots would be less than significant.

4.1.5 Valley Fever

Construction activities that include ground disturbance can result in fugitive dust, which can cause fungus *Coccidioides* spores to become airborne if they are present in the soil. These spores can cause Valley Fever. Workers who disturb soil where fungal spores are found, whether by digging, operating earthmoving equipment, driving vehicles, or by working in dusty, wind-blown areas, are more likely to breathe in spores and become infected. It is not a contagious disease, and secondary infections are rare. The Project is located in San Joaquin County where the risk is approximately 14 to 41 cases per 100,000 people as of 2016 (San Joaquin County 2018). Construction and decommissioning activities associated with the proposed Project would include ground-disturbing activities that could result in an increased potential for exposure of nearby residents and on-site workers to airborne spores, if they are present. Compliance with dust control measures required by SJVAPCD Rule 8021 would minimize personnel and public exposure to Valley Fever and reduce the potential risk of nearby resident and on-site worker exposure to Valley Fever. However, without additional controls, the impacts resulting from the proposed Project would still be potentially significant. Mitigation Measure AQ-1 is provided to ensure that personnel and public exposure to Valley Fever is minimized to the greatest extent feasible. Therefore, impacts would be less than significant with implementation of Mitigation Measures AQ-1.

4.1.6 Mitigation

AQ-1 Minimize Personnel and Public Exposure to Valley Fever

Prior to site preparation, grading activities, or ground disturbance, the Applicant shall prepare a Fugitive Dust Control Plan for the proposed Project. The Fugitive Dust Control Plan shall include the following at a minimum:

- Equipment, vehicles, and other items shall be cleaned thoroughly of dust before they are moved off-site to other work locations.
- Wherever possible, grading, and trenching work shall be phased, so that earth-moving equipment works well ahead or down-wind of workers on the ground.
- The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area.

- If a water truck runs out of water before dust is dampened sufficiently, ground workers exposed to dust are to leave the area until a full truck resumes water spraying.
- All heavy-duty earth-moving vehicles shall be closed-cab and equipped with a High Efficiency Particulate Arrestance-filtered air system.
- N95 respirators shall be provided to on-site workers for the duration of the construction period.
- Workers shall receive training to recognize the symptoms of Valley Fever and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be kept onsite for review as required by regulatory agencies.
- Valley Fever information shall be available on-site for all construction personnel. The information shall provide, at a minimum, a description of the symptoms, health effects, preventative measures, and treatment.

Significance After Mitigation

Mitigation Measure AQ-1 would ensure that personnel and public exposure to Valley Fever is minimized to the greatest extent possible; therefore, impacts would be less than significant with mitigation.

Threshold 4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact AQ-4 THE PROJECT WOULD NOT GENERATE ODORS ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE DURING CONSTRUCTION OR OPERATION. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The State of California Health and Safety Code Sections 41700 and 41705 and SJVAPCD Rule 4102 prohibit emissions from any source whatsoever in such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. An unreasonable odor discernible at the property line of the defined project area would be considered a significant odor impact. The proposed Project would generate oil and diesel fuel odors during construction from equipment use as well as odors related to asphalt paving. The odors would be limited to the construction and/or decommissioning period and would be intermittent and temporary. Furthermore, these odors would dissipate rapidly with distance from in-use construction equipment. With respect to operation, CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of odors (e.g., sewage treatment plants, landfills, recycling facilities, biomass operations, autobody shops, fiberglass manufacturing, and livestock operations). BESS site operations are not identified on this list and would not have odor sources during normal operations. Therefore, the proposed Project would not generate objectionable odors affecting a substantial number of people, and impacts would be less than significant.

4.2 Cumulative Air Quality Impacts

The geographic scope for the cumulative air quality impact analysis is the SJVAB. Because the SJVAB is designated as non-attainment for the ozone, PM₁₀, and PM_{2.5} NAAQS and CAAQS, there is an existing adverse cumulative effect in the SJVAB relative to these pollutants.

Based on SJVAPCD thresholds in the GAMAQI, a project would have a significant cumulative impact if it is inconsistent with the applicable adopted federal and State air quality plans. As discussed under

Impacts AQ-1 and Impact AQ-2, the proposed Project would not exceed SJVAPCD thresholds except for daily CO. Although CO hourly emissions exceed daily emissions thresholds, if concentrations were modeled, they would not exceed the ambient air quality standards. So, CO impacts would be less than significant. Therefore, as discussed above under Impact AQ-1, the proposed Project would not conflict with or obstruct implementation of the SJVAPCD's air quality plan, or exceed regulatory thresholds and the proposed Project's contribution to cumulative air quality impacts would be less than significant.

The SJVAPCD considers TAC emissions to be a localized issue. In general, TAC concentrations are typically highest near the emissions sources and decline with increased distance. CARB recommends distances that should be incorporated when siting new sources or sensitive receptors near a source of TACs. This generally ranges from 500 to 1,000 feet depending on the source category (CARB 2005). Therefore, in the absence of any specific guidance from the SJVAPCD, the potential cumulative impacts from TACs were analyzed based on a radius of 1,000 feet measured from the proposed Project boundary. The main construction and decommissioning activities of the proposed Project are not located within 1,000 feet of any existing or planned projects that would generate TACs affecting a substantial number of people, and wind conditions typical blow emissions away from the receptors. Therefore, cumulative health risk impacts would be less than significant, as demonstrated in Impact AQ-3.

As discussed under Impact AQ-3, construction and operation-related traffic is not anticipated to create a CO hotspot, as construction would be short-term, and the nearest intersection is far from any sensitive receptor. Therefore, the proposed Project's contribution to cumulative impacts related to CO hotspots would be less than significant.

4.3 Project-Level Greenhouse Gas Impacts

Threshold 1:	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
Threshold 2:	Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact GHG-1 CONSTRUCTION AND OPERATION OF THE PROJECTS WOULD DIRECTLY AND INDIRECTLY GENERATE GHG EMISSIONS. CONSTRUCTION AND OPERATION OF THE PROJECTS WOULD BE CONSISTENT WITH APPLICABLE PLANS, POLICIES, AND REGULATIONS ADOPTED FOR THE PURPOSE OF REDUCING GHG EMISSIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

4.3.1 Emissions Quantifications

Construction and Decommissioning Emissions

Project-related construction emissions are confined to a relatively short period in relation to the overall life of the proposed Project; GHG emissions were quantified for informational purposes. Table 10 shows that proposed Project construction would result in a total of approximately 2,204 MT CO₂e for the 12-month construction period. Emissions were then amortized over the lifetime of the proposed Project (i.e., 40 years). It is assumed that decommissioning GHG emissions would be similar to construction GHG emissions. In actuality, decommissioning emissions would be lower than construction emissions due to the reduced earthwork required and cleaner equipment available during decommissioning of the BESS. As shown in Table 10, amortized construction emissions would be 55 MT CO₂e per year.

Table 10 Estimated Construction and Decommissioning GHG Emissions

Construction Phase	Project Emissions (MT CO ₂ e)
2025	622
2026	1,485
Subtotal	2,204
Amortized Construction (40 years)	55
Decommissioning	2,204
Amortized Decommissioning (40 years)	55
MT = metric tons; CO ₂ e = carbon dioxide equivalents	
Source: Appendix B.	

Operational Emissions

The proposed Project would generate GHG emissions during operation from minimal area source, energy consumption and mobile emissions.⁷ Operation-related GHG emissions were quantified for informational purposes and are shown in Table 11. As shown, the proposed Project would generate approximately 217 MT of CO₂e per year from the operation of the proposed Project.

Table 11 Annual GHG Emissions

Project Operations	Project Emissions (MT CO ₂ e)
Area	<1
Energy	15
Mobile	20
Water	0
Waste	0
Refrigeration (Non-SF ₆)	62
SF ₆	10
Subtotal	109
Amortized Construction	55
Amortized Decommissioning	55
Total	217
Displaced Emissions	(24,072)
Annual Project Emissions with displaced emissions	(23,855)
SF ₆ = Sulphur hexafluoride; MT = metric tons; CO ₂ e = carbon dioxide equivalent	
May not add directly due to rounding. Parenthetical notation indicates a negative number.	
Source: Appendix B	

The proposed Project would help address the limitations of the electric grid and the increasing demand for renewable energy by increasing storage capability which improves the reliability of the grid and makes it more resilient to disturbances and peaks in energy demand. As the use of renewable energy increases, the need for battery storage to maintain electrical supply during both peak demand and when the renewable systems are not generating electricity also increases. Over

⁷ Area sources for this project refer to consumer products (such as aerosol cleaners), and architectural coating (maintenance re-coating activities for battery storage).

the up to 40-year operation of the proposed Project (including amortized construction and decommissioning activities), the total GHG emissions would be approximately 8,695 MT CO₂e (217 MT CO₂e times 40 years). As shown, each year the proposed Project would offset 24,072 MT CO₂e, therefore in its first year of operation the proposed Project is anticipated to offset its total 40-year contribution to GHG emissions. Therefore, the project is anticipated to result in a net benefit and overall reduction with respect to GHG emissions.

Plan Consistency

2022 Scoping Plan

The principal state GHG reduction plans and policies are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32 and AB 1279. The goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. In 2022, the State passed AB 1279, which declares the State would achieve net-zero GHG emissions by 2045 and would reduce GHG emissions by 85 percent below 1990 levels by 2045. The latest iteration of the Scoping Plan is the 2022 Scoping Plan, which focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities. The 2022 Scoping Plan's strategies that apply to the proposed Project include the following:

- Reducing fossil fuel use, energy demand and vehicle miles traveled (VMT)
- Building decarbonization
- Maximizing recycling and diversion from landfills

The proposed Project would be consistent with these goals through the expected reduction of fossil fuel use by the implementation of the BESS storage facility that would store electrical energy for additional grid support during peak demand. The proposed Project would be served by and work with PG&E to provide additional renewable energy through the BESS system installed on-site reducing the need to ramp-up non-renewable sources during peak demand periods. Therefore, the proposed Project would not conflict with the 2022 Scoping Plan and GHG impacts would be less than significant.

4.4 Cumulative Greenhouse Gas Impacts

The geographic scope for related projects considered in the cumulative impact analysis for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. As discussed in Section 8.9.1 of the *GAMAQI*, GHG emissions and climate change are, by definition, cumulative impacts. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed under Impact GHG-1, proposed Project impacts related to GHG emissions would be less than significant, since the proposed Project would be consistent with State plans for reducing GHG emissions. With the active reduction in GHG emissions as demonstrated in Table 11, the project would reduce emissions beyond those the project would generate, resulting in a net benefit with respect to GHG emissions. Therefore, the proposed Project's contribution to cumulative GHG impacts would be less than significant.

5 References

- California Air Pollution Control Officers Association. 2022. California Emissions Estimator Model User Guide: Version 2022.1. Prepared by ICF in collaboration with Sacramento Metropolitan Air Quality Management District, Fehr & Peers, STI, and Ramboll. April 2022.
https://www.caleemod.com/documents/user-guide/CalEEMod_User_Guide_v2022.1.pdf
 (accessed January 2023).
- California Air Resources Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf>
 (accessed September 2023).
- _____. 2007. Resolution No. 07-103106. October 31, 2007.
- _____. 2008. *Climate Change Scoping Plan*.
https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf (accessed September 2023).
- _____. 2014. *First Update to the Climate Change Scoping Plan*. May.
https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf (accessed July 2021).
- _____. 2017. *California's 2017 Climate Change Scoping Plan*. December 14, 2017.
https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf (accessed July 2021).
- _____. 2018a. "SB 375 Regional Plan Climate Targets." <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> (accessed September 2023).
- _____. 2021 *California Greenhouse Gas Emissions for 2000 to 2019 Trends of Emissions and Other Indicators*. July 28.
https://ww2.arb.ca.gov/sites/default/files/classic/cc/ca_ghg_inventory_trends_2000-2019.pdf (accessed December 2023)
- _____. 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16, 2022.
https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp_1.pdf (accessed September 2023).
- _____. 2023a. "Inhalable Particulate Matter and Health (PM_{2.5} and PM₁₀)."
<https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health> (accessed July 2024).
- _____. 2023b. "Overview: Diesel Exhaust & Health." <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health> (accessed July 2024).
- _____. 2024. iADAM: Air Quality Data Statistics Top 4 Summary. N.d.
<https://www.arb.ca.gov/adam/topfour/topfour1.php> (accessed August 2024).
- California Climate Change Center. 2006. Climate Scenarios for California.
<https://research.fit.edu/media/site-specific/researchfitedu/coast-climate-adaptation-library/united-states/west-coast-amp-hawaix27i/california---statewide/CCCC.--2006.--Climate-Scenarios-for-California.pdf>.

- California Department of Public Health. 2021. *Valley Fever Fact Sheet*. Last Updated June 2021.
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ValleyFeverFactSheet.pdf> (accessed June 2023).
- _____. 2023. *Valley Fever Basics*.
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/ValleyFeverBasics.aspx> (accessed August 2024).
- _____. 2024. *Valley Fever in California Dashboard*.
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/ValleyFeverDashboard.aspx> (accessed August 2024).
- California Department of Water Resources. 2018. *Indicators of Climate Change in California*. May 2018. <https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf> (accessed August 2021).
- California Energy Commission (CEC). 2021a. *Electricity Consumption by Entity*.
<http://ecdms.energy.ca.gov/elecbyutil.aspx> (accessed March 2022).
- California Natural Resources Agency. 2009. *2009 California Climate Adaptation Strategy*. March 2009. http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf (accessed July 2021).
- _____. 2018. *California's Changing Climate 2018: A summary of Key Findings from California's Fourth Climate Change Assessment*. August.
https://www.energy.ca.gov/sites/default/files/2019-11/20180827_Summary_Brochure_ADA.pdf (accessed December 2023)
- Intergovernmental Panel on Climate Change (IPCC). 2018. "Summary for Policymakers." In: *Global warming of 1.5°C*. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. <https://www.ipcc.ch/sr15/> (accessed July 2021).
- _____. 2021a. *Climate Change 2021 The Physical Science Basis*. August.
https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf (accessed August 2021).
- _____. 2021b. *The Earth's Energy Budget, Climate Feedbacks and Climate Sensitivity Supplementary Material*.
https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter07_SM.pdf (accessed September 2023).
- _____. 2023. *Climate Change 2023 Synthesis Report*. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Core Writing Team, H. Lee and J. Romero (eds.), Geneva, Switzerland.
https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf (accessed September 2023).
- Kirkland and Fiercy. 1996. *Coccidioidomycosis: A Reemerging Infectious Disease*.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2626789/> (accessed July 2023).

- Los Angeles County Health Department. 2013. *Preventing Work-Related Coccidioidomycosis (Valley Fever)*. June.
<http://publichealth.lacounty.gov/acd/docs/ValleyFeverPreventionforWorkFlyer.pdf> (accessed June 2023).
- National Oceanic and Atmospheric Administration. 2020. "Global Climate Report for Annual 2019." State of the Climate. January 2020. <https://www.ncdc.noaa.gov/sotc/global/201813> (accessed September 2023).
- San Joaquin Valley Air Pollution Control District (SJVAPCD). 2004. *Rule 8021 Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities*. Adopted November 15, 2001, Amended August 19, 2004. www.valleyair.org/rules/currnrules/r8021.pdf (accessed July 2021).
- _____. 2007a. *2007 Ozone Plan*. Adopted June 14, 2007.
http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/2007_8HourOzone_CompletePlan.pdf (accessed July 2021).
- _____. 2007b. *2007 PM₁₀ Maintenance Plan and Request for Redesignation*. September.
http://www.valleyair.org/Air_Quality_Plans/docs/Maintenance%20Plan10-25-07.pdf (accessed July 2021).
- _____. 2008a. *2018 PM_{2.5} Plan*. April.
http://www.valleyair.org/Air_Quality_Plans/AQ_Final_Adopted_PM25_2008.htm (accessed July 2021).
- _____. 2008b. *Climate Change Action Plan*.
<https://www.valleyair.org/Programs/CCAP/CAPP%20Staff%20Report%202008Nov12.pdf> (accessed November 2008).
- _____. 2009a. *2009 Reasonably Available Control Technology (RACT) Demonstration for Ozone State Implementation Plans (SIP)*. April 16, 2009.
http://valleyair.org/Air_Quality_Plans/docs/RACTSIP-2009.pdf (accessed July 2021).
- _____. 2009b. *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA*. December. <http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf> (accessed July 2021).
- _____. 2009c. *Final Staff Report Addressing Greenhouse Gas Emissions Impacts under the California Environmental Quality Act*. December. <https://www.valleyair.org/Programs/CCAP/12-17-09/1%20CCAP%20-%20FINAL%20CEQA%20GHG%20Staff%20Report%20-%20Dec%2017%202009.pdf> (accessed July 2021).
- _____. *Procedure for Determining NO₂ Monitor Background Values (Design Values) for use in Calculating NAAQS Compliance*.
http://www.valleyair.org/busind/pto/tox_resources/airqualitymonitoring.htm#modeling_guidance (accessed September 2023).
- _____. 2012. *2012 PM_{2.5} Plan*. Adopted December 20, 2012.
http://www.valleyair.org/Air_Quality_Plans/PM25Plan2012/CompletedPlanbookmarked.pdf (accessed July 2021).

- _____. 2013a. *Rule 4702 Internal Combustion Engine*. Adopted August 21, 2003, Amended November 14, 2013. https://www.valleyair.org/rules/curnrules/R4702_Clean.pdf (accessed August 2021).
- _____. 2013b. *2013 Plan for the Revoked 1-Hour Ozone Standard*. September 19, 2013. http://valleyair.org/Air_Quality_Plans/OzoneOneHourPlan2013/AdoptedPlan.pdf (accessed July 2021).
- _____. 2014. *2014 Reasonably Available Control Technology (RACT) Demonstration for the 8-Hour Ozone State Implementation Plan (SIP)*. June 19, 2014. http://valleyair.org/Air_Quality_Plans/docs/2014-RACT-SIP.PDF (accessed July 2021).
- _____. 2015a. *Guide for Assessing and Mitigating Air Quality Impacts*, March 19, 2015. www.valleyair.org/transportation/GAMAQI_3-19-15.pdf (accessed July 2021).
- _____. 2015b. *San Joaquin Valley Air Pollution Control District 2015 Annual Report, Indirect Source Review Program, Reporting Period: July 1, 2014, to June 30, 2015*. December 17, 2015. www.valleyair.org/isr/Documents/2015-ISR-Annual-Report.pdf (accessed July 2021).
- _____. 2015c. *2015 Plan for the 1997 PM_{2.5} Standard*. Adopted April 2015. www.valleyair.org/Air_Quality_Plans/docs/PM25-2015/2015-PM2.5-Plan_Bookmarked.pdf (accessed July 2021).
- _____. 2016. *2016 Moderate Area Plan for the 2012 PM_{2.5} Standard*. Adopted September 15, 2016. www.valleyair.org/Air_Quality_Plans/docs/PM25-2016/2016-Plan.pdf (accessed July 2021).
- _____. 2017. *Rule 9510 (Indirect Source Review)*. December 15, 2005. Amended December 21, 2017, but not in effect until March 21, 2018. www.valleyair.org/rules/curnrules/r9510.pdf (accessed July 2021).
- _____. 2018a. *2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards*. Adopted November 15, 2018. <http://www.valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf> (accessed July 2021).
- _____. 2019. *PR 1924 Policy for District Rule 2201 AAQA Modeling*. http://www.valleyair.org/policies_per/Policies/APR-1925.pdf (accessed September 2023).
- _____. 2020. *2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard*. Adopted June 18, 2020. http://valleyair.org/Air_Quality_Plans/docs/2020-RACT-Demonstration.pdf (accessed July 2021).
- _____. 2023. *Proposed 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard*. May 16, 2023. <https://www.valleyair.org/Workshops/postings/2023/06-15-23/maintenance-plan.pdf> (accessed September 2023).
- _____. 2024a. *Ambient Air Quality Standards & Valley Attainment Status*. <https://ww2.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/> (accessed January 2024).
- _____. 2024b. *2024 Plan for the 2012 Annual PM_{2.5} Standard*. Adopted June 2024. <https://ww2.valleyair.org/media/gw5bacvj/2024-pm25-plan.pdf> (accessed August 2024).

- San Joaquin, County of. 2018. *What you need to know about Valley Fever in San Joaquin County & California*.
https://sjcphs.org/assets/20180620_HS_What%20You%20Need%20to%20know%20VF%20Brochure_Eng.pdf (accessed August 2024)
- Sierra Club v. EPA, 671 F.3d 955 *Sierra Club v. United States Environmental Protection Agency*, 671 F.3d 955 (9th Cir. 2012) <https://www.courtlistener.com/opinion/621235/sierra-club-v-usepa/> (accessed September 2023).
- United States Environmental Protection Agency (USEPA). 2008. *Redesignation of the San Joaquin Valley SJVAB PM-10 Nonattainment Area to Attainment*. Federal Register. November 12, 2008. www.federalregister.gov/documents/2008/11/12/E8-26500/approval-and-promulgation-of-implementation-plans-designation-of-areas-for-air-quality-planning (accessed September 2023).
- _____. 2021. *Climate Change Indicators: Global Greenhouse Gas Emissions*.
<https://www.epa.gov/climate-indicators/climate-change-indicators-global-greenhouse-gas-emissions> (accessed July 2022).
- _____. 2022. *NAAQS Designations Process*. <https://www.epa.gov/criteria-air-pollutants/naaqs-designations-process#:~:text=If%20the%20air%20quality%20in%20a%20geographic%20area,meet%20the%20national%20standard%20are%20called%20nonattainment%20areas> (accessed September 2023).
- _____. 2023a. “Criteria Air Pollutants.” <https://www.epa.gov/criteria-air-pollutants> (accessed July 2024).
- _____. 2023b. “Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019.” Last updated: January 25, 2023. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019> (accessed September 2023).
- _____. 2023c. “Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act.” Last updated: April 4, 2023.
<https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a> (accessed September 2023).
- _____. 2024. Air Data Air Quality Monitors.
<https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=5f239fd3e72f424f98ef3d5def547eb5&extent=-146.2334,13.1913,-46.3896,56.5319> (accessed August 2024).

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Appendix A

Assumptions

Tracy BESS General Assumptions

Project Characteristics

Project Location	County	Title: CalEEMod File Title
	San Joaquin County	Date: 8/2/2024
Air District	SJVAPCD	
Operational Year (Buildout)	Jan-27	
Construction Year	Oct-25	
Utility Company	PG&E	

Project Land Use

Acres

Construction Area

11.2

Refrigerated Warehouse

(battery storage and switch yard)

Facility Size

40 MW System

Battery Container System

8 feet wide

(provided by Client)

20 feet long

9.5 feet tall

160 sq ft per container

88 containers

21 battery, 21 power conversion)

Tracy BESS Construction Assumptions

CalEEMod Defaults are assumed for modeling purposes unless specifically discussed in the Construction Assumptions below.

Project Schedule:	Hours: 6 am to 9 pm 12 hrs per day equipment usage Monday thru Friday	Construction	October September	2025 2026
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Phase Name	Start Date	End Date	Days/Week	Total Days	Months
Site Prep &Grading	Grading	10/15/25	01/06/26	5	60
Commissioning & Testing	Building Construction	08/19/26	09/15/26	5	20
Installation of Foundations & Equipment	Building Construction	01/07/26	04/28/26	5	80
Set Modules, Inverters, Switchgear	Building Construction	04/29/26	05/26/26	5	20
Electrical Wire Installation / Finish Grading	Building Construction	05/27/26	08/18/26	5	60
Access Road	Paving	10/01/25	10/14/25	5	10

Trips and VMT

PhaseName	Worker Trips	Vendor Trips	Haul trips/day
Site Prep &Grading	100	0	60
Commissioning & Testing	100	0	10
Installation of Foundations & Equipment	100	0	60
Set Modules, Inverters, Switchgear	100	0	60
Electrical Wire Installation / Finish Grading	100	0	10
Access Road	20	0	4

Tracy BESS Construction Assumptions

Offroad Equipment

Notes:

Watering 2x per day minimum

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per	Hours Per Da	Horsepower	Load Factor
Site Prep & Grading	Tractors/Loaders/Backhoes	Diesel	Average	1	12	84	0.37
	Plate Compactors	Diesel	Average	1	6	8	0.43
	Graders	Diesel	Average	2	12	148	0.41
	Off-Highway Trucks	Diesel	Average	3	12	376	0.38
	Sweepers/Scrubbers	Diesel	Average	1	4	36	0.46
	Scrapers	Diesel	Average	2	12	423	0.48
	Rubber Tired Loaders	Diesel	Average	1	12	95	0.36
	Rubber Tired Dozers	Diesel	Tier 4 Final	1	12	367	0.4
	Dumpers/Tenders	Diesel	Average	2	12	16	0.38
	Excavators	Diesel	Average	1	12	36	0.38
	Tractors/Loaders/Backhoes	Diesel	Average	1	6	84	0.37
	Pumps	Diesel	Average	1	12	11	0.74
	Skid Steer Loaders	Diesel	Average	1	12	71	0.37
	Pavers	Diesel	Average	1	4	81	0.42
Commissioning & Testing	Plate Compactors	Diesel	Average	1	12	50	0.43
	Off-Highway Trucks	Diesel	Average	1	12	376	0.38
	Welders	Diesel	Average	1	4	50	0.45
	Pavers	Diesel	Average	1	12	81	0.42
	Air Compressors	Diesel	Average	1	12	37	0.48
	Aerial Lifts	Diesel	Average	2	6	46	0.31

Tracy BESS
Construction Assumptions

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per	Hours Per Da	Horsepower	Load Factor
Installation of Foundations & Equipment	Tractors/Loaders/Backhoes	Diesel	Average	2	12	95	0.37
	Plate Compactors	Diesel	Average	5	12	50	0.43
	Cranes	Diesel	Average	1	12	125	0.29
	Rubber Tired Dozers	Diesel	Average	1	6	367	0.4
	Off-Highway Trucks	Diesel	Average	4	12	376	0.38
	Generator Sets	Electric	Average	2	12	14	0.74
	Rough Terrain Forklifts	Diesel	Average	1	12	125	0.4
	Sweepers/Scrubbers	Diesel	Average	1	4	36	0.46
	Welders	Diesel	Average	2	12	50	0.45
	Air Compressors	Diesel	Average	2	12	50	0.48
	Bore/Drill Rigs	Diesel	Average	2	12	83	0.5
	Rubber Tired Loaders	Diesel	Average	1	12	150	0.36
	Trenchers	Diesel	Average	3	12	40	0.5
	Skid Steer Loaders	Diesel	Average	1	12	71	0.37
	Tractors/Loaders/Backhoes	Diesel	Average	1	6	84	0.37
	Forklifts	Diesel	Average	2	12	82	0.2
	Concrete/Industrial Saws	Diesel	Average	4	12	33	0.73
Set Modules, Inverters, Switchgear	Cranes	Diesel	Average	2	12	367	0.29
	Off-Highway Trucks	Diesel	Average	5	12	376	0.38
	Generator Sets	Electric	Average	2	12	14	0.74
	Rough Terrain Forklifts	Diesel	Average	1	6	125	0.4
	Sweepers/Scrubbers	Diesel	Average	1	4	50	0.46
	Welders	Diesel	Average	3	12	50	0.45
	Air Compressors	Diesel	Average	1	12	50	0.48
	Tractors/Loaders/Backhoes	Diesel	Average	2	6	84	0.37
	Forklifts	Diesel	Average	2	12	82	0.2
	Aerial Lifts	Diesel	Average	2	6	46	0.31

Tracy BESS Construction Assumptions

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per	Hours Per Da	Horsepower	Load Factor
Electrical Wire Installation / Finish Grading	Tractors/Loaders/Backhoes	Diesel	Average	1	3	84	0.37
	Graders	Diesel	Average	1	12	148	0.41
	Off-Highway Trucks	Diesel	Average	1	6	376	0.38
	Rough Terrain Forklifts	Diesel	Average	1	6	125	0.4
	Welders	Diesel	Average	1	12	50	0.45
	Air Compressors	Diesel	Average	1	6	50	0.48
	Rubber Tired Loaders	Diesel	Average	1	12	95	0.36
	Plate Compactors	Diesel	Average	1	4	50	0.43
	Trenchers	Diesel	Average	3	12	40	0.5
	Sweepers/Scrubbers	Diesel	Average	1	4	36	0.46
	Skid Steer Loaders	Diesel	Average	1	12	71	0.37
	Off-Highway Trucks	Diesel	Average	2	12	376	0.38
	Paving Equipment	Diesel	Average	1	4	89	0.36
	Generator Sets	Electric	Average	1	12	14	0.74
	Dumpers/Tenders	Diesel	Average	1	12	16	0.38
	Aerial Lifts	Diesel	Average	2	6	46	0.31
	Tractors/Loaders/Backhoes	Diesel	Average	1	4	84	0.37
Access Road	Tractors/Loaders/Backhoes	Diesel	Average	1	4	84	0.37
	Graders	Diesel	Average	1	12	148	0.41
	Off-Highway Trucks	Diesel	Average	2	6	376	0.38
	Plate Compactors	Diesel	Average	1	6	50	0.43
	Off-Highway Trucks	Diesel	Average	1	12	376	0.38
	Rubber Tired Loaders	Diesel	Average	1	12	150	0.36
	Dumpers/Tenders	Diesel	Average	1	12	16	0.38
	Rubber Tired Dozers	Diesel	Average	1	12	367	0.4

Tracy BESS Operational Emissions

CalEEMod Defaults are assumed for modeling purposes unless specifically discussed in the Operational Assumptions below.

Project Operational Life 40 years

Mobile Sources 2 workers, 2x per week Heavy Duty
 4 trips per day 2x per week (Update)
 416 trips per year
 30 VMT/trip (based on CalEEMod Defaults)
 120 VMT/day
 12480 VMT/year

Area Sources No building constructed, no new area sources

Energy Use Energy storage system being implemented, default energy consumed for heating/cooling.

Water/Wastewater
Neg. Fire water
 750 gal/day for 2 years
 273,750 gal/yr
 0 g/wastewater

Solid Waste No new solid waste generation activities.

Stationary Sources None (for AQ purposes)

SF₆ 1 circuit breaker possibly. Modeled as if it contains SF₆

Appendix B

Calculations

Vaca Dixon Unmitigated GHG Emissions

Construction Emissions

Emission Source	Annual Emissions (MT CO ₂ e)
2025	622
90	1,406
Total	2,204

Amortized Emissions

Operational Emissions

Mobile	20
Area	0
Water	0
Waste	0
Refrig.	62
SF6	10
Total	107
Amortized Construction	55
Amortized Decommissioning	55
Total Operational Emissions	217
Displaced Emissions	-24,072
Total Operational Emissions	-23,855

Tracy BESS
SF₆ Emissions Quantifications

SF₆ Emissions Quantification

1 HV circuit breakers (115 kV equipment)
90 SF₆ max lbs/per circuit breaker¹
1.00% SF₆ leakage percentage per year¹
90 max lbs/project
0.90 SF₆ max lbs leakage per year
0.00 SF₆ average lbs leakage per year
0.000454 lbs/MT
0.000408 SF₆ max MT leakage per year
23900 GWP
10 Max MT CO₂ e/year

¹ CARB 2020. *Public Hearing to Consider the Proposed Amendments to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear.*
https://www.epa.gov/sites/production/files/2018-08/documents/12183_sf6_partnership_overview_v20_release_508.pdf. Accessed June 2022.

Displaced Energy Production during 35-year Project life

Annual Energy Production	Annual Average Solar Radiation Hours/Day/Year
Grid Size (MW)	40
Total hrs/year ¹	2,920
% Operational time ²	100%
KWh produced per year	116,800,000
Assumed Heat Rate (Btu/KWh)	10,000

CA Power Mix ⁴	Annual Fuel Displacement (MMBtu)
Coal ⁵	2.15% 25,112
Large Hydro	9.24% 107,923
Nuclear	9.18% 107,222
Oil	0.00% 0
Renewables	35.83% 418,494
Unspecified sources of Power	7.11% 83,045
Total	100.0% 1,168,000

Annual Pollutant Displacement ⁴					
Natural Gas Turbine Emissions					
Pollutant	AP-42 Emission Factor (lb/MMBtu) ⁶	Controlled Emission Factor (lb/MMBtu)	Controlled Emissions (lb)	Controlled Emissions (ton)	AP-42 Emission Factor Source Notes ⁶
NO ₂	0.099	0.099	42,067	21.03	Table 3.1-1, lean premix; Assume SCR Control Efficiency
CO	0.015	0.015	6,374	3.19	Table 3.1-1, lean premix; Assume Ox. Cat. Control Efficiency
PM ₁₀	0.0047	0.0047	1,997	1.00	Table 3.1-2a, PM (condensable)
PM _{2.5}	0.0019	0.0019	807	0.40	Table 3.1-2a, PM (filterable)
SO ₂	0.0034	0.0034	1,445	0.72	Table 3.1-2a
CO ₂	110	110	46,741,024	23,370.51	Table 3.1-2a

Coal Combustion Emissions					
Pollutant	AP-42 Emission Factor (lb/ton) ⁷	Controlled Emission Factor (lb/ton)	Emissions (lb) ⁸	Emissions (ton)	AP-42 Emission Factor Source Notes ⁷
NOx	12	12	12556	6.28	Table 1.1-3 pulverized coal, wall fired, bituminous coal NSPS
CO	0.5	0.5	523	0.26	Table 1.1-3 pulverized coal, wall fired, bituminous coal NSPS
PM ₁₀ ⁹	0.46	0.084	88	0.04	Table 1.1-4, PC-fired dry bottom wall-fired, scrubber control
PM _{2.5} ⁹	0.12	0.06	63	0.03	Table 1.1-4, PC-fired dry bottom wall-fired, scrubber control
SO ₂ ¹⁰	2.85	0.57	596	0.30	Table 1.1-3 pulverized coal, wall fired, bituminous coal NSPS
CO ₂	6040	6040	6319853	3,159.93	Table 1.1-20
Total NMHC	0.06	0.06	63	0.03	Table 1.1-19; assumed all hydrocarbons are reactive
CH ₄	0.04	0.04	42	0.02	Table 1.1-19
N ₂ O	0.03	0.03	31	0.02	Table 1.1-19

Total Displaced Emissions Associated With Direct Combustion		
Pollutant	tons/year ⁹	tons/lifetime (40 years)
ROG (NMHC)	0	1
NO _x	27	956
CO	3	121
PM ₁₀	1	36
PM _{2.5}	0	15
SO _x	1	36
CO ₂ E (Metric Ton) ¹¹	24,072	962,899

Notes:

1. Operational time is 8 hours per day for charging.

2. Operational time is 100% because the BESS is charged from the grid.

3. The Project is assumed to displace existing power generation equivalent to the current power mix each year of operation.

4. CA Power Mix assumptions are based on data from the 2022 Total System Electric Generatin Table. <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation>

5. Combustion of natural gas and coal for power are of the greatest concern related to the generation of criteria pollutants and GHG emissions, therefore only fuel displacement of natural gas and coal due to electricity production from the Solar Scarlet facility are considered in this assessment.

6. EPA Air Pollution Emission Factors AP-42 Section 3.1, Stationary Gas Turbines

7. EPA Air Pollution Emission Factors AP-42 Section 1.1, Bituminous and Subbituminous Coal Combustion

8. Coal characteristics used for conversion: Assumed coal heat content = 24 MMBtu/ton

9. Total particulate matter (CPM-TOT) is expressed in terms of coal ash content therefore emission factor is determined by multiplying % ash content of coal (assumed to be 20% herein) by value listed in Table 1.1-4. Organic fraction of particulate matter is 20% of total CPM-TOT (Table 1.1-5) and listed as controlled emission factor.

10. SO_x emission factor calculated by multiplying the weight percent of sulfur (assumed to be 7.5%) by the value listed in Table 1.1-3

11. CO₂E volumes are in metric tons rather than short (US) tons

Appendix C

CalEEMod Output

Tracy BESS Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Tracy BESS
Construction Start Date	10/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	6.60
Location	14950 W Schulte Rd, Tracy, CA 95377, USA
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2107
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

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
Refrigerated Warehouse-No Rail	14.1	1000sqft	12.8	14,080	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

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	12.4	10.3	80.2	101	0.23	2.80	1.95	4.75	2.58	0.50	3.09	—	24,694	24,694	0.88	0.84	12.7	24,980
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.64	7.24	60.3	71.5	0.19	2.36	7.65	10.0	2.18	2.67	4.86	—	22,771	22,771	0.84	0.83	0.35	23,040
2026	12.4	10.3	80.6	99.8	0.23	2.80	7.65	9.80	2.58	2.67	4.66	—	24,609	24,609	0.89	0.85	0.33	24,884
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.45	1.22	10.0	11.8	0.03	0.40	1.29	1.68	0.37	0.46	0.83	—	3,712	3,712	0.14	0.13	0.91	3,755
2026	4.31	3.60	27.2	34.2	0.08	0.97	0.85	1.81	0.89	0.22	1.11	—	8,875	8,875	0.32	0.29	2.01	8,970
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.26	0.22	1.83	2.16	0.01	0.07	0.23	0.31	0.07	0.08	0.15	—	615	615	0.02	0.02	0.15	622
2026	0.79	0.66	4.96	6.23	0.01	0.18	0.15	0.33	0.16	0.04	0.20	—	1,469	1,469	0.05	0.05	0.33	1,485

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
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.45	0.09	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	399	399	0.01	0.06	0.88	419
Area	0.43	0.42	0.01	0.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.52	2.52	< 0.005	< 0.005	—	2.53
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	92.2	92.2	0.01	< 0.005	—	93.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	1,053	1,053	0.17	0.02	—	1,063
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Total	0.44	0.43	0.45	0.71	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	0.00	1,546	1,546	0.19	0.09	376	1,953
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.47	0.09	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	399	399	0.01	0.06	0.02	418
Area	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	92.2	92.2	0.01	< 0.005	—	93.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	1,053	1,053	0.17	0.02	—	1,063
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Total	0.33	0.33	0.47	0.09	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	0.00	1,544	1,544	0.19	0.09	375	1,950
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	114	114	< 0.005	0.02	0.11	119
Area	0.37	0.37	< 0.005	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.24	1.24	< 0.005	< 0.005	—	1.25
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	92.2	92.2	0.01	< 0.005	—	93.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	1,053	1,053	0.17	0.02	—	1,063
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Total	0.38	0.37	0.14	0.33	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.00	1,260	1,260	0.19	0.04	375	1,652
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.02	19.7
Area	0.07	0.07	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.21	0.21	< 0.005	< 0.005	—	0.21
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	15.3	15.3	< 0.005	< 0.005	—	15.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	174	174	0.03	< 0.005	—	176
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.1	62.1
Total	0.07	0.07	0.02	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	209	209	0.03	0.01	62.1	274

3. Construction Emissions Details

3.1. Site Prep &Grading (2025) - 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 Equipm ent	8.05	6.79	54.6	66.1	0.17	2.28	—	2.28	2.10	—	2.10	—	17,731	17,731	0.72	0.14	—	17,792
Dust From Material Movement	—	—	—	—	—	—	5.70	5.70	—	2.17	2.17	—	—	—	—	—	—	—
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	1.23	1.04	8.33	10.1	0.03	0.35	—	0.35	0.32	—	0.32	—	2,707	2,707	0.11	0.02	—	2,716
Dust From Material Movement	—	—	—	—	—	—	0.87	0.87	—	0.33	0.33	—	—	—	—	—	—	—
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	0.22	0.19	1.52	1.84	< 0.005	0.06	—	0.06	0.06	—	0.06	—	448	448	0.02	< 0.005	—	450
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.38	4.14	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	836	836	0.02	0.04	0.09	847
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	0.16	0.07	5.37	1.23	0.03	0.08	1.11	1.19	0.08	0.30	0.38	—	4,204	4,204	0.09	0.65	0.26	4,401
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	< 0.005	0.01	0.23	133
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	0.03	0.01	0.80	0.19	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	642	642	0.01	0.10	0.67	672
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.7	21.7	< 0.005	< 0.005	0.04	22.0
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	< 0.005	< 0.005	0.15	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.11	111

3.3. Site Prep & 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	7.76	6.54	50.4	65.7	0.17	2.07	—	2.07	1.91	—	1.91	—	17,737	17,737	0.72	0.14	—	17,798
Dust From Material Movement	—	—	—	—	—	—	5.70	5.70	—	2.17	2.17	—	—	—	—	—	—	—
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	0.09	0.08	0.59	0.77	< 0.005	0.02	—	0.02	0.02	—	0.02	—	208	208	0.01	< 0.005	—	209
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—	—	—	—

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	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.5	34.5	< 0.005	< 0.005	—	34.6
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.32	3.81	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	819	819	0.02	0.04	0.08	830
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	0.16	0.07	5.21	1.20	0.03	0.08	1.11	1.19	0.08	0.30	0.38	—	4,119	4,119	0.07	0.65	0.25	4,315
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.85	9.85	< 0.005	< 0.005	0.02	10.00
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	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.3	48.3	< 0.005	0.01	0.05	50.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.63	1.63	< 0.005	< 0.005	< 0.005	1.65
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.00	8.00	< 0.005	< 0.005	0.01	8.39

3.5. Commissioning & Testing (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	1.89	1.58	12.0	13.8	0.03	0.42	—	0.42	0.38	—	0.38	—	3,398	3,398	0.14	0.03	—	3,410
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.66	0.76	< 0.005	0.02	—	0.02	0.02	—	0.02	—	186	186	0.01	< 0.005	—	187
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.12	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.8	30.8	< 0.005	< 0.005	—	30.9
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.42	0.39	0.25	4.82	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	906	906	0.02	0.03	3.11	919
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	0.03	0.01	0.81	0.20	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	686	686	0.01	0.11	1.60	720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.0	46.0	< 0.005	< 0.005	0.07	46.6
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	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.6	37.6	< 0.005	0.01	0.04	39.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.61	7.61	< 0.005	< 0.005	0.01	7.72
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.23	6.23	< 0.005	< 0.005	0.01	6.53

3.7. Installation of Foundations & Equipment (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	11.8	9.88	75.1	94.7	0.20	2.72	—	2.72	2.50	—	2.50	—	19,671	19,671	0.80	0.16	—	19,738
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	11.8	9.88	75.1	94.7	0.20	2.72	—	2.72	2.50	—	2.50	—	19,671	19,671	0.80	0.16	—	19,738
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	2.59	2.17	16.5	20.8	0.04	0.60	—	0.60	0.55	—	0.55	—	4,311	4,311	0.17	0.03	—	4,326
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	0.47	0.40	3.00	3.79	0.01	0.11	—	0.11	0.10	—	0.10	—	714	714	0.03	0.01	—	716
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	0.42	0.39	0.25	4.82	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	906	906	0.02	0.03	3.11	919
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	0.17	0.07	4.89	1.18	0.03	0.08	1.11	1.19	0.08	0.30	0.38	—	4,117	4,117	0.07	0.65	9.61	4,322
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.32	3.81	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	819	819	0.02	0.04	0.08	830
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	0.16	0.07	5.21	1.20	0.03	0.08	1.11	1.19	0.08	0.30	0.38	—	4,119	4,119	0.07	0.65	0.25	4,315
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.86	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	184	184	< 0.005	0.01	0.29	187
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	0.04	0.02	1.12	0.26	0.01	0.02	0.24	0.26	0.02	0.07	0.08	—	903	903	0.01	0.14	0.90	946
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.4	30.4	< 0.005	< 0.005	0.05	30.9
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	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.02	—	149	149	< 0.005	0.02	0.15	157

3.9. Set Modules, Inverters, Switchgear (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 Equipm	7.51	6.29	45.0	52.5	0.15	1.65	—	1.65	1.52	—	1.52	—	15,917	15,917	0.65	0.13	—	15,972
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	2.47	2.88	0.01	0.09	—	0.09	0.08	—	0.08	—	872	872	0.04	0.01	—	875
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	0.08	0.06	0.45	0.53	< 0.005	0.02	—	0.02	0.02	—	0.02	—	144	144	0.01	< 0.005	—	145
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	0.42	0.39	0.25	4.82	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	906	906	0.02	0.03	3.11	919
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	0.17	0.07	4.89	1.18	0.03	0.08	1.11	1.19	0.08	0.30	0.38	—	4,117	4,117	0.07	0.65	9.61	4,322
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.02	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.0	46.0	< 0.005	< 0.005	0.07	46.6
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	0.01	< 0.005	0.28	0.07	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	226	226	< 0.005	0.04	0.23	237
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.61	7.61	< 0.005	< 0.005	0.01	7.72
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	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.4	37.4	< 0.005	0.01	0.04	39.2

3.11. Electrical Wire Installation / Finish 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.23	4.38	31.7	40.4	0.09	1.25	—	1.25	1.15	—	1.15	—	9,405	9,405	0.38	0.08	—	9,437
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	5.21	6.63	0.01	0.21	—	0.21	0.19	—	0.19	—	1,546	1,546	0.06	0.01	—	1,551
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	0.95	1.21	< 0.005	0.04	—	0.04	0.03	—	0.03	—	256	256	0.01	< 0.005	—	257
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	0.42	0.39	0.25	4.82	0.00	0.00	0.84	0.84	0.00	0.20	0.20	—	906	906	0.02	0.03	3.11	919
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	0.03	0.01	0.81	0.20	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	686	686	0.01	0.11	1.60	720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.64	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	138	138	< 0.005	0.01	0.22	140
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	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	< 0.005	0.02	0.11	118
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	0.04	23.2
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	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.6

3.13. Access Road (2025) - 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	4.71	3.95	31.1	32.6	0.08	1.36	—	1.36	1.25	—	1.25	—	8,066	8,066	0.33	0.07	—	8,094
Dust From Material Movement	—	—	—	—	—	—	4.15	4.15	—	2.00	2.00	—	—	—	—	—	—	—
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.13	0.11	0.85	0.89	< 0.005	0.04	—	0.04	0.03	—	0.03	—	221	221	0.01	< 0.005	—	222
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.16	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36.6	36.6	< 0.005	< 0.005	—	36.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.08	0.08	0.08	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.02	169
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	0.01	< 0.005	0.36	0.08	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	—	280	280	0.01	0.04	0.02	293
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.70	4.70	< 0.005	< 0.005	0.01	4.76
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.68	7.68	< 0.005	< 0.005	0.01	8.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.79
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.33

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	92.2	92.2	0.01	< 0.005	—	93.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	92.2	92.2	0.01	< 0.005	—	93.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	92.2	92.2	0.01	< 0.005	—	93.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	92.2	92.2	0.01	< 0.005	—	93.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	15.3	15.3	< 0.005	< 0.005	—	15.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	15.3	15.3	< 0.005	< 0.005	—	15.4

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refriger Warehouse-No Rail	0.00	0.00	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	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	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	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.10	0.01	0.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.52	2.52	< 0.005	< 0.005	—	2.53
Total	0.43	0.42	0.01	0.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.52	2.52	< 0.005	< 0.005	—	2.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.21	0.21	< 0.005	< 0.005	—	0.21
Total	0.07	0.07	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.21	0.21	< 0.005	< 0.005	—	0.21

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	1,053	1,053	0.17	0.02	—	1,063
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	1,053	1,053	0.17	0.02	—	1,063
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	1,053	1,053	0.17	0.02	—	1,063
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	1,053	1,053	0.17	0.02	—	1,063
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	174	174	0.03	< 0.005	—	176
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	174	174	0.03	< 0.005	—	176

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

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
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.1	62.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.1	62.1

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)

Equipm ent 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)

Vegetati on	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 Prep & Grading	Grading	10/15/2025	1/6/2026	5.00	60.0	—
Commissioning & Testing	Building Construction	8/19/2026	9/15/2026	5.00	20.0	—
Installation of Foundations & Equipment	Building Construction	1/7/2026	4/28/2026	5.00	80.0	—
Set Modules, Inverters, Switchgear	Building Construction	4/29/2026	5/26/2026	5.00	20.0	—

Electrical Wire Installation / Finish Grading	Building Construction	5/27/2026	8/18/2026	5.00	60.0	—
Access Road	Paving	10/1/2025	10/14/2025	5.00	10.0	—

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 Prep &Grading	Tractors/Loaders/Back hoes	Diesel	Average	1.00	12.0	84.0	0.37
Site Prep &Grading	Plate Compactors	Diesel	Average	1.00	6.00	8.00	0.43
Site Prep &Grading	Graders	Diesel	Average	2.00	12.0	148	0.41
Site Prep &Grading	Off-Highway Trucks	Diesel	Average	3.00	12.0	376	0.38
Site Prep &Grading	Sweepers/Scrubbers	Diesel	Average	1.00	4.00	36.0	0.46
Site Prep &Grading	Scrapers	Diesel	Average	2.00	12.0	423	0.48
Site Prep &Grading	Rubber Tired Loaders	Diesel	Average	1.00	12.0	95.0	0.36
Site Prep &Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	12.0	367	0.40
Site Prep &Grading	Dumpers/Tenders	Diesel	Average	2.00	12.0	16.0	0.38
Site Prep &Grading	Excavators	Diesel	Average	1.00	12.0	36.0	0.38
Site Prep &Grading	Tractors/Loaders/Back hoes	Diesel	Average	1.00	6.00	84.0	0.37
Site Prep &Grading	Pumps	Diesel	Average	1.00	12.0	11.0	0.74
Site Prep &Grading	Skid Steer Loaders	Diesel	Average	1.00	12.0	71.0	0.37
Site Prep &Grading	Pavers	Diesel	Average	1.00	4.00	81.0	0.42
Commissioning & Testing	Plate Compactors	Diesel	Average	1.00	12.0	50.0	0.43
Commissioning & Testing	Off-Highway Trucks	Diesel	Average	1.00	12.0	376	0.38
Commissioning & Testing	Welders	Diesel	Average	1.00	4.00	50.0	0.45

Commissioning & Testing	Pavers	Diesel	Average	1.00	12.0	81.0	0.42
Commissioning & Testing	Air Compressors	Diesel	Average	1.00	12.0	37.0	0.48
Commissioning & Testing	Aerial Lifts	Diesel	Average	2.00	6.00	46.0	0.31
Installation of Foundations & Equipment	Tractors/Loaders/Back hoes	Diesel	Average	2.00	12.0	95.0	0.37
Installation of Foundations & Equipment	Plate Compactors	Diesel	Average	5.00	12.0	50.0	0.43
Installation of Foundations & Equipment	Cranes	Diesel	Average	1.00	12.0	125	0.29
Installation of Foundations & Equipment	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Installation of Foundations & Equipment	Off-Highway Trucks	Diesel	Average	4.00	12.0	376	0.38
Installation of Foundations & Equipment	Generator Sets	Electric	Average	2.00	12.0	14.0	0.74
Installation of Foundations & Equipment	Rough Terrain Forklifts	Diesel	Average	1.00	12.0	125	0.40
Installation of Foundations & Equipment	Sweepers/Scrubbers	Diesel	Average	1.00	4.00	36.0	0.46
Installation of Foundations & Equipment	Welders	Diesel	Average	2.00	12.0	50.0	0.45
Installation of Foundations & Equipment	Air Compressors	Diesel	Average	2.00	12.0	50.0	0.48

Installation of Foundations & Equipment	Bore/Drill Rigs	Diesel	Average	2.00	12.0	83.0	0.50
Installation of Foundations & Equipment	Rubber Tired Loaders	Diesel	Average	1.00	12.0	150	0.36
Installation of Foundations & Equipment	Trenchers	Diesel	Average	3.00	12.0	40.0	0.50
Installation of Foundations & Equipment	Skid Steer Loaders	Diesel	Average	1.00	12.0	71.0	0.37
Installation of Foundations & Equipment	Tractors/Loaders/Back hoes	Diesel	Average	1.00	6.00	84.0	0.37
Installation of Foundations & Equipment	Forklifts	Diesel	Average	2.00	12.0	82.0	0.20
Installation of Foundations & Equipment	Concrete/Industrial Saws	Diesel	Average	4.00	12.0	33.0	0.73
Set Modules, Inverters, Switchgear	Cranes	Diesel	Average	2.00	12.0	367	0.29
Set Modules, Inverters, Switchgear	Off-Highway Trucks	Diesel	Average	5.00	12.0	376	0.38
Set Modules, Inverters, Switchgear	Generator Sets	Electric	Average	2.00	12.0	14.0	0.74
Set Modules, Inverters, Switchgear	Rough Terrain Forklifts	Diesel	Average	1.00	6.00	125	0.40
Set Modules, Inverters, Switchgear	Sweepers/Scrubbers	Diesel	Average	1.00	4.00	50.0	0.46
Set Modules, Inverters, Switchgear	Welders	Diesel	Average	3.00	12.0	50.0	0.45
Set Modules, Inverters, Switchgear	Air Compressors	Diesel	Average	1.00	12.0	50.0	0.48
Set Modules, Inverters, Switchgear	Tractors/Loaders/Back hoes	Diesel	Average	2.00	6.00	84.0	0.37

Set Modules, Inverters, Switchgear	Forklifts	Diesel	Average	2.00	12.0	82.0	0.20
Set Modules, Inverters, Switchgear	Aerial Lifts	Diesel	Average	2.00	6.00	46.0	0.31
Electrical Wire Installation / Finish Grading	Tractors/Loaders/Back hoes	Diesel	Average	1.00	3.00	84.0	0.37
Electrical Wire Installation / Finish Grading	Graders	Diesel	Average	1.00	12.0	148	0.41
Electrical Wire Installation / Finish Grading	Off-Highway Trucks	Diesel	Average	1.00	6.00	376	0.38
Electrical Wire Installation / Finish Grading	Rough Terrain Forklifts	Diesel	Average	1.00	6.00	125	0.40
Electrical Wire Installation / Finish Grading	Welders	Diesel	Average	1.00	12.0	50.0	0.45
Electrical Wire Installation / Finish Grading	Air Compressors	Diesel	Average	1.00	6.00	50.0	0.48
Electrical Wire Installation / Finish Grading	Rubber Tired Loaders	Diesel	Average	1.00	12.0	95.0	0.36
Electrical Wire Installation / Finish Grading	Plate Compactors	Diesel	Average	1.00	4.00	50.0	0.43
Electrical Wire Installation / Finish Grading	Trenchers	Diesel	Average	3.00	12.0	40.0	0.50
Electrical Wire Installation / Finish Grading	Sweepers/Scrubbers	Diesel	Average	1.00	4.00	36.0	0.46
Electrical Wire Installation / Finish Grading	Skid Steer Loaders	Diesel	Average	1.00	12.0	71.0	0.37

Electrical Wire Installation / Finish Grading	Off-Highway Trucks	Diesel	Average	2.00	12.0	376	0.38
Electrical Wire Installation / Finish Grading	Paving Equipment	Diesel	Average	1.00	4.00	89.0	0.36
Electrical Wire Installation / Finish Grading	Generator Sets	Electric	Average	1.00	12.0	14.0	0.74
Electrical Wire Installation / Finish Grading	Dumpers/Tenders	Diesel	Average	1.00	12.0	16.0	0.38
Electrical Wire Installation / Finish Grading	Aerial Lifts	Diesel	Average	2.00	6.00	46.0	0.31
Electrical Wire Installation / Finish Grading	Tractors/Loaders/Back hoes	Diesel	Average	1.00	4.00	84.0	0.37
Access Road	Tractors/Loaders/Back hoes	Diesel	Average	1.00	4.00	84.0	0.37
Access Road	Graders	Diesel	Average	1.00	12.0	148	0.41
Access Road	Off-Highway Trucks	Diesel	Average	2.00	6.00	376	0.38
Access Road	Plate Compactors	Diesel	Average	1.00	6.00	50.0	0.43
Access Road	Off-Highway Trucks	Diesel	Average	1.00	12.0	376	0.38
Access Road	Rubber Tired Loaders	Diesel	Average	1.00	12.0	150	0.36
Access Road	Dumpers/Tenders	Diesel	Average	1.00	12.0	16.0	0.38
Access Road	Rubber Tired Dozers	Diesel	Average	1.00	12.0	367	0.40

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Prep &Grading	—	—	—	—

Site Prep &Grading	Worker	100	11.9	LDA,LDT1,LDT2
Site Prep &Grading	Vendor	0.00	9.10	HHDT,MHDT
Site Prep &Grading	Hauling	60.0	20.0	HHDT
Site Prep &Grading	Onsite truck	0.00	—	HHDT
Installation of Foundations & Equipment	—	—	—	—
Installation of Foundations & Equipment	Worker	100	11.9	LDA,LDT1,LDT2
Installation of Foundations & Equipment	Vendor	0.00	9.10	HHDT,MHDT
Installation of Foundations & Equipment	Hauling	60.0	20.0	HHDT
Installation of Foundations & Equipment	Onsite truck	0.00	—	HHDT
Set Modules, Inverters, Switchgear	—	—	—	—
Set Modules, Inverters, Switchgear	Worker	100	11.9	LDA,LDT1,LDT2
Set Modules, Inverters, Switchgear	Vendor	0.00	9.10	HHDT,MHDT
Set Modules, Inverters, Switchgear	Hauling	60.0	20.0	HHDT
Set Modules, Inverters, Switchgear	Onsite truck	0.00	—	HHDT
Electrical Wire Installation / Finish Grading	—	—	—	—
Electrical Wire Installation / Finish Grading	Worker	100	11.9	LDA,LDT1,LDT2
Electrical Wire Installation / Finish Grading	Vendor	0.00	9.10	HHDT,MHDT
Electrical Wire Installation / Finish Grading	Hauling	10.0	20.0	HHDT
Electrical Wire Installation / Finish Grading	Onsite truck	0.00	—	HHDT
Commissioning & Testing	—	—	—	—
Commissioning & Testing	Worker	100	11.9	LDA,LDT1,LDT2
Commissioning & Testing	Vendor	0.00	9.10	HHDT,MHDT

Commissioning & Testing	Hauling	10.0	20.0	HHDT
Commissioning & Testing	Onsite truck	0.00	—	HHDT
Access Road	—	—	—	—
Access Road	Worker	20.0	11.9	LDA,LDT1,LDT2
Access Road	Vendor	0.00	9.10	HHDT,MHDT
Access Road	Hauling	4.00	20.0	HHDT
Access Road	Onsite truck	0.00	—	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)
Commissioning & Testing	0.00	0.00	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Prep &Grading	0.00	4,300	25.5	0.00	—
Access Road	3,730	0.00	15.0	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	464	204	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
Total all Land Uses	4.00	0.00	0.00	416	120	0.00	0.00	12,480

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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)
0	0.00	21,120	7,040	—

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)
Refrigerated Warehouse-No Rail	165,044	204	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)
Refrigerated Warehouse-No Rail	0.00	1,250,000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	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
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Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
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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
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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
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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
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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8. User Changes to Default Data

Screen	Justification
Land Use	Based on data request
Construction: Construction Phases	Provided in data request.
Construction: Off-Road Equipment	Provided in data request to Rincon.
Operations: Vehicle Data	Assuming 2 workers up to twice per week for operational vehicle trips.
Construction: Dust From Material Movement	Based on Provided information
Construction: Trips and VMT	Based on provided information
Operations: Fleet Mix	Based on provided information
Operations: Energy Use	Based on provided information for NG, defaults for electricity
Operations: Water and Waste Water	based on provided information, no indoor water use, no landscaping, fire water from Delta Mendota Canal (pump usage assumed in general site electrical consumption). Water usage here represents construction water consumption (5,000 gallons per day x 250 days = 1,250,000 gallons per year
Operations: Solid Waste	no solid waste generation based on provided information
Construction: Architectural Coatings	BESS containers brought to site already finished/painted
Construction: Paving	Not a warehouse.... type used for refrigerant use of operation

Appendix B

Biological Studies



Tracy Long Duration Energy Storage Project

Biological Resources Assessment

prepared for

Tracy BESS LLC

4350 Executive Drive, Suite 320

San Diego, California 92121

prepared by

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August 2024

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1 Executive Summary

Rincon Consultants, Inc. prepared this Biological Resources Assessment for the proposed Tracy Long Duration Energy Storage Project in San Joaquin County, California (Assessor's Parcel Number 209-240-32; Figure 1; Appendix A). This report documents the existing conditions of the approximately 39-acre MRP San Joaquin Energy LLC owned Tracy Combined-Cycle Power Plant site (hereinafter known as the "Project Area") and identifies sensitive biological resources that have the potential to occur on or in the vicinity. Potential impacts to biological resources consistent with California Environmental Quality Act Appendix G are assessed, including species protected in accordance with the California Endangered Species Act and/or federal Endangered Species Act, and waters regulated by the federal Clean Water Act and by the State. Where warranted, the report also provides recommendations to mitigate potentially significant impacts to biological resources.

2 Project Location and Setting

The Tracy Long Duration Energy Storage Project (proposed Project) is located in an unincorporated portion of San Joaquin County, immediately southwest of the city of Tracy and approximately 20-miles southwest of the city of Stockton. The limits of disturbance encompass 12.8 acres within a larger, approximately 39-acre parcel (Assessor's Parcel Number 209-240-32). The proposed Project would be located adjacent to and north of the Tracy Combined-Cycle Power Plant (TCCPP) on the same parcel. The TCCPP, including the Tracy Long Duration Energy Storage limits of disturbance, is accessed by an existing 3,300-foot-long, asphalt-paved service road that runs southward from West Schulte Road. The proposed Project would create a raw water supply pipeline and electrical interconnections with TCCPP facilities to the south. A new overhead and/or underground 115 kilovolt (kV) line would connect the Tracy Long Duration Energy Storage switchgear to the nearby Pacific Gas and Electric Company (PG&E) Schulte Substation via a new tap line structure to be installed adjacent to the PG&E Substation on the TCCPP site. The portions of these components on the developed portion of the TCCPP site fall under California Energy Commission (CEC) jurisdiction and are not a part of this report's analysis. The existing Schulte Substation is located on a separate approximately 1-acre parcel within the TCCPP parcel area that is excluded from the Project Area and was not reviewed as a part of the proposed Project. The Study Area is defined as the Project Area (the proposed development area, access roads, and a construction laydown area), the exclusion of the Schulte Substation, and an additional 100-foot survey buffer in all directions. The Study Area is depicted in Figure 2.

The Study Area is currently mostly undeveloped and consists mostly of ruderal non-native grassland. The site has previously been disturbed in association with its historical use as a construction laydown area for the adjacent power plant facilities to the south. The Study Area, situated at an elevation of approximately 155 to 196 feet above mean sea level, features generally flat topography.

3 Project Description

The proposed Project would support California's current need for additional electrical supply capacity during periods of peak demand. The proposed Project will involve the construction and operation of a 40-megawatt (MW), eight-hour duration, 320 MW hour (MWh) Battery Energy Storage System (BESS) facility within an approximately 12.8-acre site area north of the existing TCCPP. The existing TCCPP was licensed by the CEC in 2010 (CEC Docket No. 08-AFC-07). The CEC does not have permitting jurisdiction for the proposed Project, except for the proposed generation tie (gen-tie) and raw water supply line on the developed portion of the TCCPP property (see Figure 3).

The proposed Project will include modular battery and electrical equipment enclosures, a 13.8 kV/115 kV electrical switchyard, and an overhead 115 kV gen-tie tap line to connect to the electrical grid via the nearby PG&E Schulte Substation. The proposed Project will also include a fire water tank and an extension of an existing access road, a stormwater detention basin, and a temporary construction laydown and parking area. Figure 3 presents a preliminary site plan for the proposed Project.

4 Regulatory Background

Regulatory authority over biological resources is shared by federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, San Joaquin County). The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the state under California Environmental Quality Act (CEQA) and has direct jurisdiction under the California Fish and Game Code (CFGC). Under the California Endangered Species Act (CESA) and federal Endangered Species Act (ESA), the CDFW and the United States Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as Threatened or Endangered as well as native and bird species listed under the CFGC, Migratory Bird Treaty Act, and Bald and Golden Eagle Protection Act. The U.S. Army Corps of Engineers has regulatory authority over waters of the U.S., including wetlands, under Section 404 of the Clean Water Act. The CDFW and Regional Water Quality Control Board protect streams, lakes, and associated riparian habitat and waters of the State, respectively, at the State level. The analysis in this report is guided by the requirements of these laws, and by the operating standards of the implementing agencies.

5 Methodology

This report includes a review of relevant literature followed by a field reconnaissance survey and CDFW protocol burrowing owl surveys covering the Study Area. The purpose of this report is to document the biological conditions of the Study Area and to provide information on the anticipated impacts from the proposed Project components as well as potential constraints to development related to sensitive biological resources.

5.1 Literature Review

The literature review included queries of the CDFW *California Natural Diversity Database* (CNDDDB; CDFW 2024a), Biogeographic Information and Observation System (CDFW 2024b), and California Native Plant Society (CNPS) *Online Inventory of Rare and Endangered Plants of California* (CNPS 2024a) for special-status species occurrences within the *Tracy, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle and surrounding eight quadrangles (*Vernalis, Solyo, Lone Tree Creek, Cedar Mtn., Midway, Clifton Court Forebay, Union Island, Lathrop*). Other resources reviewed to inform the existing conditions and sensitive biological resources that occur on site or in the vicinity, such as the San Joaquin kit fox Habitat Conservation Area, USFWS *National Wetlands Inventory* (USFWS 2024a), USGS *National Hydrology Dataset* (USGS 2024), USFWS *Information for Planning and Consultation System* Unofficial Species List (USFWS 2024b), and USFWS *Critical Habitat Portal* (USFWS 2024c). Aerial photographs, topographic maps, soil survey maps, geologic maps, and climatic data in the area were also examined.

5.2 Field Surveys

On March 21, 2024, Rincon Consultants, LLC (Rincon) biologists Anastasia Ennis and Grace Myers conducted a field reconnaissance survey (field survey). The field survey was succeeded by four USFWS protocol surveys for burrowing owls (*Athene cunicularia*) which took place on April 11, May 8, May 30, and June 20, 2024. The existing vegetation communities and land cover types present within the Study Area were characterized and mapped, including federal and/or State-regulated aquatic features. The field survey included an assessment of habitat conditions within the Study Area for potentially supporting special-status species and evaluated whether the Study Area may be used as a regional wildlife corridor. All observations of plant and wildlife species within the Study Area were noted and are included in Appendix B. All plant species encountered were noted and identified to the lowest taxonomic level possible given the condition of the materials during the field survey. Plant species nomenclature and taxonomy followed Baldwin et al. (2012) as updated by The *Jepson Online Interchange* (University of California, Berkeley 2022, Jepson Flora Project 2022). The vegetation classification system used for this analysis is based on *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009), but has been modified as needed to accurately describe the existing habitats observed on site. Vegetation communities were mapped onto aerial imagery depicting the Study Area and then later digitized using ArcGIS® (ESRI 2024).

5.2.1 Special-Status Wildlife Species

Wildlife identification and nomenclature followed standard reference literature. The habitat requirements for each potentially occurring special-status wildlife species were assessed and compared to the type and quality of the habitats observed within the Study Area during the field survey. After the preliminary literature review and field survey, several sensitive species were eliminated from consideration as having potential to occur on site due to lack of suitable habitat, lack of suitable soils/substrate, and/or knowledge of regional distribution.

5.2.1.1 *Burrowing Owl Habitat Assessment and Focused Surveys*

A habitat assessment to search for potentially suitable burrows for burrowing owl was completed on March 21, 2024, and focused surveys concluded on June 20, 2024. The habitat assessment was conducted in accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (2012). This assessment was conducted due to the presence of suitable dry perennial grassland habitat within the Study Area and documented nearby burrowing owl occurrences. In accordance with the *Habitat Assessment Data Collection and Reporting* guidelines of the CDFW *Staff Report on Burrowing Owl Mitigation* (2012), CNDDDB and Biogeographic Information and Observation System were reviewed for nearby recent and historical occurrences prior to the survey to inform where the biologists focused their efforts. Following the initial habitat assessment, focused breeding season burrowing owl surveys were performed by systematically searching for signs of burrowing owl presence and suitable habitat within the Study Area. Suitable habitat was identified based on the presence of low vegetation cover, potential burrows, and perch sites. The Study Area was assessed on foot by the biologists walking transects spaced approximately 10 meters apart, appropriately adjusted to allow for 100 percent visual coverage of the ground surface. If suitable burrows, individuals, and/or signs of burrowing owls were found within the Study Area, their respective locations were recorded. Rincon's Protocol Survey Letter Report for Burrowing Owl is included as Appendix E.

6 Existing Conditions

6.1 Topography and Soils

At an elevation of approximately 155 to 196 feet above mean sea level, the topography of the Study Area is generally flat, and its immediate surroundings are characterized primarily by utility infrastructure, paved roads, and agriculture. Based on the most recent U.S. Department of Agriculture, Natural Resources Conservation Service soil survey for San Joaquin County, California (U.S. Department of Agriculture, Natural Resources Conservation Service 2019), the Study Area contains two soil map units:

- **Capay clay, 0 to 1 percent slopes, MLRA 17** occurs on basin floors, alluvial fans, and basin rims. This soil type is derived from mostly sandstone and shale. This soil type makes up approximately 67 percent of the Study Area. A typical soil profile is very firm throughout. This soil is considered moderately well drained. Depth to a restrictive layer is more than 80 inches. This soil is not considered hydric.
- **Stomar clay loam, 0 to 2 percent slopes** occurs on alluvial fans and terraces. This soil type is derived from alluvial derived from sedimentary rocks. This soil type makes up approximately 33 percent of the Study Area. A typical soil profile contains many fine roots and is very moist throughout. This soil is considered well drained. Depth to a restrictive layer is more than 80 inches. This soil is not considered hydric.

6.2 Vegetation Communities and Land Cover Types

Two vegetation communities and four additional land cover types were observed within the Study Area. A map approximating the various vegetation communities and land cover types that occur within the Study Area are shown in Figure 3 (Appendix A) that include non-native annual grassland, freshwater wetland, landscaped, developed, canal, and orchard. Brief descriptions of the vegetation and land cover types present in the Study Area are provided below. Vegetation community characterizations for this analysis are primarily based on the classification systems presented in MCV2 but have been modified slightly to reflect the existing site conditions most accurately. The *Preliminary Description of Terrestrial Natural Communities of California* (Holland 1986) has been superseded by the MCV2 but is included for additional reference, as is the *California Wildlife Habitat Relationships System* (CWHR; CDFW 2024c) as applicable. Plant species nomenclature and taxonomy used for this report follows the treatments within the second edition of *The Jepson Manual* (Baldwin et al. 2012). See Appendix B for a complete list of plant species observed within the Study Area.

6.2.1 Non-native Annual Grassland

The non-native annual grassland within the Study Area closely resembles the wild oats and annual brome grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance) described in MCV2. Wild oats and annual brome grassland are generally found in open areas in valleys and foothills throughout coastal and interior California. They typically occur on soils consisting of fine-textured loams or clays that are somewhat poorly drained. Non-native annual grasses and weedy annual and perennial forbs, primarily of Mediterranean origin, dominate this vegetation type, probably as a

result of human disturbance. Scattered native grass and wildflower species, representing remnants of the original vegetation may also be common (Sawyer et al. 2009).

Non-native annual grassland is the dominant vegetation community of the Study Area, covering approximately 31.6 acres. Characteristic non-native annual grass species observed were wild oats (*Avena fatua*) and ripgut brome (*Bromus diandrus*) with Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), Italian ryegrass (*Festuca perennis*), and soft chess (*Bromus hordeaceus*). Some native herbaceous species observed include common fiddleneck (*Amsinckia intermedia*) and meadow barley (*Hordeum brachyantherum*). A few of the non-native herbs present include black mustard (*Brassica nigra*), rose clover (*Trifolium hirtum*), and prickly lettuce (*Lactuca seriola*). The eastern portion of the Study Area within the proposed Project footprint consists of a relatively equal percentage of non-native grasses and black mustard, with the non-native grasses ranging from 1 to 4 feet high with very little bare ground throughout. A full list of plants observed within the Study Area can be found in Appendix B.

6.2.2 Freshwater Wetland

Freshwater wetlands typically occur at elevations ranging from 0 to 350 meters (0 to 1,148 feet) across North America. A small freshwater wetland was observed that accounts for approximately 0.06 acre of the Study Area, located on the northeastern side of the TCCPP, which is approximately 100-feet southwest of the proposed Project's footprint. This feature is a depression in the ground that is vegetated with a stand of dead cattails (*Typha* spp.), which are not present within the surrounding non-native annual grassland areas. This feature is characterized as an isolated wetland feature caused by a leaky irrigation pipe which has since been repaired. No water was present within the feature at the time of the field survey.

Because this freshwater wetland is dominated by *Typha* spp., this community most closely resembles the *Cattail Marsh Alliance* (*angustifolia*, *domingensis*, *latifolia* Herbaceous Alliance) as described by Sawyer et al. (2009). To be included in this community, *Typha angustifolia*, *T. domingensis* and/or *T. latifolia* must have more than 50 percent relative cover in the herbaceous layer and more than one cattail species may be present. This community occurs in semi-permanently flooded freshwater or brackish marshes where soils are clay and/or silt. This community is listed as a CDFW-sensitive natural community (CDFW 2024d, Sawyer et al. 2009).

6.2.3 Landscaped

Landscaped areas cover approximately 2.7 acres of the Study Area. This land cover type is not naturally occurring and is not described in either the Holland (1986) or Sawyer et al. (2009) classification systems but is considered "Urban" in the CWHR (CDFW 2024c) classification system. This land cover type consists of areas that have been modified and are built up such that most or all vegetation has been removed and/or non-native ornamental trees and shrubs are present. Within the Study Area, this land cover type consists of landscaped areas associated with the TCCPP (Appendix A). Species observed include Italian cypress (*Cupressus sempervirens*), black elderberry (*Sambucus nigra*), Peruvian pepper tree (*Shinus molle*), with small amounts of ruderal herbs and grasses.

It is Rincon's understanding that the ornamental trees planted along the outside of the TCCPP within the Study Area were installed as part of mitigation requested by the CEC following the development of the TCCPP.

6.2.4 Developed

The developed land cover type consists of approximately 14.7 acres of the Study Area. This land cover type is not naturally occurring and is not described in either the Holland (1986) or Sawyer et al. (2009) classification systems. Despite being sparsely vegetated, the “Urban” classification in the CWHR (CDFW 2024c) classification system mostly resembles this land cover type. Developed areas within the Study Area have been modified and are built up such that most or all vegetation has been removed and/or minimal ornamental trees and shrubs are present. Disturbed areas consist of paved roads, structures and other infrastructure associated with the TCCPP (Appendix A).

6.2.5 Canal

The Delta Mendota Canal is located along the southwest corner and western edge of the Study Area, outside of the Project Area, and consists of approximately 1.2 acres of the entire Study Area. This canal is approximately 116.5-miles long, spanning the western side of the San Joaquin Valley and is used for agricultural irrigation, receiving its water via the San Joaquin Valley Aquifer system. This canal is concrete lined with gravel on either side. Within the Study Area, the canal neighbors non-native vegetation with some small mammal burrows occurring throughout. No trees or shrubs were observed along the east and west sides of the canal.

6.2.6 Orchard

Almond orchards surround the Study Area to the south and east and encompass approximately 3.4 acres of the Study Area, none of which occur within the Project Area. In 2019, San Joaquin County was ranked seventh in the state for almond production in the entire State of California. The orchards surrounding the Project Area, at the time of the reconnaissance survey, were in neat rows and had exposed soil and exposed understory throughout with minimal overhead canopy coverage as almond trees do not have a substantial canopy. The orchard is routinely maintained by workers walking and driving utility terrain vehicles throughout the rows of almond on a regular basis. This human presence and exposed understory may make it harder for wildlife to hide from predators and escape human disturbance despite the understory making it easier for wildlife to travel freely throughout (San Joaquin Council of Governments [SJCOG] 2020).

6.3 General Wildlife

Wildlife activity was low overall during the surveys; however, typical species found in open field and industrial development were observed. Swainson’s hawk (*Buteo swainsoni*; State Threatened), American kestrel (*Falco sparverius*), northern mockingbird (*Mimus polyglottos*), California scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), western fence lizard (*Sceloporus occidentalis*), western kingbird (*Tyrannus verticalis*), and European starling (*Sturnus vulgaris*) were observed within the Study Area. See Appendix B for a complete list of wildlife species observed.

7 Sensitive Biological Resources

7.1 Special-Status Species

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted prior to the approval of proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB, species occurrence records from other sites near the Study Area, and previous reports for the Study Area or nearby sites. The potential for each special-status species to occur in the Study Area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species' requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime). The species is not analyzed further in this letter report.
- **Low Potential.** Few of the habitat components meeting the species' requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species' requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species' requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species was observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last five years).

For the purpose of this report, and in accordance with CEQA, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered under the CESA or Native Plant Protection Act; those identified as Fully Protected by the CFGC (Sections 3511, 4700, 5050, and 5515); those identified as Species of Special Concern or Watch List by the CDFW; and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank system per the following definitions:

- **Rank 1A** = Plants presumed extinct in California
- **Rank 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- **Rank 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened)
- **Rank 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20 percent of occurrences threatened, or no current threats known)
- **Rank 2** = Rare, threatened or endangered in California, but more common elsewhere

Based on a query of the CDFW CNDDDB, there are 84 special-status species within the *Tracy, California* USGS 7.5-minute quadrangle and the eight surrounding quadrangles. All 84 special-status species have been evaluated for potential to occur within the Study Area in Appendix C. Once the field surveys were complete, it was determined that only one special-status plant species and twelve special-status wildlife species have the potential to occur on or within the Study Area.

7.1.1 Special-Status Plant Species

The database and literature review performed for the proposed Project indicated that 38 special-status plant species occur within the nine-quadrangle search; however, only one special-status plant species has the potential to occur within the Study Area. No federal or State listed, or special-status plants were observed during these surveys. However, since one special-status plant species has the potential to occur within the Study Area, the big tarplant (*Blepharizonia plumosa*), it is discussed further below. The remaining 37 special-status plant species are not expected or have low potential to occur within the Study Area and are not discussed further.

7.1.1.1 Big Tarplant

Big tarplant is an aromatic annual herb that is endemic to central California, growing in the Central Coast Ranges, southern San Francisco Bay Area, and Central Valley. This species primarily occurs in annual grassland areas with clay to clay-loam soils. This species is associated with grasses, such as wild oats (*Avena* spp.), brome grasses (*Bromus* spp.), panicle willow-herb (*Epilobium brachycarpum*), Italian ryegrass (*Lolium multiflorum*), and others. Big tarplant seedlings appear during the early spring months, whereas the blooming period does not start until July and usually lasts until October.

Although grassland areas with associated grass species and clay to clay loam soils occur within the Study Area, the developed and disturbed condition of the Study Area limits the potential for this species to occur here. This species was not observed during the field survey or any preceding survey at the site, though the surveys did occur outside of this species' blooming period. Eleven CNDDDB occurrences were recorded within 5 miles of the Study Area, the closest being an occurrence in 2002 that was 1.7-miles west of the Study Area. A focused rare plant survey for big tarplant will be conducted in September 2024, during the blooming period for this species. The survey results will be provided to the County.

7.1.2 Special-Status Wildlife Species

The database and literature review performed for the project indicated that 46 special-status wildlife species occurred within the nine-quadrangle search. Of those 46 species, two were determined to have moderate potential to occur, and one was observed within the Study Area. The remaining species are not expected or have low potential to occur within the Study Area and are not discussed further, with the exception of burrowing owl, a potential candidate species for State listing. Swainson's hawk was the only special-status species observed during the field surveys and is state-listed as threatened. No other special-status wildlife species were observed during the surveys.

Table 1 below identifies the seven special-status wildlife species that will be discussed further, one of which (Swainson's hawk) was determined to be present. See Appendix C for a summary of all 46 special-status wildlife species that have recorded occurrences in the region.

Table 1 Special-Status Wildlife Species with Potential to Occur within the Study Area and Considered for Analysis

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>	<i>Potential to Occur</i>
Invertebrates			
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	FT	Low Potential
<i>Bombus crotchii</i>	Crotch's bumble bee	SCE	Moderate Potential
Amphibians			
<i>Ambystoma californiense</i> pop. 1	California tiger salamander – California DPS	FT/ST	Low Potential
Birds			
<i>Athene cunicularia</i>	burrowing owl	SSC	Low Potential
<i>Buteo swainsoni</i>	Swainson's hawk	ST	Present
Mammals			
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	FE/ST	Low Potential
<i>Taxidea taxus</i>	American badger	SSC	Low Potential
DPS = Distinct Population Segment FE = Federally Endangered FT= Federally Threatened ST = State Threatened ST = State Threatened SCE = State Candidate Endangered SSC = CDFW Species of Special Concern			

7.1.2.1 American Badger

The American badger (*Taxidea taxus*) inhabits drier open stages of most shrub, forest, and herbaceous habits with friable soils. Cropland, desert, grassland, savanna, and shrubland/chaparral are preferred habitat types for the American badger. The species is primarily nocturnal, mostly solitary, and feeds on small rodents that are captured by digging out the rodent burrows. American badgers are an uncommon, permanent resident throughout most of California, except in the northern North Coast area (Zeiner et al. 1988). Threats to the species include habitat loss, collisions with vehicles, and direct persecution (NatureServe 2024).

Some suitable grasslands and soils are present and small rodents, which could be prey for this species, were observed throughout the site. However, minimal suitably sized burrows for badgers are present and the disturbed land cover within the Study Area reduces the potential for this species to be present. There have been nine recorded occurrences of this species within 5 miles of the Study Area; however, the closest occurrence is approximately 2.6-miles southwest of the Study Area and was from 1993.

7.1.2.2 California tiger salamander – Central California DPS

The California tiger salamander (*Ambystoma californiense* pop. 1) is a federally threatened species that is endemic to the San Joaquin-Sacramento River valley, coastal valleys and neighboring foothills of Central California. This species requires both aquatic and upland habitats throughout their life cycle. During the larval stages, this species uses water bodies holding at least 12 weeks of water for the larvae to develop. To breed, this species uses bodies of fresh water, vernal pools, and other ephemeral permanent water bodies. The upland habitat requirements include small mammal

burrows or another similar underground area to use as protection and shelter from predators. The California tiger salamander Central California distinct population segment (DPS) is an opportunistic feeder, eating insects, tadpoles, frogs, centipedes, crickets, and more.

This species has a low potential to occur in the Study Area during dispersal due to the lack of available aquatic habitat for the larval stage of this species' life cycle. Although a canal is present, this canal is concrete-lined and does not have natural vegetation in or along the edges making it unlikely that this species occurs within the canal. The concrete, in this case, would act as a barrier for this species, if it were to occur within the canal, as it tries to move into the grassland areas for breeding. The closest CNDDDB occurrence is 4-miles southwest of the Study Area. Additionally, the closest breeding habitat is likely the Tom Paine Slough, which is over 6 miles from the Study Area.

7.1.2.3 Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) is a federally threatened invertebrate with a low potential to occur within the Study Area. This species is found throughout the Central Valley of California, spanning from Shasta County to Madera County. Named for its dependence on the elderberry shrub (*Sambucus* sp.), this beetle is mostly found in riparian areas where elderberry grows. More specifically, this species prefers blue elderberry (*Sambucus cerulia*), which was not present within the Survey Area; however, there were a few black elderberry shrubs (*Sambucus nigra*) scattered within the Study Area outside of the TCCPP. This species can use the elderberry shrub at all life stages, from feeding on the pith of the stems at the larval stage to the flowers, leaves, and nectar as an adult (USFWS 2024d).

The valley elderberry longhorn beetle was not observed during the field surveys. Although there is a canal within the Study Area, no riparian vegetation is present as it is concrete-lined. Though the Study Area provides mature elderberry shrubs, riparian habitat is absent, giving this species a low potential to occur within the Study Area. Additionally, the closest CNDDDB occurrence is approximately 4 miles south of the Project Area and is considered a historical record.

7.1.2.4 Crotch's Bumble Bee

The Crotch's bumble bee (*Bombus crotchii*) is a candidate species for State listing under CESA. Formal determination of the listing is expected to occur in 2025 and could result in the species being recorded as a State listed Endangered species under CESA. This species occurs from coastal California to the Sierra-Cascade crest and south into Mexico. Crotch's bumble bee is known to inhabit open grassland, shrublands, chaparral, desert margins including Joshua tree and creosote scrub, and semi-urban settings. This species is a generalist that is known to forage on a variety of floral resources including *Antirrhinum* spp., *Phacelia* spp., *Clarkia* spp., *Dendromecon* spp., *Eschscholzia* spp., *Eriogonum* spp., *Vicia* spp., *Carduus* spp., and *Amsinckia* spp. The species' queen flight season is defined as February-March, their worker active period is defined as April-August, and their gyne flight season is defined as September-October (Williams et al. 2014). Nests are located in cavities, most commonly underground often located underground in abandoned rodent nests, or but may also be found above ground in cavities formed by tufts of grass, brush piles, leaf litter, vegetation mulch, old bird nests, rock piles, or cavities in dead trees. New queens overwinter a few centimeters underneath bare soil, leaf litter, or vegetation mulch.

One unidentified bumble bee was observed foraging during the March field survey. There is minimally suitable nesting, foraging, and overwintering habitat for Crotch's bumble bee that occurs throughout the non-native grassland areas of the Study Area. One CNDDDB occurrence record of

Crotch's bumble bee from 2023 is located approximately 3.3-miles northeast of the Study Area (Xerces et al. 2024).

7.1.2.5 Burrowing Owl

The burrowing owl has been recommended for a potential CESA candidacy, with a low potential to occur within the Study Area (CDFW 2024e). Burrowing owls occur in burrows and dens in open, mostly flat, dry grassland and shrubland habitats as well as some agricultural and ruderal areas where the vegetation cover is short and sparse. This species prefers habitats where vegetation cover is relatively short so they can see above the vegetation to watch for predators and hunt for rodents, amphibians, reptiles, and carrion (Haug et al. 1993). Burrowing owls breed during the period from February 1 to August 31, with peak breeding season occurring from April 15 to July 15. This species is known to change burrows multiple times during the breeding season, depending on site conditions. A burrowing owl is more likely to reuse a past nest site for breeding if they have had success during the previous year in that nest location. Burrowing owls typically use burrows and dens that were made by other species such as California ground squirrels, San Joaquin Kit Fox (*Vulpes macrotis mutica*), American badger, and coyotes (*Canis latrans*).

No burrowing owls were observed during the field reconnaissance survey or any of the four burrowing owl protocol surveys within the Study Area. While there are approximately 50 known occurrences of burrowing owls within a 5-mile radius of the Study Area, the site does not have favorable foraging conditions for this species. Although there are ground squirrel burrows throughout the non-native grassland areas to the east of the TCCPP and an even greater number of burrows to the west of the TCCPP within the non-native grassland portions of the 100-foot survey buffer, the non-native grasses are likely much higher and denser than this species would typically utilize. However, this site does still contain marginally suitable habitat for burrowing owls. Due to the negative results of the protocol surveys and the marginally suitable habitat on-site, there is a low potential for this species to occur within the Study Area.

7.1.2.6 Swainson's Hawk

The Swainson's hawk is listed as a state threatened species. The historical breeding range of the Swainson's hawk in California included the Great Basin, Sacramento and San Joaquin Basins, the coast from Marin County to San Diego County, the Antelope Valley in Los Angeles and Kern counties, and scattered sites in the Mojave and Colorado Deserts (England et al. 1997). The species continues to breed across its entire historical range but in significantly lower numbers. In the Central Valley, much of the native habitat has been converted to agricultural and urban uses, thereby limiting nesting and foraging opportunities for Swainson's hawks. This species is often found nesting in trees associated with scattered rural residences, particularly in relation to grasslands or dry-land grain fields. Throughout its range the species nest almost exclusively in trees, typically on the edges of woodlands adjacent to grass or shrubland habitat (England et al. 1997). Prey species include squirrels, mice, voles, rabbits, and insects. Nests are typically constructed in solitary trees or small groves of trees near streams (Cornell Lab of Ornithology 2024).

Three Swainson's hawks (one pair and one individual) were observed in flight above the Study Area during the March 2024 field survey and at least one individual observed during each of the four burrowing owl protocol surveys. There are known Swainson's hawk nest sites as close as approximately 1-mile northeast of the Study Area (CDFW 2023a) and presence of a pair during the field survey indicates that there is nesting potential near the Study Area. This species could forage within the non-native grassland within the Study Area. the Italian cypress and Peruvian pepper trees

within the landscaped areas of the Study Area are not suitable for nesting; however, Swainson's hawk could nest on the utility transmission lines at the southeastern portion of the Study Area.

7.1.2.7 San Joaquin Kit Fox

The San Joaquin kit fox is a federally endangered and State threatened species that inhabits deserts and grasslands in California's San Joaquin Valley. This species' range within the San Joaquin Valley stretches from the southern portion of Kern County to San Joaquin, Alameda, and Contra Costa counties, but also includes the La Grange area of Stanislaus County. Additionally, this species can be found in the valleys within San Luis Obispo County. This species has experienced a significant population decline due to loss of habitat, disease, wildfire, and predation. An opportunistic hunter, the San Joaquin kit fox's diet consists of kangaroo rats, mice, ground squirrels, ground-nesting birds and rabbits. San Joaquin kit fox begin mating during the months of December and March, and usually begin giving birth between February and March. Female kit foxes typically have a litter of two to six pups (USFWS 2024e).

The Study Area includes a San Joaquin kit fox Habitat Conservation Area along the southwestern edge, which serves as a corridor for individuals that may transient the area. However, no individuals or signs of San Joaquin kit fox were observed during the surveys. There are known CNDDDB occurrences within 5 miles of the Study Area but the most recent occurrence dates back to 1991. The Study Area's high frequency of human disturbance around these areas would likely prevent San Joaquin kit fox from occupying the area. Additionally, the entirety of the Study Area does not provide adequate habitat to support this species, as the grasses in the non-native grassland areas are too dense and no suitable burrows were observed; thus, this species has a low potential to occur.

7.2 Nesting Birds

The Study Area contains suitable nesting habitat for a variety of native avian species common to urbanized areas. Species of birds common to the area that typically use open disturbed habitats for foraging and landscaped trees for nesting habitat, such as house finch (*Haemorrhous mexicanus*), were detected during the surveys conducted on-site. California scrub jays actively using the elderberry shrubs along the western edge of the TCCPP and rock doves (*Columba livia*) were perched along the towers within the substation. Additionally, the trees within the Study Area could be used for nesting by a variety of common birds protected by the Migratory Bird Treaty Act and CFGC Section 3503. The nesting season generally extends from February 1 through August 31 but can vary based upon annual climatic conditions.

7.3 Sensitive Vegetation Communities

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities. Sensitive natural communities included in the CNDDDB are historic (greater than 25 years) and follow the original methodology according to "Preliminary Descriptions of the Terrestrial Natural Communities of California" (Holland 1986). The methodology for determining sensitivity continues to be revised and is now based on MCV2 (Sawyer et al. 2009). MCV2 communities considered sensitive by CDFW are published in the California Sensitive Natural Communities List (CDFW 2024d).

The freshwater wetland is mapped as a sensitive natural community– the *Cattail Marsh Alliance* (*angustifolia*, *domingensis*, *latifolia* Herbaceous Alliance – and is found to the northeast of the TCCPP.

7.4 Aquatic Resources and Regulatory Agency Permitting

The Study Area contains one isolated freshwater wetland on the northeastern side of the TCCPP. This feature is approximately 100 feet from the edge of the limit of disturbance and appears as a depression within the surrounding area that has moist soil and mostly senescent cattails throughout. According to MRP, this feature was originally created by a leak in an irrigation pipe that occurred in 2012. Since the leak has been fixed, there have been several years of heavy amounts of rain that have allowed the wet area to persist and grow riparian vegetation species. The mapped extent of this feature is shown on the vegetation map (Figure 4; Appendix A).

The freshwater wetland does not support a relatively permanent flow of water or exhibit a continuous surface connection to navigable waters; thus, it is not a water of the U.S. This feature is assumed to be exempt from the State Water Resources Control Board’s 2021 State Wetland Definition and *Procedures for Discharges of Dredged or Fill Material to Waters of the State* per section IV.D.2.c.iv, which excludes artificially irrigated areas that would revert to dry land if irrigation were to cease. During the field survey, it was noted that the depression area has mostly dried and most of the cattails have senesced. It is not hydrologically connected to a lake, stream, or river; therefore, it would not be regulated under the CFGC Section 1602.

7.5 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations or those populations that are at risk of becoming isolated. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Wildlife movement corridors can be both large and small scale. Regionally, the Study Area is located within Essential Connectivity Area Rank 1, as mapped in the report, *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (Spencer et al. 2010). Rank 1 is considered the lowest quality habitat connectivity ranking, which may even include no possible connectivity at all. Lands surrounding the Study Area are highly disturbed and developed with infrastructure associated with the existing power plant and other industrial uses, as well as agricultural land use. Therefore, the Study Area is not considered an important regional wildlife movement area.

7.6 Local Policies and Ordinances

The San Joaquin County General Plan (San Joaquin County 2016) includes the Study Area in the plan's sphere of influence and urban growth boundaries. Chapter 3.4 of the General Plan contains goals, policies and procedures to protect and enhance habitat for sensitive species and natural communities (San Joaquin County 2016). The Study Area is within unincorporated San Joaquin County (County) and the County is the lead agency for CEQA. All existing trees within the Study Area are currently planned to be retained during project activities. County ordinances and guidelines protecting significant oak woodlands and heritage trees would not apply because neither are present on site.

7.7 Habitat Conservation Plans

The San Joaquin County Multi Species Habitat Conservation Plan and Open Space Plan (SJMSCP) is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species while protecting the region's agricultural interests as the population increases over the next 50 years (2001-2051) (SJMSCP 2000). The SJMSCP, in accordance with ESA 10(a)(1)(B) and CESA Section 2081(b) offers compensation for the Conversion of Open Space to non-Open Space that affect one or more of the 97 species covered under the SJMSCP ("Covered Species") (SJMSCP 2000). The previous Tracy Peaker Project (TPP) and the existing TCCPP Project, which are present on the southern portion of the Project Area, previously opted-in, coordinated with, and obtained incidental take coverage through, the SJMSCP during their certification by the CEC.

For all Project activities subject to the SJMSCP and seeking coverage under the SJMSCP, the Project proponent must submit an applicant checklist and review form to SJCOG to establish eligibility for coverage. The form details the activities not subject to the SJMSCP and those that may have the potential to impact a biological resource covered by the SJMSCP. Project applicants have four options to receive coverage, with approval by SJCOG:

1. Pay the appropriate fee. A fee is assessed depending on which of the four habitats the project lies within.
2. Dedicate habitat lands as conservation easement or fee title.
3. Purchase mitigation bank credits from a mitigation bank approved by SJMSCP.
4. Propose an alternative mitigation plan, consistent with the goals of the SJMSCP and equivalent in biological value

8 Impacts Analysis and Recommended Measures

This section discusses the potential adverse impacts to regulated biological resources that may occur from implementation of the proposed Project and provides recommendations for additional surveys and actions to further evaluate or avoid/minimize potential impacts.

8.1 Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

- 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 Wildlife or U.S. Fish and Wildlife Service*

8.1.1 Plant Species

Minimal suitable habitat for special-status plant species exists within the Study Area; yet, one special-status species is anticipated to occur during proposed Project activities. The entire Study Area has been significantly disturbed by development, human presence, agricultural activities, and other factors that decrease the likelihood of sensitive plant species inhabiting the area. No special-status plants were observed on-site during the surveys, however, a focused rare plant survey for big tarplant, identified as having moderate potential to occur, will be conducted in September 2024. The survey results will be provided to the County.

8.1.2 Wildlife Species

The proposed Project components, including, but not limited to, site grading and excavation of soil and removal of vegetation, may impact special-status wildlife species, including suitable habit, nests, and/or individual animals. The following is a general discussion of anticipated impacts based on the nature of the proposed Project. Implementation of the following recommended Avoidance and AMMs BIO-1 through BIO-3, described below, would reduce project impacts to special-status wildlife species to less than significant.

8.1.2.1 Crotch's Bumble Bee

There is one documented occurrence of a Crotch's bumble bee within 3.3-miles northeast of the Study Area and no occurrences of western bumble bee within 60 miles of the Study Area. Suitable foraging, nesting, and overwintering habitat occurs within the Study Area. There is a moderate potential for Crotch's bumble bee to occur within the Study Area based on recent occurrences in the region and suitable habitat on-site. Western bumble bee is not expected to occur within the Study Area as this species is not currently known to occur in the region. Proposed Project activities may cause direct impacts to Crotch's bumble bee nests, foraging resources, and overwintering habitat. Potential indirect impacts include disturbance due to increased noise and human presence. AMM BIO-1 would avoid impacts to Crotch's bumble bee:

BIO-1 Crotch's Bumble Bee Avoidance

- Prior to any vegetation removal, clearing, grading or grubbing, focused surveys for Crotch's bumble bee shall be conducted within the proposed Project footprint by a qualified biologist, with expertise in surveying for bumble bees. The focused surveys shall include: (1) a habitat assessment, (2) foraging surveys, and (3) nesting surveys, in accordance with the recommendations described in the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, released by the CDFW on June 6, 2023. If more than one year after the completion of focused Crotch's bumble bee surveys (i.e., date of last survey) has passed before ground disturbance has been initiated, the focused surveys shall be repeated. The habitat assessment will be conducted concurrently with the foraging and nesting surveys, and shall at a minimum, include historical and current species occurrences; document potential on-site habitat, including foraging, nesting, and/or overwintering resources; and identify which plant species are in bloom during the foraging and nesting surveys, as well as their percent cover. Nesting surveys shall occur during the Queen Flight Season through the Colony Active Period (February 1 through August 31 for Crotch's bumble bee). Potential nesting sites shall be surveyed for active Crotch's bumble bee colonies either through observations of queens searching for nesting sites or by looking for concentrated bumble bee activity entering and exiting a given area. Potential nesting sites investigated by colony founding queens shall be GPS marked if the queen exhibits signs of interest in the potential site (e.g., she doesn't emerge from the site within a few minutes and then continues to nest search). Potential nesting sites identified during the queen nest searching phase shall be evaluated later during the Colony Active Period to determine whether an active colony has been established. Potential nest sites in project areas shall be observed for up to five minutes during the Colony Active Period to monitor for Crotch's bumble bees entering or exiting. If a nest site is confirmed to be occupied by Crotch's bumble bees, the location GPS coordinates shall be recorded. A qualified biologist who is in possession of a valid Memorandum of Understanding with the CDFW (and valid Scientific Collecting Permit, if applicable) shall conduct capture foraging surveys and record non-lethal photo vouchers of all captured bumble bees in accordance with the CDFW *Survey Considerations for CEQA Candidate Bumble Bee Species* document (June 2023). Foraging surveys shall include at least three on-site surveys that are spaced two to four weeks apart. The timing of these surveys shall coincide with the Colony Active Period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between one hour after sunrise and two hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors shall wait at least one hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies, temperatures are between 65°F and 90°F, and winds are less than eight miles per hour. Surveys may be conducted outside these weather parameters if other bees or butterflies are observed flying.
- If Crotch's bumble bee is detected during the focused surveys, an Avoidance Plan to fully avoid impacts to Crotch's bumble bee shall be developed. If impacts to Crotch's bumble bee cannot be fully avoided, an Incidental Take Permit shall be obtained from CDFW.
- If Crotch's bumble bee is not detected during the focused surveys, or if this species is no longer listed or a Candidate under CESA at the time of construction, no further action or mitigation would be required.

8.1.2.2 Burrowing Owl

The focused breeding season burrowing owl surveys that were completed on June 20, 2024, concluded that the Study Area provides marginally suitable habitat for burrowing owls to forage and nest along the ground, and therefore this species has a low potential to occur. The non-native annual grassland areas on the eastern portion of the site are presumed to provide a higher quality foraging and nesting area than the remainder of the site due to the wide open space and presence of ground squirrel burrows. Despite the presence of grasses in a large amount of the Study Area, the grasses in the non-native grassland areas are likely too tall to be utilized by this species. Project activities are not expected to impact any burrowing owls, therefore no mitigation is provided for this species. However, a pre-construction survey will be completed in accordance with AMM BIO-3 to further ensure no impacts will occur to this species.

8.1.2.3 Swainson's Hawk

There are known Swainson's hawk nest sites to the northeast of the Study Area (CDFW 2023a) and utility transmission lines within the southeastern portion of the Study Area that could be used as nesting sites for Swainson's hawk. The presence of a pair of Swainson's hawks during the field survey indicates that there is suitable nesting habitat within the vicinity. This species could also forage within the non-native annual grassland, which is abundant throughout the Study Area.

Project activities may have the potential to impact Swainson's hawk foraging and nesting habitats primarily through increased human activity, ground disturbance, and vegetation removal. The anticipated impacts include harassment and/or injury, nest disturbance, and noise disturbance. Swainson's hawks are present within the Study Area. AMM BIO-2 should be implemented to avoid impacts to Swainson's hawks.

BIO-2 Swainson's Hawk Measures

- One pre-construction survey shall be conducted to search for Swainson's hawk nests within 0.25 mile of the proposed Project, generally following guidance laid out by the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000).
- If active nests are found within 0.25 mile during the pre-construction and construction activities will occur during the Swainson's hawks nesting season (February 15 through September 15), a qualified biologist shall be present daily during any activities within the Project Area, including access routes, that are within 0.25 mile of the active nests to monitor the behavior of the potentially affected Swainson's hawks. The qualified biologist shall have the authority to order the cessation of all project activities if the bird(s) exhibits distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization [distress calls], agitation, failure to remain on nest, failure to deliver prey items for an extended time period, failure to maintain nest, etc.), which may cause reproductive failure (nest abandonment and loss of eggs and/or young).

8.1.2.4 Nesting Birds

There is minimal suitable nesting habitat for nesting birds throughout the Study Area, primarily within the landscaped/developed areas. All project activities and components have the potential to impact nesting birds. If construction activities are scheduled to occur during the avian nesting season (typically February 1 to August 31), AMM BIO-3 should be implemented to avoid impacts to nesting birds.

BIO-3 Pre-construction Nesting Bird Survey and Avoidance

- A general pre-construction nesting bird survey shall be conducted by a qualified biologist within seven days prior to the initiation of construction activities. If construction is stopped for more than seven days during the nesting season, a pre-construction survey should be conducted prior to the re-start of construction activities. Surveys shall include the disturbance area plus a 100-foot buffer for passerine species and a 300-foot buffer for raptors.
- If active nests are located, an appropriate avoidance buffer shall be established within which no work activity would be allowed which would impact these nests. The avoidance buffer would be established by the qualified biologist on a case-by-case basis based on the species and site conditions. Larger buffers may be required depending upon the status of the nest and the construction activities occurring near the nest. The buffer area(s) shall be closed to all construction personnel and equipment until juveniles have fledged and/or the nest is inactive. A qualified biologist shall confirm that breeding/nesting is complete, and the nest is no longer active prior to removal of the buffer. If work within a buffer area cannot be avoided, then a qualified biologist shall be present to monitor all project activities that occur within the buffer. The biological monitor should evaluate the nesting avian species for signs of disturbance and should have the ability to stop work.

8.2 Sensitive Natural Communities

The proposed project would have a significant effect on biological resources if it would:

- b) *Have a substantial adverse impact 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 Wildlife or U.S. Fish and Wildlife Service*

The freshwater wetland within the Project Area falls into the *Cattail Marsh Alliance (angustifolia, domingensis, latifolia Herbaceous Alliance)* based on the structure and composition of the herbaceous layer that is present on-site. The *Cattail Marsh Alliance* is a CDFW-listed Sensitive Natural Community, yet the freshwater wetland supporting this sensitive natural community is manmade, has no continuous surface connection to any another water source, and are not contiguous to other sensitive natural community types. The freshwater wetland would be completely avoided during the proposed Project activities, and so significant impacts are not expected to occur as a result of the proposed Project.

8.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

- 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.*

There are no potentially jurisdictional features present. Despite the freshwater wetland supporting riparian vegetation, it is hydrologically isolated from lakes, rivers, or streams; therefore, it is not likely to be considered jurisdictional pursuant to CFGC Section 1602. The freshwater wetland is assumed to be exempt from the State Water Resources Control Board's 2021 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State per

section IV.D.2.c.iv, which excludes artificially irrigated areas that would revert to dry land if irrigation were to cease. The proposed Project would not impact waters or wetlands.

8.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

- d) *Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.*

The Study Area is located within an *Essential Connectivity Area* Rank 1, as determined by the California Essential Habitat Connectivity, described as an area with limited connectivity opportunity. Rank 1 is the lowest quality habitat for wildlife movement within the California Essential Habitat Connectivity ranking system and is reserved for areas with greater than 50 percent urbanization.

Due to the relatively small size of the Study Area, and its location within existing regional industrial and urban development, the proposed Project is not anticipated to interfere with regional movement of wildlife species compared to the existing site conditions. Therefore, no impacts to wildlife movement would occur.

8.5 Local Policies and Ordinance

The proposed project would have a significant effect on biological resources if it would:

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance*

The proposed Project is not in conflict with San Joaquin County policies or ordinances protecting biological resources. Additionally, the project is consistent with the San Joaquin County General Plan (San Joaquin County 2016). Since this Project is in an unincorporated area of San Joaquin County, consistency with the SJMSCP is recommended (refer to Section 8.7 below). Additionally, the proposed Project proponent will be applying for an Administrative Use Permit and plans to comply with mitigation measures and conditions of the permit once approved.

8.6 Habitat Conservation Plan

The proposed project would have a significant effect on biological resources if it would:

- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.*

The proposed Project is located within the SJMSCP area. The Study Area is mapped as the agriculture land use type per the SJMSCP and is also located in the SJMSCP's Central/Southwest Transition Zone, which provides incidental take coverage for several Covered Species. The Central/Southwest Transition zone includes mostly row and field crop habitat with some grassland habitat and small creeks throughout. It comprises most of the city of Tracy and the entire Chrisman and Lammersville communities. If a proposed Project proponent opts into the SJMSCP, avoidance and minimization measures needed to offset impacts to Covered Species would be added as conditions to the County's Administrative Use Permit. If the Project proponent opts into the SJSCMP, the SJMSCP would primarily provide incidental take coverage if "take" were to occur to

Covered Species within the Study Area. Species within the Central/Southwest Transition Zone that have low potential (i.e., not likely to be found on the site) within the Study Area include valley elderberry longhorn beetle, California tiger salamander-central California DPS, burrowing owl, ferruginous hawk (*Buteo regalis*), northern harrier (*Circus hudsonius*), California horned lark (*Eremophila alpestris actia*), American badger, and the San Joaquin kit fox. Swainson's hawk has moderate potential to forage within the non-native grassland within the Study Area and could potentially nest on power poles in the southeastern portion of the Study Area.

The SJMSCP provides compensation for the effects of conversion of open space to non-open space uses on plant and wildlife species covered by the SJMSCP as well as non-wildlife resources such as agriculture, recreation, scenic value. A mitigation fee was paid to SJCOG to compensate for the 34.6 acres of temporary and permanent habitat loss of Agricultural Lands for the construction of the TPP in 2001. The proposed Project includes temporary and permanent impacts that fall within the previously mitigated 34.6 acres, as well as portions outside of the previously mitigated area. To compensate for areas outside of the 34.6 acres, AMM BIO-4 should be implemented.

BIO-4 Conversion of Open Space Land

The Applicant shall confer with SJCOG to confirm the areas of temporary and/or permanent Project impacts falling outside the area that was previously mitigated through the SJMSCP for conversion of Agricultural Habitat Land from Open Space use to non-Open space. . As applicable, the Applicant shall pay the mitigation fees for this acreage to SJCOG at a 1:1 ratio prior to the start of construction.

9 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary with regard to accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

10 References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. *The Jepson Manual: Vascular Plants of California*, second edition. University of California Press, Berkeley.
- Brown, L. and Amadon, D. 1970. *The Falconiformes: Eagles, Hawks and Falcons of the World*. McGraw-Hill, New York, 1968. 2 vols., Science.
- California Department of Fish and Wildlife. 2012. Staff Report on Burrowing Owl Mitigation. Available from <https://www.wildlife.ca.gov>. (Accessed June 2024).
- _____. 2019. Evaluation of The Petition from The Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered Under the California Endangered Species Act. April 4, 2019. Available from <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=166804&inline> (Accessed June 2024).
- _____. 2024a. California Natural Diversity Database (CNDDDB), RareFind 6. Available from <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx> (Accessed June 2024).
- _____. 2024b. Biogeographic Information and Observation System. <https://apps.wildlife.ca.gov/bios6/>. (Accessed June 2024).
- _____. 2024c. Wildlife Habitats – California Wildlife Habitat Relationships System. Available from <https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats>. (Accessed June 2024).
- _____. 2024d. California Sensitive Natural Communities. Available from <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline> June 2023. (Accessed June 2024).
- _____. 2024e. Petition Evaluation for Western Burrowing Owl (*Athene cunicularia hypugaea*). Report to the Fish and Game Commission. California Department of Fish and Wildlife, P.O. Box 944209, Sacramento CA 94244-2090. 19 pp.
- California Native Plant Society (CNPS). 2024a. Inventory of Rare and Endangered Plants of California (online edition, v9-01 0.0). Website <https://www.rareplants.cnps.org>. (Accessed June 2024).
- _____. 2024b. Rare Plant Program. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> (Accessed June 2024).
- Cornell Lab of Ornithology. 2024. All About Birds. Updated online: <https://www.allaboutbirds.org/> (Accessed June 2024)
- England, A. S., M. J. Bechard, and C. S. Houston. 1997. Swainson's hawk (*Buteo swainsoni*) in A. Poole and F. Gill (eds.), *The Birds of North America*, No. 265. The Academy of Natural Sci., Philadelphia, PA, and The American Ornithologists' Union. Washington, D.C.
- ESRI, 2024. ArcMap Aerial Imagery Basemap. Software available at: <https://www.esri.com/enus/arcgis/products/index> (Accessed June 2024).
- Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. Burrowing owl (*Speotyto cunicularia*), in A. Poole and F. Gill, editors, *The Birds of North America*, The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C., USA.

- Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Wildlife, Nongame Heritage Program. 156 pgs.
- Jepsen, S., S.F. Jordan, and R. Huff. 2014. Species fact sheet: Western bumblebee (*Bombus occidentalis*). 6 pp.
- Jepson Flora Project (eds.). 2022. Jepson eFlora. <https://ucjeps.berkeley.edu/eflora/>. (Accessed June 2024).
- Nafis, G. 2024. California Herps - A Guide to the Amphibians and Reptiles of California. Available at: <https://californiaherps.com/snakes/pages/c.f.ruddocki.html>. (Accessed June 2024).
- NatureServe. 2024. NatureServe Explorer. Arlington, Virginia. Available at: <http://explorer.natureserve.org>. (Accessed June 2024).
- San Joaquin, County of. 2016. San Joaquin County General Plan Policy Document. Available at https://www.sjgov.org/commdev/cgi-bin/cdyn.exe/file/Planning/General%20Plan%202035/Part%200%20Title%20Acknowledgments_2016-11-18.pdf (Accessed June 2024).
- San Joaquin Multiple Species Conservation Plan (SJMSCP). 2000. <https://www.sjcog.org/DocumentCenter/View/5> (Accessed June 2024).
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition* (MCV2). California Native Plant Society, Sacramento, CA. 1300 pp.
- Shuford, D.W. and Gardali, editors. 2008. *California Bird Species of Special Concern*. Studies of Western Birds. First edition.
- Sibley. 2016. *Sibley Birds West: Field Guide to Birds of Western North America*. Knopf, second edition.
- Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration.
- State Water Resource Control Board. 2021. California Water Board Adopts Statewide Wetland Definition and Procedures (Media Release). Prepared by California Environmental Protection Agency. Available from https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf (Accessed June 2024).
- Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline>. (Accessed June 2024).
- United States Department of Agriculture, Natural Resources Conservation Service. 2019. Web Soil Survey. Soil Survey Area: San Joaquin County, California. Soil Survey Data: Version 12. Available at: <http://websoilsurvey.nrcs.usda.gov/app/>. (Accessed June 2024).
- United States Fish and Wildlife Service. 2024a. National Wetlands Inventory wetlands mapper. Available at: <https://www.fws.gov/wetlands/data/mapper.html> (Accessed June 2024).
- _____. 2024b. Information for Planning and Consultation. Available at: <https://ecos.fws.gov/ipac/>. (Accessed June 2024).

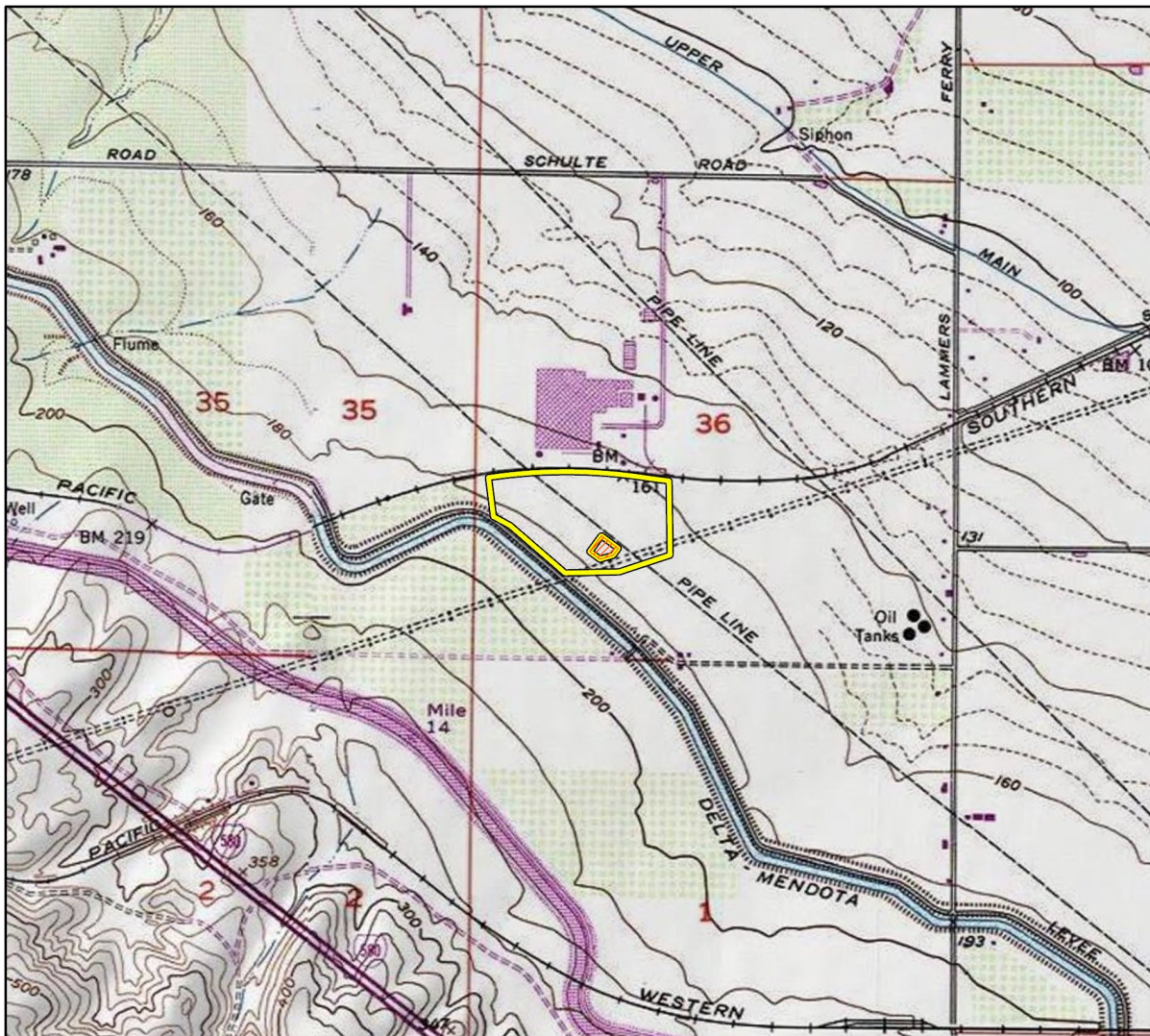
- _____. 2024c. Critical Habitat Portal. Available at: <http://criticalhabitat.fws.gov>. (Accessed June 2024).
- _____. 2024d. Valley Elderberry Longhorn Beetle. Available at: <https://www.fws.gov/species/valley-elderberry-longhorn-beetle-desmocerus-californicus-dimorphus> (Accessed June 2024).
- United States Geologic Survey (USGS). 2024. National Hydrography Dataset. Available at <http://nhd.usgs.gov/>. (Accessed June 2024).
- University of California, Berkeley. 2022. University and Jepson Herbaria. Available at <https://ucjeps.berkeley.edu/interchange/>. (Accessed June 2024).
- Williams, P.H., Thorp, R.W., Richardson, L.L., and Colla, S.R. 2014. The Bumble Bees of North America: An Identification Guide. Princeton University Press.
- Xerces Society, Wildlife Preservation Canada, York University, University of Ottawa, The Montreal Insectarium, The London Natural History Museum, BeeSpotter. 2024. Data accessed from Bumble Bee Watch. Available from <https://www.bumblebeewatch.org/maps/>. (Accessed August 2024).
- Zeiner, D., W.F. Laudenslayer, Jr., and K.E. Mayer. 1988. California's Wildlife. California Statewide Wildlife Habitat Relationship System, Volumes I, II, & III. California Department of Fish and Wildlife.

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Appendix A

Figures

Figure 1 Regional Location



Basemap provided by National Geographic Society, Esri and their licensors © 2024. Tracy Quadrangle. T02S R04E S36. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

24-15860 CR
Fig X Regional Location Topo

- Study Area
- Not in Study Area

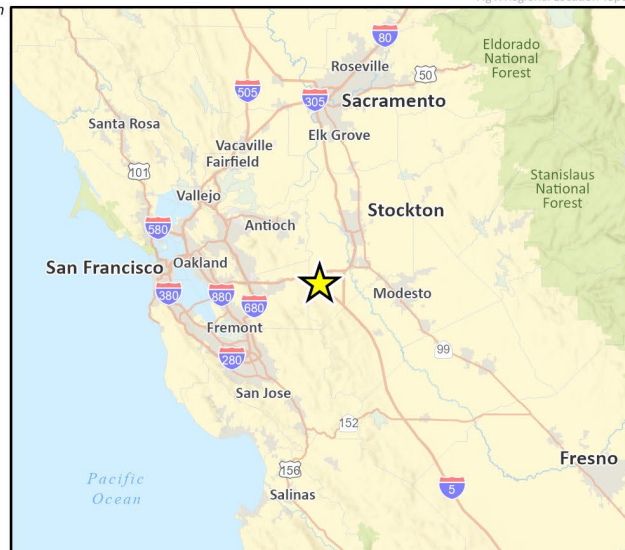
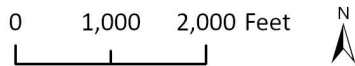


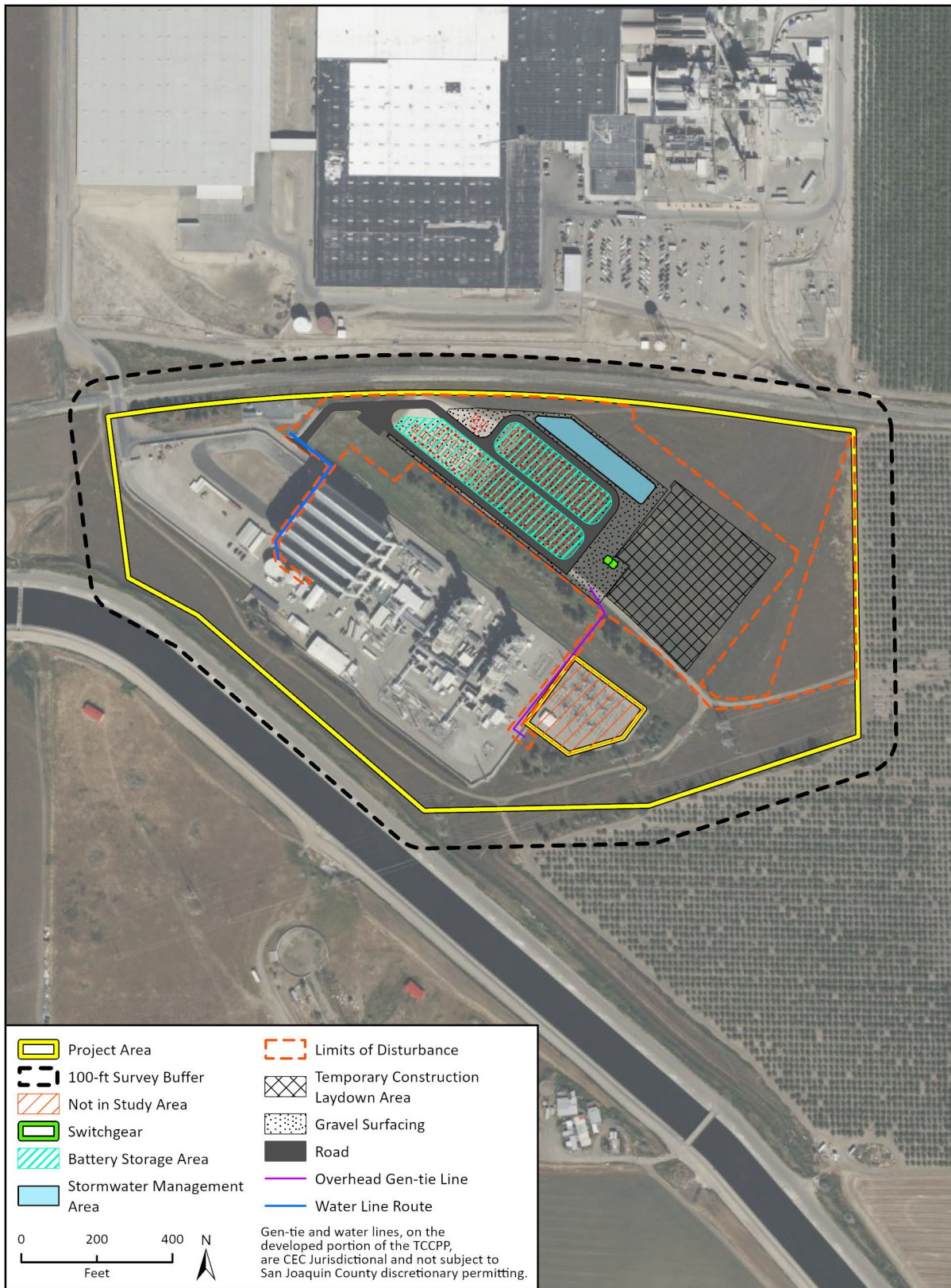
Figure 2 Project Area and Survey Buffer



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Fig X Study Area

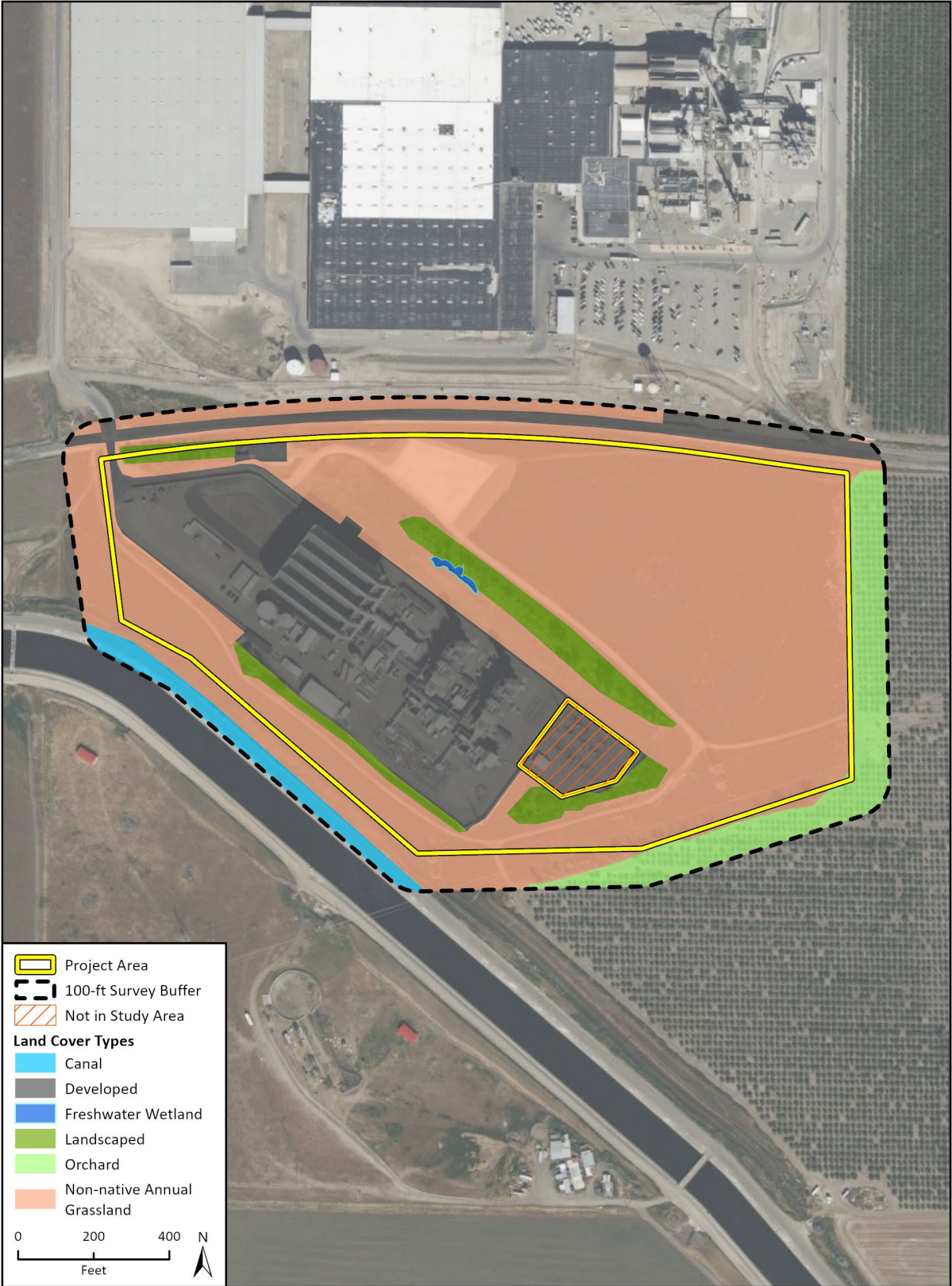
Figure 3 Project Site Plans



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Fig X Site Plan

Figure 4 Land Cover Types



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24-15860 B10
Fig X Land Cover

Appendix B

Floral and Faunal Compendium

Plant Species Observed Within the Study Area, March 2024

Scientific Name	Common Name	Status	Native or Introduced
Trees			
<i>Cupressus sempervirens</i>	Italian cypress	None	Introduced
<i>Casuarina sp.</i>	Unknown sheoak	None	Introduced
<i>Populus fremontii</i>	Fremont cottonwood	None	Native
<i>Pinus sp.</i>	Unknown pine	None	Native
<i>Schinus molle</i>	Peruvian pepper tree	None	Introduced
Shrubs			
<i>Frangula californica</i>	coffeeberry	None	Native
<i>Sambucus sp.</i>	Unknown elderberry	None	Native
Herbs			
<i>Amsinckia intermedia</i>	common fiddleneck	None	Native
<i>Brassica nigra</i>	black mustard	None	Introduced
<i>Carduus pycnocephalus</i>	Italian thistle	None	Introduced
<i>Lactuca serriola</i>	prickly lettuce	None	Introduced
<i>Trifolium hirtum</i>	rose clover	None	Introduced
<i>Vicia sativa ssp. nigra</i>	narrow-leaved vetch	None	Introduced
Graminoids			
<i>Alopecurus saccatus</i>	foxtail	None	Native
<i>Avena fatua</i>	wild oats	None	Introduced
<i>Bromus diandrus</i>	riggut brome	None	Introduced
<i>Bromus hordeaceus</i>	soft chess	None	Introduced
<i>Hordeum brachyantherum</i>	meadow barley	None	Native
<i>Hordeum marinum ssp. gussoneanum</i>	Mediterranean barley	None	Introduced

Wildlife Species Observed Within the Study Area, March 2024

Scientific Name	Common Name	Status	Native or Introduced
Birds			
<i>Aphelocoma californica</i>	California scrubjay	None; MBTA/CFGC; CDFW:WL	Native
<i>Buteo jamaicensis</i>	red-tailed hawk	None; MBTA/CFGC	Native
<i>Buteo swainsoni</i>	Swainson's hawk	ST; MBTA/CFGC	Native
<i>Calypte anna</i>	Anna's hummingbird	None; MBTA/CFGC	Native
<i>Columba livia</i>	rock dove	None	Introduced
<i>Corvus brachyrhynchos</i>	American crow	None; MBTA/CFGC	Native
<i>Corvus corax</i>	common raven	None; MBTA/CFGC	Native
<i>Falco sparverius</i>	American kestrel	None; MBTA/CFGC	Native
<i>Haemorhous mexicanus</i>	house finch	None; MBTA/CFGC	Native
<i>Melospiza melodia</i>	song sparrow	None; MBTA/CFGC	Native
<i>Sturnus vulgaris</i>	European starling	None	Introduced
<i>Tyrannus verticalis</i>	western kingbird	None; MBTA/CFGC	Native
<i>Zenaida macroura</i>	mourning dove	None; MBTA/CFGC	Native
Reptiles			
<i>Sceloporus occidentalis</i>	western fence lizard	None	Native
Invertebrates			
<i>Bombus sp.</i>	Unknown bumble bee	Unknown	Unknown

ST = State Threatened

MBTA = Migratory Bird Treaty Act

USFWS = US Fish and Wildlife Service

BCC = Birds of Conservation Concern

CDFW = California Department of Fish and Wildlife

WL = Watch List

CFGC = California Fish and Game Code Section 3503

Appendix C

Special-Status Species Evaluation Tables

Special-Status Plant and Lichen Species in the Regional Vicinity (Nine Quadrangles) of the Study Area

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CRPR	Habitat Requirements	Potential to Occur in Study Area	Rationale
<i>Allium sharsmithiae</i> Sharsmith's onion	None/None G2/S2 1B.3	Perennial bulbiferous herb. Chaparral, cismontane woodland. Rocky, serpentinite. Elevations: 1310-3935 feet. (400-1200 meters.) Blooms Mar-May.	Not Expected	The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Amsinckia grandiflora</i> large-flowered fiddleneck	FE/SE G1/S1 1B.1	Annual herb. Cismontane woodland, valley and foothill grassland. Annual grassland in various soils. Elevations: 885-1805 feet. (270-550 meters.) Blooms Apr-May.	Not Expected	The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	None/None G2T1/S1 1B.2	Annual herb. Playas, valley and foothill grassland, vernal pools. Alkaline. Elevations: 5-195 feet. (1-60 meters.) Blooms Mar-Jun.	Not Expected	No suitable vernal pools, playas or native grasslands are present within the Study Area. The Study Area is outside of the habitat range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	None/None G3T2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, valley and foothill grassland. Alkaline (sometimes). Elevations: 0-1835 feet. (0-560 meters.) Blooms Apr-Oct.	Not Expected	No suitable chenopod scrub, meadows, seeps or native grasslands are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Atriplex depressa</i> brittlescale	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools. Alkaline, clay. Elevations: 5-1050 feet. (1-320 meters.) Blooms Apr-Oct.	Not Expected	No suitable chenopod scrub, meadows, seeps, playas vernal pools or native grasslands are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Blepharizonia plumosa</i> big tarplant	None/None G1G2/S1S2 1B.1	Annual herb. Valley and foothill grassland. Clay (usually). Elevations: 100-1655 feet. (30-505 meters.) Blooms Jul-Oct.	Moderate Potential	Suitable clay soils and marginal grassland habitat are present within the Study Area. There are eleven CNDDDB occurrences within 5 miles of the Study Area, with the closest occurrence approximately 1.7 miles west. However, this occurrence is historical (2002).
<i>Caulanthus lemmonii</i> Lemmon's jewelflower	None/None G3/S3 1B.2	Annual herb. Pinyon and juniper woodland, valley and foothill grassland. Elevations: 260-5185 feet. (80-1580 meters.) Blooms Feb-May.	Not Expected	The Study Area is outside of the elevation range for this species. There is one CNDDDB occurrence within 5 miles, approximately 4.9 miles southwest.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CRPR	Habitat Requirements	Potential to Occur in Study Area	Rationale
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	None/None G3T2/S2 1B.1	Annual herb. Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. Elevations: 0-755 feet. (0-230 meters.) Blooms May-Oct.	Not Expected	No native grassland habitat is present in the Study Area. The Study Area is outside of the habitat range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Chlorogalum pomeridianum</i> var. <i>minus</i> dwarf soaproot	None/None G5T3/S3 1B.2	Perennial bulbiferous herb. Chaparral. Serpentine. Elevations: 1000-3280 feet. (305-1000 meters.) Blooms May-Aug.	Not Expected	No chaparral or serpentine soils are present within the Study Area. The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Cirsium crassicaule</i> slough thistle	None/None G1/S1 1B.1	Annual/perennial herb. Chenopod scrub, marshes and swamps, riparian scrub. Sloughs, riverbanks, and marshy areas. Elevations: 10-330 feet. (3-100 meet.) Blooms May-Aug.	Not Expected	No suitable chenopod scrub, marshes, swamps, riparian shrubs, sloughs or riverbanks are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Cirsium fontinale</i> var. <i>campylon</i> Mt. Hamilton thistle	None/None G2T2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, valley and foothill grassland. Seeps, serpentinite. Elevations: 330-2920 feet. (100-890 metes.) Blooms Apr-Oct.	Not Expected	No suitable chaparral, cismontane woodland, native grasslands or seeps are present within the Study Area. The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon larkspur	None/None G3T3/S3 1B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. Elevations: 640-3595 feet. (195-1095 meters.) Blooms Apr-Jun.	Not Expected	No suitable chaparral, cismontane woodland, coastal scrub or boggy meadows present within the Study Area. The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Delphinium recurvatum</i> recurved larkspur	None/None G2?/S2? 1B.2	Perennial herb. Chenopod scrub, cismontane woodland, valley and foothill grassland. Alkaline. Elevations: 10-2590 feet. (3-790 meters.) Blooms Mar-Jun.	Not Expected	No suitable chenopod scrub, cismontane woodlands, or native grasslands are present within the Study Area. There are CNDDDB occurrences within 5 miles.
<i>Eriastrum tracyi</i> Tracy's eriastrum	None/SR G3Q/S3 3.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Gravelly shale or clay; often in open areas. Elevations: 1035-5840 feet. (315-1780 meters.) Blooms May-Jul.	Not Expected	No suitable chenopod scrub, cismontane woodlands, or native grasslands are present within the Study Area. The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Eryngium racemosum</i> Delta button-celery	None/SE G1/S1 1B.1	Annual/perennial herb. Riparian scrub. Seasonally inundated floodplain on clay. Elevations: 10-100 feet. (3-30 meters.) Blooms Jun-Oct.	Not Expected	No suitable riparian scrub or floodplains present within the Study Area. The Study Area is outside the habitat range for this species. There are no CNDDDB occurrences within 5 miles.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CRPR	Habitat Requirements	Potential to Occur in Study Area	Rationale
<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	None/None G2/S2 1B.2	Annual/perennial herb. Valley and foothill grassland, vernal pools. Some sites on clay soil of granitic origin; vernal pools, within grassland. Elevations: 260-3200 feet. (80-975 meters.) Blooms Apr-Jun.	Not Expected	No suitable native grasslands or vernal pools are present within the Study Area. The Study Area is outside of the elevation range for this species. There are no CNDDB occurrences within 5 miles.
<i>Eschscholzia rhombipetala</i> diamond-petaled California poppy	None/None G1/S1 1B.1	Annual herb. Valley and foothill grassland. Alkaline, clay slopes and flats. Elevations: 0-3200 feet. (0-975 meters.) Blooms Mar-Apr.	Not Expected	No suitable native grasslands are present within the Study Area. There is only one historical CNDDB occurrence within 4.9 miles of the Study Area.
<i>Extriplex joaquinana</i> San Joaquin spearscale	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. In seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> , <i>Frankenia</i> , etc. Elevations: 5-2740 feet. (1-835 meters.) Blooms Apr-Oct.	Not Expected	No suitable chenopod scrub, meadows, seeps playas or native grasslands are present within the Study Area. There are no CNDDB occurrences within 5 miles.
<i>Fritillaria falcata</i> talus fritillary	None/None G2/S2 1B.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, lower montane coniferous forest. Mostly on serpentine talus, but occasionally found on granitics. Elevations: 985-5005 feet. (300-1525 meters.) Blooms Mar-May.	Not Expected	No suitable chaparral, cismontane woodland, or lower montane coniferous forests are present within the Study Area. The Study Area is outside of the elevation range for this species. There are no CNDDB occurrences within 5 miles.
<i>Helianthella castanea</i> Diablo helianthella	None/None G2/S2 1B.2	Perennial herb. Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Azonal soils, Partial shade (often), rocky (usually). Elevations: 195-4265 feet. (60-1300 meters.) Blooms Mar-Jun.	Not Expected	No suitable woodlands, chaparral, coastal scrub or native grasslands are present within the Study Area. The Study Area is found on the lowest edge of this species' elevation range. There are no CNDDB occurrences within 5 miles.
<i>Hesperolinon breweri</i> Brewer's western flax	None/None G2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Often in rocky serpentine soil in serpentine chaparral and serpentine grassland. Elevations: 100-3100 feet. (30-945 meters.) Blooms May-Jul.	Not Expected	No suitable chaparral, woodlands, native grasslands or rocky serpentine soils are present within the Study Area. There are no CNDDB occurrences within 5 miles.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CRPR	Habitat Requirements	Potential to Occur in Study Area	Rationale
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	None/None G5T3/S3 1B.2	Perennial rhizomatous herb (emergent). Marshes and swamps. Moist, freshwater-soaked river banks and low peat islands in sloughs; can also occur on riprap and levees. In California, known from the delta watershed. Elevations: 0-395 feet. (0-120 meters.) Blooms Jun-Sep.	Not Expected	No suitable marshes, swamps, riverbanks, sloughs or riprap are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Hoita strobilina</i> Loma Prieta hoita	None/None G2?/S2? 1B.1	Perennial herb. Chaparral, cismontane woodland, riparian woodland. Serpentine; mesic sites. Elevations: 100-2820ft. (30-860 meters.) Blooms May-Jul.	Not Expected	No suitable chaparral, woodlands, mesic sites, or serpentine soils present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Leptosyne hamiltonii</i> Mt. Hamilton coreopsis	None/None G2/S2 1B.2	Annual herb. Cismontane woodland. On steep shale talus with open southwestern exposure. Elevations: 1805-4265 feet. (550-1300 meters.) Blooms Mar-May.	Not Expected	No suitable cismontane woodlands are present within the Study Area. The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	None/SR G2/S2 1B.1	Perennial rhizomatous herb. Marshes and swamps, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. In brackish or freshwater. Elevations: 0-35 feet. (0-10 meters.) Blooms Apr-Nov.	Not Expected	No suitable marshes, swamps, tidal zones, or riparian scrubs are present within the Study Area. There is one CNDDDB occurrence within 5 miles, and it is approximately 5 miles north of the Study Area. However, this occurrence is historical (1991).
<i>Limosella australis</i> Delta mudwort	None/None G4G5/S2 2B.1	Perennial stoloniferous herb. Marshes and swamps, riparian scrub. Usually on mud banks of the Delta in marshy or scrubby riparian associations; often with <i>Lilaeopsis masonii</i> . Elevations: 0-10 feet. (0-3 meters.) Blooms May-Aug.	Not Expected	No suitable marshes, swamps, or riparian scrubs are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Madia radiata</i> showy golden madia	None/None G3/S3 1B.1	Annual herb. Cismontane woodland, valley and foothill grassland. Mostly on adobe clay in grassland or among shrubs. Elevations: 80-3985 feet. (25-1215 meters.) Blooms Mar-May.	Not Expected	No suitable cismontane woodland, native grasslands, or shrubs are present within the Study Area. However, grassland habitat is present. There are no CNDDDB occurrences within 5 miles.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CRPR	Habitat Requirements	Potential to Occur in Study Area	Rationale
<i>Malacothamnus hallii</i> Hall's bush-mallow	None/None G2/S2 1B.2	Perennial deciduous shrub. Chaparral, coastal scrub. Some populations on serpentine. Elevations: 35-2495 feet. (10-760 meters.) Blooms May-Sep.	Not Expected	No suitable chaparral, coastal shrub or shrubs are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Micropus amphibolus</i> Mt. Diablo cottonweed	None/None G3G4/S3S4 3.2	Annual herb. Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland. Bare, grassy or rocky slopes. Elevations: 150-2705 feet. (45-825 meters.) Blooms Mar-May.	Not Expected	No suitable chaparral, upland forest, woodlands, native grasslands, or rocky slopes are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Myosurus minimus</i> ssp. <i>apus</i> little mouse-tail	None/None G5T2Q/S2 3.1	Annual herb. Valley and foothill grassland, vernal pools. Alkaline soils. Elevations: 65-2100 feet. (20-640 meters.) Blooms Mar-Jun.	Not Expected	No suitable vernal pools or native grasslands are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Navarretia nigelliformis</i> ssp. <i>radians</i> shining navarretia	None/None G4T2/S2 1B.2	Annual herb. Cismontane woodland, valley and foothill grassland, vernal pools. Apparently in grassland, and not necessarily in vernal pools. Elevations: 215-3280 feet. (65-1000 meters.) Blooms Mar-Jul.	Not Expected	No suitable woodlands, native grasslands or vernal pools are present within the Study Area. The Study Area is outside this species' elevation range. There is one CNDDDB occurrence approximately 3.9 miles southwest of the Study Area. However, this occurrence is historical (1997).
<i>Phacelia phacelioides</i> Mt. Diablo phacelia	None/None G2/S2 1B.2	Annual herb. Chaparral, cismontane woodland. Adjacent to trails, on rock outcrops and talus slopes; sometimes on serpentine. Elevations: 1640-4495 feet. (500-1370 meters.) Blooms Apr-May.	Not Expected	No suitable chaparral, woodland or rocky outcrops are present within the Project Area. The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.
<i>Puccinellia simplex</i> California alkali grass	None/None G2/S2 1B.2	Annual herb. Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools. Alkaline, vernal mesic. Sinks, flats, and lake margins. Elevations: 5-3050 feet. (2-930 meters.) Blooms Mar-May.	Not Expected	No chenopod scrub, meadows, seeps, native grasslands or vernal pools present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Ravenella exigua</i> chaparral harebell	None/None G2/S2 1B.2	Chaparral. Rocky sites, usually on serpentine in chaparral. 275-1250 meters. Blooms May-Jun.	Not Expected	The Study Area is outside of the elevation range for this species. There are no CNDDDB occurrences within 5 miles.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CRPR	Habitat Requirements	Potential to Occur in Study Area	Rationale
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625 feet. (15-800 meters.) Blooms Jan-Apr.	Not Expected	No suitable chaparral, cismontane woodland, or coastal scrubs are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Spergularia macrotheca</i> var. <i>longistyla</i> long-styled sand-spurrey	None/None G5T2/S2 1B.2	Perennial herb. Marshes and swamps, meadows and seeps. Alkaline. Elevations: 0-835 feet. (0-255 meters.) Blooms Feb-May.	Not Expected	No suitable marshes, swamps, meadows or seeps are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	None/None G4T3/S1 2B.1	Annual herb. Marshes and swamps, meadows and seeps, riparian forest, vernal pools. Mud flats of vernal lakes, drying riverbeds, alkali meadows. Elevations: 15-1425 feet. (5-435 meters.) Blooms May-Sep.	Not Expected	No suitable marshes, swamps, meadows, seeps, vernal pools or riparian forest present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Tropidocarpum capparideum</i> caper-fruited tropidocarpum	None/None G1/S1 1B.1	Annual herb. Valley and foothill grassland. Alkaline clay. Elevations: 5-1495 feet. (1-455 meters.) Blooms Mar-Apr.	Low Potential	Suitable clay soils and moderately suitable grassland are present within the Study Area. There are five CNDDDB occurrences within 5 miles. The closest occurrence is 0.7 miles west of the Study Area. However, this occurrence is historical (1987).

Regional Vicinity refers to within the *Malaga*, California USGS 7.5-minute quadrangle and the eight surrounding quadrangles.

FE = Federally Endangered FT = Federally Threatened

SE = State Endangered ST = State Threatened SR = State Rare

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind3.

CRPR (CNPS California Rare Plant Rank):

1A=Presumed Extinct in California

1B=Rare, Threatened, or Endangered in California and elsewhere

2A=Plants presumed extirpated in California, but more common elsewhere

2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere

3=Need more information (a Review List)

4=Plants of Limited Distribution (a Watch List)

CRPR Threat Code Extension:

.1=Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2=Fairly endangered in California (20-80% occurrences threatened)

.3=Not very endangered in California (<20% of occurrences threatened)

Special-Status Animal Species in the Regional Vicinity (Nine Quad) of the Study Area

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
Invertebrates				
<i>Anthicus sacramento</i> Sacramento anthicid beetle	None/None G4/S4	Restricted to sand dune areas. Inhabit sand slipfaces among bamboo and willow but may not depend on presence of these plant species.	Not Expected	No suitable sand slipfaces or sand dunes present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Bombus crotchii</i> Crotch's bumble bee	None/SCE G2/S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Habitats include open grassland, shrublands, chaparral, desert margins including Joshua tree and creosote scrub, and semi-urban settings. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Moderate Potential	Suitable foraging resources are present within the Study Area including <i>Amsinckia</i> , <i>Trifolium</i> , <i>Vicia</i> , and <i>Carduus</i> . Suitable nesting habitat including small mammal burrows, and suitable overwintering habitat including loose bare soil and vegetation mulch are present within the Study Area. There is one CNDDDB occurrence from 2023 located approximately 3.3 miles northeast of the Project Area.
<i>Bombus occidentalis</i> western bumble bee	None/SCE G3/S1	Historically found in western North America. This species is a generalist and is found on many different types of flowering plants and crops. May be found in open grassland, parks and gardens, prairies, and mountain meadows. Once common and widespread, species has declined precipitously from central CA to southern British Columbia, perhaps from disease.	Not Expected	While suitable foraging, nesting, and overwintering resources are present within the Study Area, this species has not been observed within 60 miles of the Study Area since 1994. Therefore, this species is not expected to occur within the Study Area.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT/None G3/S3	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Not Expected	No suitable seasonal wetland habitat is present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Branchinecta mesovallensis</i> midvalley fairy shrimp	None/None G2/S2S3	Vernal pools in the Central Valley.	Not Expected	No suitable vernal pools are present within the Study Area. There are no CNDDDB occurrences within 5 miles.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT/None G3T3/S3	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for “stressed” elderberries.	Low Potential	Blue elderberry has been observed within the Tracy quadrangle, and there is elderberry found within the Study Area. There are two CNDDDB occurrences within 5 miles. The closest occurrence is approximately 4 miles south. However, this occurrence is historical (2002).
<i>Gonidea angulata</i> western ridged mussel	None/None G3/S2	Primarily creeks and rivers and less often lakes. Originally in most of state, now extirpated from Central and Southern California.	Not Expected	No suitable aquatic habitat is present within the Study Area. There is one CNDDDB occurrence 4.6 miles from the Project Area, in the Delta Mendota Canal. However, this occurrence is historical (1974).
<i>Hygrotus curvipes</i> curved-foot hygrotus diving beetle	None/None G2/S2	Aquatic; known only from Alameda and Contra Costa counties. .	Not Expected	No suitable aquatic habitat is present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Linderiella occidentalis</i> California linderiella	None/None G2G3/S2S3	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	Not Expected	Moderately suitable stomar clay loam soils are present within the Study Area. However, there are no seasonal pools present within the Study Area. There is one CNDDDB occurrence within 5 miles, approximately 4.8 miles southwest of Study Area.
Fish				
<i>Acipenser medirostris</i> pop. 1 green sturgeon – southern DPS	FT/None G2T1/S1	Spawning site fidelity. Spawns in the Sacramento, Feather and Yuba Rivers. Presence in upper Stanislaus and San Joaquin Rivers may indicate spawning. Non-spawning adults occupy marine/estuarine waters. Delta Estuary is important for rearing juveniles. Spawning occurs primarily in cool (11-15° C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.	Not Expected	No suitable aquatic habitat is present within the Study Area. There is one CNDDDB occurrence within 5 miles, approximately 4.8 miles from Study Area. However, this occurrence is within Old River, a tributary of the San Joaquin River, which is the southern edge of this species' range.
<i>Hypomesus transpacificus</i> Delta smelt	FT/SE G1/S1	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	Not Expected	No suitable aquatic habitat is present within the Study Area. There are no CNDDDB occurrences within 5 miles.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead – Central Valley DPS	FT/None G5T2Q/S2	Populations in the Sacramento and San Joaquin rivers and their tributaries.	Not Expected	No suitable aquatic habitat is present within the Study Area. The Study Area is outside of the range of the species. There are no CNDDDB occurrences within 5 miles.
<i>Spirinchus thaleichthys</i> longfin smelt	FPE/ST G5/S1	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt but can be found in completely freshwater to almost pure seawater.	Not Expected	No suitable aquatic habitat is present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Thaleichthys pacificus</i> eulachon	FT/None G5/S1	Found in Klamath River, Mad River, Redwood Creek, and in small numbers in Smith River and Humboldt Bay tributaries. Spawn in lower reaches of coastal rivers with moderate water velocities and bottom of pea-sized gravel, sand, and woody debris.	Not Expected	No suitable aquatic habitat is present within the Study Area. The Study Area is outside of the range of the species. There are no CNDDDB occurrences within 5 miles.
Amphibians				
<i>Ambystoma californiense pop. 1</i> California tiger salamander – central California DPS	FT/ST G2G3T3/S3 WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Low Potential	Marginal ruderal grasslands, and a low density of ground squirrel burrows are present within the Study Area. No vernal pools are present. There are four CNDDDB occurrences within 5 miles. All four CNDDDB occurrences are at approximately 4 miles southwest of the Study Area.
<i>Rana boylei pop. 4</i> foothill yellow-legged frog – central coast DPS	FT/SE G3T2/S2	San Francisco Peninsula and Diablo Range south of San Francisco Bay Estuary, and south through the Santa Cruz and Gabilan Mountains east of the Salinas River in the southern inner Coast Ranges. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	Not Expected	No suitable shallow streams with rocky substrate are present. There are two CNDDDB occurrences within 5 miles. Both occurrences are historical (1974 and 1977) and are approximately 3.75 miles from the Study Area.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Rana draytonii</i> California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not Expected	No suitable permanent sources of deep water are present within the Study Area. There are twelve CNDDDB occurrences within the 5 miles. Each occurrence is on or near sources of water. The closest occurrence is approximately 2 miles southwest of the Study Area. Critical Habitat is designated 1.3 miles to the west of the Study Area.
<i>Spea hammondi</i> western spadefoot	FPT/None G2G3/S3S4 SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not Expected	No suitable grassland habitat is present within the Study Area. Vernal pools are not present within the Study Area. One CNDDDB occurrence was recorded within 5 miles, approximately 4.2 miles south of the Project Area.
Reptiles				
<i>Anniella pulchra</i> Northern California legless lizard	None/None G3/S2S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Not Expected	No suitable high moisture sandy or loamy soils are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Arizona elegans occidentalis</i> California glossy snake	None/None G5T2/S2 SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Not Expected	No vernal pools or native grasslands are present for breeding and egg laying. The closest CNDDDB occurrences are over 3.6 miles south of the Study Area.
<i>Emys marmorata</i> western pond turtle	FPT/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected	No suitable aquatic habitat is present within the Study Area. Two CNDDDB occurrences were recorded within the 5-mile buffer, but both are more than 3.8 miles from the Study Area.
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	None/None G5T2T3/S3 SSC	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and oviposition sites.	Low Potential	Suitable mammal burrows and open, dry habitats are present within the Study Area. Three CNDDDB occurrences were recorded within 5 miles of the Study Area.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	FT/ST G4T2/S2	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna and woodland habitats. Mostly south-facing slopes and ravines, with rock outcrops, deep crevices or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses.	Not Expected	Preferred chaparral and scrub habitats are not present within the Study Area. Although there are abundant rodent burrows, only one historical CNDDDB occurrence was recorded 5 miles southwest of the Study Area.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G4/S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Low Potential	No suitable cover and sandy washes are present within the Study Area. However, this species can be found along roads and may travel onto the site via railroad crossing. The most recent CNDDDB occurrence within 5 miles of the Study Area is from 2003.
Birds				
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G1G2/S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected	Open water is present near the Study Area, yet no suitable nesting habitat is present. Although mostly found near open water habitats, two nesting sites (one verified and one presumed) were recorded in CNDDDB within 1.9-2.4 miles of the Study Area.
<i>Ammodramus savannarum</i> grasshopper sparrow	None/None G5/S3 SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Not Expected	No suitable dense native grasslands on rolling hills, plains and mountain slopes are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Aquila chrysaetos</i> golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not Expected	No suitable rolling foothills, mountain areas, sage-juniper flats and desert habitat are present within the Study Area. Only one historical CNDDDB occurrence was within 5 miles, and it was approximately 5 miles from the Study Area.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Asio flammeus</i> short-eared owl	None/None G5/S2 SSC	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Not Expected	No suitable swamp lands, meadows, irrigated alfalfa fields or tall grasses are present within the Study Area. There is one CNDDDB occurrence within 5 miles, and it was approximately 4.95 miles from the Study Area.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S2 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Low Potential	No suitable deserts or scrublands habitat present within the Study Area. Marginally suitable grasslands are available within the Study Area. A low density of California ground squirrels is present within the Study Area. All four protocol surveys yielded negative results. There are fifty CNDDDB occurrences within 5 miles of the Study Area, with the closest nest being found 0.3 miles northwest of the Study Area.
<i>Buteo regalis</i> ferruginous hawk	None/None G4/S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Low Potential	Suitable foraging habitat is present in non-native grasslands within the Study Area. There are two CNDDDB occurrences within the 5 mile buffer, although both occurrences are historical (1993).
<i>Buteo swainsoni</i> Swainson's hawk	None/ST G5/S4	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Present	Suitable foraging habitat is present within the Study Area. Utility poles and smaller trees are present within the Study Area that may provide nesting sites. There are seven CNDDDB nest occurrences within the 5 mile buffer, with the closest located approximately 1 mile northeast of the Study Area. This species was observed during the March 2024 survey.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Circus hudsonius</i> northern harrier	None/None G5/S3 SSC	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Low Potential	Suitable grassland habitat for foraging is present within the Study Area, however, marshes are not present within Study Area. There is one CNDDDB occurrence of a nest approximately 3.3 miles northwest from the Study Area.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT/SE G5T2T3/S1	Riparian forests,, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not Expected	No suitable riparian habitat along larger river systems is present within the Study area. There are no CNDDDB occurrences within 5 miles.
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Not Expected	Moderately suitable grassland habitat is present within the Study Area; however, the grassland habitat is not within close proximity to dense-topped trees for nesting and perching. There are no CNDDDB occurrences within 5 miles.
<i>Eremophila alpestris actia</i> California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County, as well as main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Low Potential	No suitable coastal regions, "bald hills", mountain meadows are present within the Study Area. However, ruderal grassland habitat is present. There are six CNDDDB occurrences within 5 miles. The closest occurrence is approximately 3 miles southwest of the Project Area.
<i>Falco columbarius</i> merlin	None/None G5/S3S4 WL	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.	Not Expected	No suitable seacoast, tidal estuaries, or open woodland habitat present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Lanius ludovicianus</i> loggerhead shrike	None/None G4/S4 SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Not Expected	No suitable pinyon juniper, Joshua tree, riparian woodlands, desert oases, scrubs or washes present within the Study Area. There are no CNDDDB occurrences within 5 miles.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Melospiza melodia</i> <i>pop. 1</i> song sparrow ("Modesto" population)	None/None G5T3?Q/S3? SSC	Central lower basin of Great Valley, from Colusa County south to Stanislaus County and east of Suisun Marshes. Breeds chiefly below 200 feet elevation. Freshwater marshes, riparian thickets, sparsely vegetated irrigation canals, and Valley Oak restoration sites. Cover consists of willow and nettle thickets, growths of tules and cattails, and riparian oak forests with sufficient understory of blackberry.	Not Expected	No suitable freshwater marshes or riparian thickets are present within the Study Area. There are minimal cattails within the freshwater wetland in the Study Area however, they are dead. There are no CNDDDB occurrences within 5 miles.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE/SE G5T2/S3	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Not Expected	No suitable riparian habitat is present. There is one CNDDDB occurrence approximately 4 miles from the Study Area, however this occurrence is historical (1932).
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	None/None G5/S3 SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	Not Expected	No suitable aquatic habitat is present within the Study Area. There are no CNDDDB occurrences within 5-miles of the Study Area.
Mammals				
<i>Antrozous pallidus</i> pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not Expected	Suitable dry open grassland habitat is present within the Study Area; however, roosting habitat such as rock outcrops and caves are not present. There is one CNDDDB occurrence approximately 4.9 miles from the Study Area, however this occurrence is historical (1941).
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	Not Expected	No suitable foraging and roosting habitats are present within the Study Area. There is one historical CNDDDB occurrence within 5 miles, approximately 4.8 miles from the Study Area.

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Eumops perotis californicus</i> western mastiff bat	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	Not Expected	No suitable foraging or roosting habitats are present within the Study Area. There is one CNDDDB occurrence within 5 miles, approximately 4.9 miles from the Study Area. However, this occurrence is historical (1991).
<i>Neotoma fuscipes riparia</i> riparian (=San Joaquin Valley) woodrat	FE/None G5T1/S1 SSC	Occurs in riparian habitats along the San Joaquin, Stanislaus, and Tuolumne rivers. Builds middens out of grasses, leaves, and woody debris.	Not Expected	No suitable riparian habitat is present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Perognathus inornatus</i> San Joaquin pocket mouse	None/None G2G3/S2S3	Grassland, oak savanna and arid scrubland in the southern Sacramento Valley, Salinas Valley, San Joaquin Valley and adjacent foothills, south to the Mojave Desert. Associated with fine-textured, sandy, friable soils.	Not Expected	No suitable oak savannas or arid scrublands are present within the Study Area. However, non-native grassland is present within the Project Area. There are three CNDDDB occurrences, with the closest approximately 3.5 miles southeast of the Study Area.
<i>Sylvilagus bachmani riparius</i> riparian brush rabbit	FE/SE G5T1/S2	Riparian areas on the San Joaquin River in northern Stanislaus County. Dense thickets of wild rose, willows, and blackberries.	Not Expected	No suitable riparian habitat with dense thickets of wild rose, willows and/or blackberries are present within the Study Area. There are no CNDDDB occurrences within 5 miles.
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Low Potential	Suitable dry habitat, soils and rodent burrows present within the Study Area. Food sources may also be present within the Study Area. There are nine CNDDDB occurrences within 5 miles. The closest occurrence is approximately 2.6 miles southwest of the Study Area. However, this occurrence is historical (1993).

Scientific Name Common Name	Status Fed/State ESA G-Rank/S-Rank CDFW	Habitat Requirements	Potential for Impact	Potential for Occurrence
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	FE/ST G4T2/S3	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	Low Potential	Minimally suitable grassy habitat and loose textured sandy soils are present within the Study Area. Twelve CNDDDB occurrences were recorded within 5 miles of the Study Area. SJKF Habitat Conservation Area is located on the northwestern edge of the Study Area. This species may transient the Study Area.
<p>Regional Vicinity refers to within the <i>Tracy</i>, California USGS 7.5-minute quadrangle and the eight surrounding quadrangles.</p> <p>FT = Federally Threatened SE = State Endangered</p> <p>FC = Federal Candidate Species ST = State Threatened</p> <p>FE = Federally Endangered FPE = Federally Proposed Endangered</p> <p>FP = Fully Protected FPT = Federally Proposed Threatened</p> <p>G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind 5</p> <p>SCC = CDFW Species of Special Concern</p> <p>PPT = Parts Per Thousand</p>				

Appendix D

Representative Site Photographs



Photograph 1. View from the west of the TCCPP of the non-native annual grassland, facing south. March 21, 2024.



Photograph 2. View of the canal from the northwest portion of the Study Area boundary. The San Joaquin Kit Fox Habitat Conservation Area is along the far eastern portion of this photo. March 21, 2024.



Photograph 3. View looking southeast with the canal, landscaped areas, and the San Joaquin Kit Fox Habitat Conservation Area on the west side of the TCCPP. March 21, 2024.



Photograph 4. View looking east from the southwest corner of the Study Area. March 21, 2024.



Photograph 5. View looking southwest from the southern portion of the Study Area. March 21, 2024.



Photograph 6. View looking northwest from the southeast corner of the TCCPP within the Study Area. March 21, 2024.



Photograph 7. View looking north from the southeast corner of the TCCPP within the Study Area. March 21, 2024.



Photograph 8. View looking north from the eastern edge of the Study Area near the almond orchards that surround the Study Area. March 21, 2024.



Photograph 9. View of the non-native annual grassland facing north, in the eastern portion of the Study Area. March 21, 2024.

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Appendix E

Protocol Survey Letter Report for Burrowing Owls



Rincon Consultants, Inc.

180 North Ashwood Avenue
Ventura, California 93003
805-644-4455

August 30, 2024
Project No: 24-15860

Jon Boyer
Tracy BESS LLC
4350 Executive Drive, Suite 320
San Diego, California 92121
Via email: jboyer@mrpgenco.com

Subject: Burrowing Owl Habitat Assessment and Focused Survey Results for the Tracy BESS LLC - Long Duration Energy Storage Project in San Joaquin County, California

Dear Mr. Boyer:

This report documents the findings of a western burrowing owl (*Athene cunicularia*) habitat assessment, focused burrow survey, and focused burrowing owl survey conducted for the Tracy Long Duration Energy Storage (LDES) Project (Project). The Project is located on the MRP San Joaquin Energy LLC-owned Tracy Combined-Cycle Power Plant (TCCPP) site. According to a query of the California Natural Diversity Database (CNDDB), the project parcel is located within historically occupied burrowing owl habitat. The purpose of this habitat assessment and focused surveys were to identify and document suitable habitat for and the presence/absence of western burrowing owls.

Project Location and Description

The Project is located within the approximately 39-acre MRP San Joaquin Energy LLC-owned TCCPP site, with current Assessor Parcel Number 209-240-32 (herein referred to as the Project Area). The Project Area is located east of US Highway 580, immediately south of the Union Pacific Railroad and northeast of the Delta-Mendota Canal near Tracy California. An additional 100-foot survey buffer surrounds the Project Area. The Study Area includes both the Project Area and surrounding 100-foot survey buffer. The Study Area is in an area of unincorporated San Joaquin County consisting of utility infrastructure, paved roads, and agriculture.

Burrowing Owl Natural History

Western burrowing owl is a California Department of Fish and Wildlife (CDFW) species of special concern (CDFW 2024a). The California Fish and Game Commission (CFGF) received a petition in March 2024 to list this species under the California Endangered Species Act (CESA). If the CFGF accepts the petition for consideration the species would be considered a “candidate” and would be afforded the same protections as a threatened and endangered species under the CESA. This decision is anticipated to be made in Summer/Fall 2024. Primarily restricted to the western United States and Mexico, its habitat includes dry, open, short-grass areas often associated with fossorial (adapted for burrowing or digging) mammals, such as California ground squirrel (*Otospermophilus beecheyi*) and American badger (*Taxidea taxus*).

The burrowing owl is crepuscular (active primarily during dusk and dawn) and perches during daylight hours at the entrance to its burrow or on low posts. Nesting typically occurs from March

through August. Burrowing owls form a pair-bond for more than one (1) year and exhibit high site fidelity, reusing the same burrow year after year. The female remains inside the burrow during most of



the egg laying and incubation periods and is fed by the male through the brooding period. Western burrowing owls are opportunistic feeders, consuming a diet that includes arthropods, small mammals, birds, and occasionally amphibians and reptiles (Shuford and Gardali 2008). Typical burrowing owl sign includes, but is not limited to, feathers, white-wash, and pellets.

The western burrowing owl was once abundant and widely distributed in coastal southern California, but it has declined in counties such as Los Angeles, Orange, San Diego, Riverside, and San Bernardino. Urbanization has greatly reduced the amount of suitable habitat for this species. Other contributions to the decline of burrowing owls include habitat destruction, insecticide poisoning, rodenticide for squirrels and prairie dogs, and collisions with automobiles (Shuford and Gardali 2008).

Methodology

The burrowing owl habitat assessment and first focused burrowing owl survey were conducted concurrently on April 11, 2024, by Rincon biologists Grace Myers and Christian Knowlton. Both Ms. Myers and Mr. Knowlton have knowledge of burrowing owl life history and experience identifying burrowing owls and their sign. Focused breeding season burrowing owl surveys were performed by systematically searching for potential foraging and nesting habitat within the Project Area, plus a 100-foot survey buffer (i.e., the Study Area). The surveys were conducted according to guidelines outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The project site was assessed on foot by the biologist(s) walking transects spaced approximately 10 meters apart, appropriately adjusted to allow for 100 percent visual coverage of the ground surface. Due to site constraints (i.e., adjacent private property, railroad tracks, canal), some of the 100-foot buffer was inaccessible on foot; therefore, the biologists visually inspected these areas with binoculars.

As described in Table 1 below, a habitat assessment was conducted on April 11, 2024. Potentially suitable California ground squirrel burrows were observed; therefore, focused breeding season owl surveys were conducted on April 11, May 8, May 20, and June 20, 2024. Suitable habitat was identified based on the presence of low vegetation cover, potential burrows, and perch sites. If found, burrow locations suitable for burrowing owl occupancy were mapped using a handheld Global Positioning System unit capable of recording positions at sub-meter accuracy.

Survey dates and conditions are reflected in Table 1 below.

Table 1 Survey Dates and Site Conditions

Date	Time (24-hour)	Surveyors	Air Temp (°F)	Wind Speed (mph)	Weather Notes	Type of Survey Conducted
April 11, 2024	0800 – 1130	Christian Knowlton and Grace Myers	57-75	0-5	0% cloud cover	Habitat Assessment, 1st Focused Breeding Season Survey
May 8, 2024	0800 – 1115	Christian Knowlton and Grace Myers	54-65	0-5	0% cloud cover	2nd Focused Breeding Season Survey
May 30, 2024	0815–1100	Christian Knowlton and Grace Myers	76-82	2.5-5	0% cloud cover	3rd Focused Breeding Season Survey
June 20, 2024	0815–1100	Christian Knowlton and Grace Myers	65-80	2.6-9.2	10% cloud cover	4th Focused Breeding Season Survey



Existing Site Conditions

Surrounding Land Use

Surrounding land uses include agriculture, transportation, utility infrastructure, and residential development. The Delta-Mendota Canal runs along the western site of the Study Area while a railroad runs along the northern boundary. The areas to the east and south of the Study Area are comprised of almond orchards.

Topography and Soils

At an elevation of approximately 155 to 196 feet above mean sea level, the topography of the Study Area is generally flat, and its immediate surroundings are characterized primarily by utility infrastructure, paved roads, and agriculture. Geologically, the site is underlain by quaternary alluvium and marine and non-marine sedimentary rocks comprising alluvium, lake, playa, and terrace deposits, both unconsolidated and semi-consolidated, dating from the Pleistocene to Holocene. Based on the most recent U.S. Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS) soil survey for San Joaquin County, California (USDA, NRCS 2019), the Study Area contains two soil map units:

- **Capay clay, 0 to 1 percent slopes, MLRA 17** occurs on basin floors, alluvial fans, and basin rims. This soil series is derived from mostly sandstone and shale. This soil type makes up approximately 67 percent of the Project Area. A typical soil profile is very firm throughout. This soil is considered moderately well drained. Depth to a restrictive layer is more than 80 inches. This soil is not considered hydric.
- **Stomar clay loam, 0 to 2 percent slopes** occurs on alluvial fans and terraces. This soil series is derived from alluvial derived from sedimentary rocks. This soil type makes up approximately 33 percent of the Project Area. A typical soil profile contains many fine roots and is very moist throughout. This soil is considered well drained. Depth to a restrictive layer is more than 80 inches. This soil is not considered hydric.

Vegetation Communities and Land Cover Types

Two vegetation communities and four additional land cover types were observed within the Study Area. A map approximating the various vegetation communities and land cover types that occur within the Study Area is shown in Figure 2. The vegetation communities and land cover types observed in the Study Area are: 1) non-native annual grassland; 2) freshwater wetland; 3) landscaped; 4) developed; 5) canal; and 6) orchard. Brief descriptions of the land cover types present in the Study Area are provided below. Vegetation community characterizations for this analysis are primarily based on the classification systems presented in *A Manual of California Vegetation, Second Edition* (MCV2) but have been modified slightly to reflect the existing site conditions most accurately (Sawyer et al. 2009). *The Preliminary Description of Terrestrial Natural Communities of California* (Holland 1986) has been superseded by the MCV2 but is included for additional reference, as is the California Wildlife Habitat Relationships System (CWHR; CDFW 2024a) as applicable. Plant species nomenclature and taxonomy used for this report follows the treatments within the second edition of *The Jepson Manual* (Baldwin et al. 2012).



Non-native Annual Grassland

Non-native annual grassland is the dominant vegetation community, covering approximately 31.6 acres of the Study Area. In the Study Area, characteristic non-native annual grass species observed were wild oats (*Avena fatua*) and ripgut brome (*Bromus diandrus*) with Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), Italian ryegrass (*Festuca perennis*), and soft chess (*Bromus hordeaceus*). Some native herbaceous species observed include common fiddleneck (*Amsinckia menziesii*) and meadow barley (*Hordeum brachyantherum*). A few of the non-native herbs present include black mustard (*Brassica nigra*), rose clover (*Trifolium hirtum*), and prickly lettuce (*Lactuca seriola*). The eastern portion of the Project Area, where the Project footprint overlays, consists of a relatively equal percentage of non-native grasses and black mustard.

The non-native annual grassland classification in this case closely resembles the wild oats and annual brome grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance) described in MCV2. Wild oats and annual brome grassland are generally found in open areas in valleys and foothills throughout coastal and interior California. They typically occur on soils consisting of fine-textured loams or clays that are somewhat poorly drained. Non-native annual grasses and weedy annual and perennial forbs, primarily of Mediterranean origin, dominate this vegetation type, probably as a result of human disturbance. Scattered native grass and wildflower species, representing remnants of the original vegetation may also be common (Sawyer et al. 2009).

Freshwater Wetland

A small freshwater wetland accounts for approximately 0.06 acres of the Study Area, located on the northeastern side of the TCCPP. This feature is identified as a depression in the ground that is vegetated with a stand of dead cattails (*Typha* spp.), which are not present within the surrounding non-native annual grassland areas. This feature is classified as an isolated wetland feature caused by a leaky irrigation pipe which has since been repaired. No water was present within the feature at the time of the field survey.

Because this freshwater wetland is dominated by *Typha* spp., its vegetation community most closely resembles the Cattail Marsh Alliance (*angustifolia*, *domingensis*, *latifolia* Herbaceous Alliance) as described by Sawyer et al. (2009). To be included in this community, *Typha angustifolia*, *T. domingensis* and/or *T. latifolia* must have more than 50 percent relative cover in the herbaceous layer and more than one cattail species may be present. This community occurs in semi-permanently flooded freshwater or brackish marshes where soils are clay and/or silt. This community occurs at elevations ranging from 0-350 meters (0-1,148 feet) and is distributed across North America. This community is listed as a CDFW-sensitive natural community (CDFW 2024b; Sawyer et al. 2009).

Landscaped

The landscaped land cover type covers approximately 2.7 acres of the Study Area. This land cover type is not naturally occurring and is not described in either the Holland (1986) or Sawyer et al. (2009) classification systems. This would be considered Urban in the CWHR (CDFW 2024c) classification system. This land cover type consists of areas that have been modified and are built up such that most or all vegetation has been removed and/or ornamental trees and shrubs are present. Within the Project Area, this land cover type consists of landscaped areas associated with the TCCPP (Attachment A). Species observed include Italian cypress (*Cupressus sempervirens*), elderberry (*Sambucus* sp.), Peruvian pepper tree (*Shinus molle*), with small amounts of ruderal herbs and grasses.

The ornamental trees planted around the TCCPP were planted as part of mitigation requested by the California Energy Commission following the development of the TCCPP.



Developed

The developed land cover type consists of approximately 14.7 acres of the Study Area. This land cover type is not naturally occurring and is not described in either the Holland (1986) or Sawyer et al. (2009) classification systems. Despite being sparsely vegetated, the Urban classification in the CWHR (CDFW 2024c) classification system would still most closely resemble this land cover type. This land cover type consists of areas that have been modified and are built up such that most or all vegetation has been removed and/or minimal ornamental trees and shrubs are present. Within the Study Area, this land cover type consists of paved roads, structures and other infrastructure associated with the TCCPP (Figure 2).

Canal

The Delta-Mendota Canal is located along the southwest corner and western edge of the Buffer Area and consists of approximately 1.2 acres of the entire Study Area. This canal is approximately 116.5 miles long, spanning the western side of the San Joaquin Valley and is used for agricultural irrigation, receiving its water via the San Joaquin Valley Aquifer system. This canal is concrete lined with gravel on either side. Within the Study Area, the canal is neighboring non-native vegetation with some small mammal burrows occurring throughout. No trees or shrubs were observed along the east and west sides of the canal.

Orchard

Almond orchards surround the Study Area to the south and east and encompass approximately 3.4 acres of the Study Area. In 2019 San Joaquin County was ranked seventh in the state for almond production in the entire State of California. The orchards surrounding the Project Area were in neat rows and had exposed soil and exposed understory throughout with minimal overhead canopy coverage as almond trees do not have a substantial canopy. The orchard is routinely maintained by workers walking and driving utility terrain vehicles (UTV) throughout the rows of almond on a regular basis. This human presence and exposed understory may make it harder for wildlife to hide from predators and escape human disturbance despite the understory making it easier for wildlife to travel freely throughout (San Joaquin Council of Governments; SJCOC 2020).

Summary of Findings

Burrowing owl was assessed for its potential to occur within the Study Area. Marginally suitable habitat was determined to be present within the Study Area.

Potentially suitable mammal burrows were observed in the southwestern portion of the survey buffer and ground squirrel burrows were found in the eastern portion of the Study Area, in the non-native grassland. No western burrowing owls or burrowing owl sign indicating owl activity were observed within the Study Area. Study Area conditions observed during the surveys are shown in the attached Appendix A – Site Photographs. Overall avian activity was low during the surveys and some common species expected to occur within an agricultural or urbanized region were observed (Table 2). Taxonomic nomenclature of avian species follows the American Ornithological Union's (AOU's) Checklist of North American Birds (AOU 2021).



Table 2 Avian Species Observed

Scientific Name	Common Name
<i>Aphelocoma californica</i>	California scrubjay
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Buteo swainsoni</i>	Swainson's hawk
<i>Calypte anna</i>	Anna's hummingbird
<i>Columba livia</i>	rock dove
<i>Corvus brachyrhynchos</i>	American crow
<i>Corvus corax</i>	common raven
<i>Falco sparverius</i>	American kestrel
<i>Haemorhous mexicanus</i>	house finch
<i>Melospiza melodia</i>	song sparrow
<i>Sturnus vulgaris</i>	European starling
<i>Tyrannus verticalis</i>	western kingbird
<i>Zenaida macroura</i>	mourning dove

Conclusion

Potentially suitable California ground squirrel burrows and burrow complexes were observed during the focused burrow surveys. Therefore, four focused burrowing owl surveys were conducted in accordance with the *Staff Report on Burrowing Owl Mitigation* (2012) requirements. No burrowing owls or signs were observed within the Study Area; therefore, no impacts to burrowing owls are expected at this time.

Because suitable habitat was determined to be present on site, a 30-day pre-construction survey for burrowing owl is recommended. Once complete, the pre-construction survey report shall be submitted to San Joaquin County. Additionally, if burrowing owls are present during the pre-construction survey, a qualified biological monitor shall be present on site during construction activities to ensure burrowing owls are not impacted.

If you have any questions, please contact Grace Myers at gmyers@rinconconsultants.com or 916-306-5888.

Sincerely,
Rincon Consultants, Inc.

Grace Myers
Biologist

Andrea Maben
Project Manager/ Senior Biologist

Christopher Julian
Principal Regulatory Specialist

Attachments

Figure 1 Project Area and Survey Buffer

Figure 2 Vegetation and Land Cover Types

Attachment 1 Representative Site Photographs



References

- American Ornithologists' Union (AOU). 2021. Checklist of North American Birds (online). American Ornithological Society. <http://checklist.aou.org/taxa>
- Baldwin, B.G. (Ed.), D.H. Goldman (Ed.), D. J. Keil (Ed.), R. Patterson (Ed.), T. J. Rosatti (Ed.), D. H. Wilken (Ed.). 2012. The Jepson Manual: Vascular Plants of California, Second Edition, Thoroughly Revised and Expanded. University of California Press. Berkeley, California.
- California Department of Fish and Wildlife (CDFW). 2024a. Wildlife Habitats – California Wildlife Habitat Relationships System. Available from <https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats>. (Accessed June 2024).
- _____. 2024b. California Sensitive Natural Communities. Available from <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline> June 2023. (Accessed June 2024).
- California Fish and Game Code. 2012. Staff Report on Burrowing Owl Mitigation. Available from <https://www.wildlife.ca.gov>. (Accessed June 2024).
- Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Wildlife, Nongame Heritage Program. 156 pgs.
- San Joaquin Multiple Species Conservation Plan (SJMSCP). 2000. <https://www.sjcog.org/DocumentCenter/View/5> (Accessed June 2024).
- Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.
- Shuford, W. D., and T. Gardali, editors 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. Soil Survey Area: San Joaquin County, California. Soil Survey Data: Version 12. Available at: <http://websoilsurvey.nrcs.usda.gov/app/>. (Accessed June 2024).

Figures

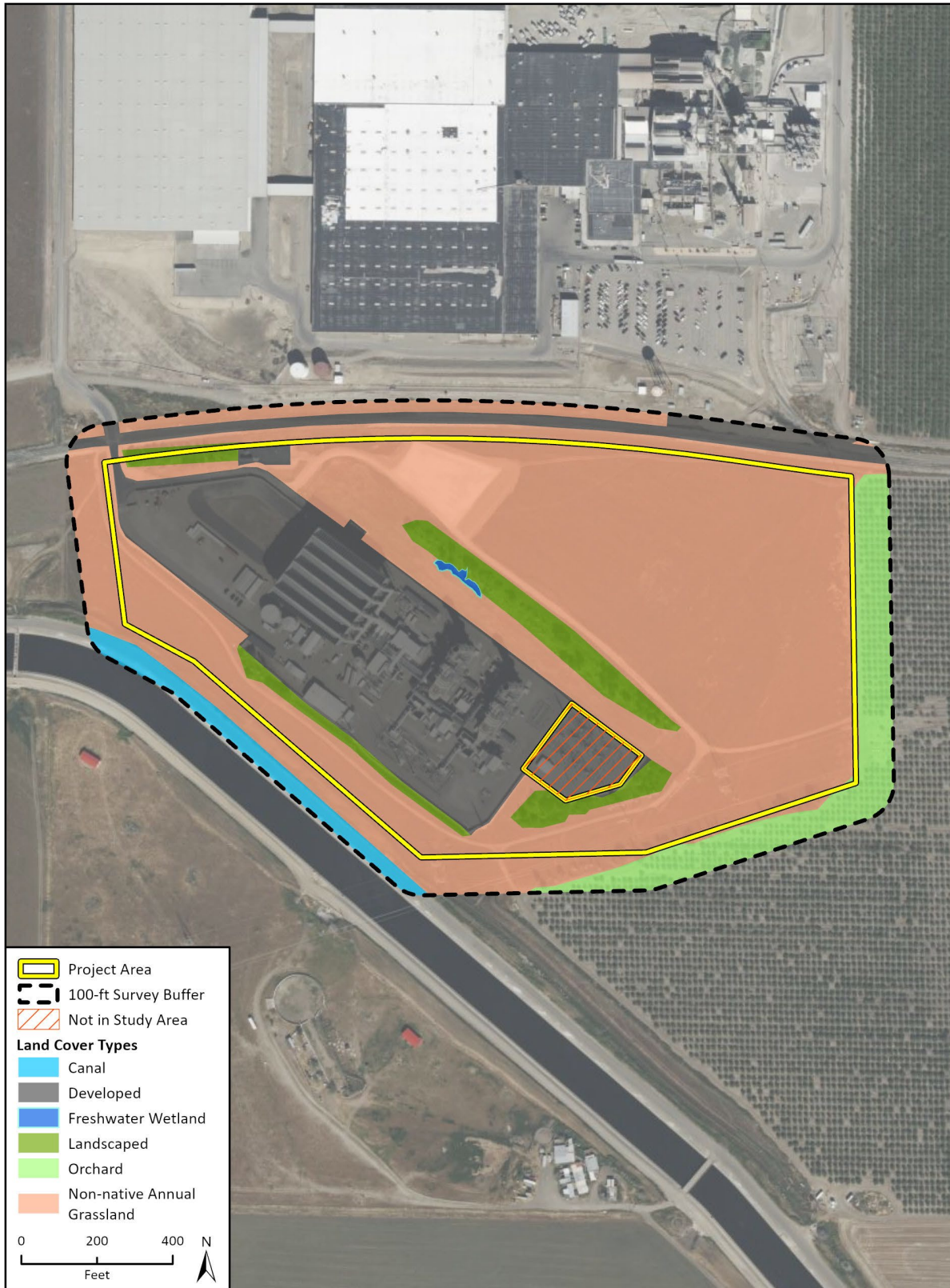
Figure 1 Project Area and Survey Buffer



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24-15860 BIO
 Fig X Study Area

Figure 2 Vegetation and Land Cover Types



Imagery provided by Microsoft Bing and its licensors © 2024.

24-15860 BIO
Fig X Land Cover

Attachment 1

Representative Site Photographs



Photograph 1. View from the west of the TCCPP of the non-native annual grassland, facing south. March 21, 2024.



Photograph 2. View of the canal from the northwest portion of the Study Area boundary. The San Joaquin Kit Fox Habitat Conservation Area is along the far eastern portion of this photo. March 21, 2024.



Photograph 3. View looking southeast with the canal, landscaped areas, and the San Joaquin Kit Fox Habitat Conservation Area on the west side of the TCCPP. March 21, 2024.



Photograph 4. View looking east from the southwest corner of the Study Area. March 21, 2024.



Photograph 5. View looking southwest from the southern portion of the Study Area. March 21, 2024.



Photograph 6. View looking northwest from the southeast corner of the TCCPP within the Study Area. March 21, 2024.



Photograph 7. View looking north from the southeast corner of the TCCPP within the Study Area. March 21, 2024.



Photograph 8. View looking north from the eastern edge of the Study Area near the almond orchards that surround the Study Area. March 21, 2024.



Photograph 9. View of the non-native annual grassland facing north, in the eastern portion of the Study Area. March 21, 2024.

Appendix C

Cultural Resources Technical Report (Confidential Appendix A has been removed)



Tracy Long Duration Energy Storage Project

Cultural Resources Technical Report (Public Version that Excludes Confidential Appendix A)

prepared for

Tracy BESS LLC
4350 Executive Drive, Suite 320
San Diego, California 92121

prepared by

Rincon Consultants, Inc.
4589 North Marty Avenue, Unit 102
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August 2024

Please *cite this report* as follows:

Strother, Mark, Rachel Bilchak, and Christopher Duran

2024. *Cultural Resources Technical Report for the Tracy Long Duration Energy Storage Project*. Rincon Consultants, Inc., Project No. 24-15860. Report on file at the Central California Information Center, California State University Stanislaus, California.

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Appendices

Appendix A CONFIDENTIAL and Redacted from this version

Appendix B Native American Heritage Commission Sacred Land Files Search

Executive Summary

Patch Services LLC and Tracy BESS LLC retained Rincon Consultants, Inc. (Rincon) to conduct a cultural resources study for the proposed Tracy Long Duration Energy Storage Project (Project) in unincorporated San Joaquin County, California. The Project is located at 14950 West Schulte Road on Assessor's Parcel Number 209-240-32 (Study Area) and will be co-located with the existing natural gas-fired, combined-cycle generating facility—the Tracy Combined-Cycle Power Plant (TCCPP)—currently owned and operated by MRP San Joaquin Energy LLC. The TCCPP was approved by the California Energy Commission (CEC) on March 24, 2010 (CEC Docket No. 08-AFC-07), which allowed for the modification of the simple-cycle Tracy Peaker Plant (CEC Docket No. 01-AFC-16C) that was certified in 2002 and began operation in 2003. The proposed Project battery energy storage system (BESS) expansion, as currently envisioned, would include adding batteries, inverters, and appurtenant facilities to support 40 megawatts (MWs) of eight-hour duration storage (i.e., 320-MW hour).

The following analysis includes a cultural resources records search of the California Historical Resources Information System (CHRIS), archival research, Sacred Lands File (SLF) search, field survey, desktop historical built environment analysis, and an assessment of potential, project-related impacts to cultural resources. This report has been prepared in accordance with the California Environmental Quality Act (CEQA) guidelines for examining cultural resources.

Rincon understands that cultural resources studies conducted by the URS Corporation and CH2M HILL in 2001 and 2008, respectively, both determined that no cultural resources are present within the approximately 39-acre Study Area. No cultural resources were identified within the Study Area as a result of this analysis.

The record search of the CHRIS identified one historic built environment structure (P-39-004289) within the Study Area. P-39-004289 consists of three sets of two transmission towers, part of a 137-mile electrical transmission system from the Stanislaus Powerhouse to San Francisco. The towers in the Study Area were replaced in 1988, losing their original design, materials, and setting, as well as contributing to a larger system that lacks integrity and significance. In 2001, these towers were recommended ineligible for listing in the National Register of Historic Places and the California Register of Historical Resources under any designation criteria due to a lack of historical or architectural significance. P-39-004289 is thus not considered a historical resource under CEQA. The proposed Project, which will also avoid the towers through Project design, does not have the potential to impact historical built environment resources, and Rincon recommends a finding of ***no impact to historical resources*** pursuant to CEQA.

The records search of the CHRIS SLF search and the archaeological field survey identified no archaeological resources within the Study Area. However, two previously recorded archaeological sites (one prehistoric and one historic-era) and two isolated artifacts (one prehistoric and one historic era) were identified within 1 mile of the Study Area. Although there is no surficial evidence within the Study Area suggesting that the proposed Project may impact archaeological resources, the presence of two archaeological sites and two archaeological isolates within 1 mile of the Study Area suggest the Study Area is at least moderately sensitive in terms of the potential to impact such resources which could be present beneath the surface. To address these concerns, Rincon recommends Cultural Resources Sensitivity Training for all on-site construction personnel prior to the start of ground disturbance for the project. Based on the results of this study, Rincon

recommends a finding of ***less-than-significant impact to archaeological resources with mitigation incorporated*** under CEQA. A measure for the unanticipated discovery of cultural resources during project development as a best management practice is also provided.

Although no human remains are known to be present within the project site, the discovery of human remains is a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance.

1 Introduction

Patch Services LLC and Tracy BESS LLC retained Rincon Consultants, Inc. (Rincon) to conduct a cultural resources study for the proposed Tracy Long Duration Energy Storage (LDES) Project (Project) in unincorporated San Joaquin County, California. The following analysis includes a cultural resources records search of the California Historical Resources Information System (CHRIS), archival research, Sacred Lands File (SLF) search, field survey, desktop historical built environment analysis, and an assessment of potential, project-related impacts to cultural resources. This study has been completed pursuant to the requirements of the California Environmental Quality Act (CEQA). The County of San Joaquin (County) is the lead agency under CEQA.

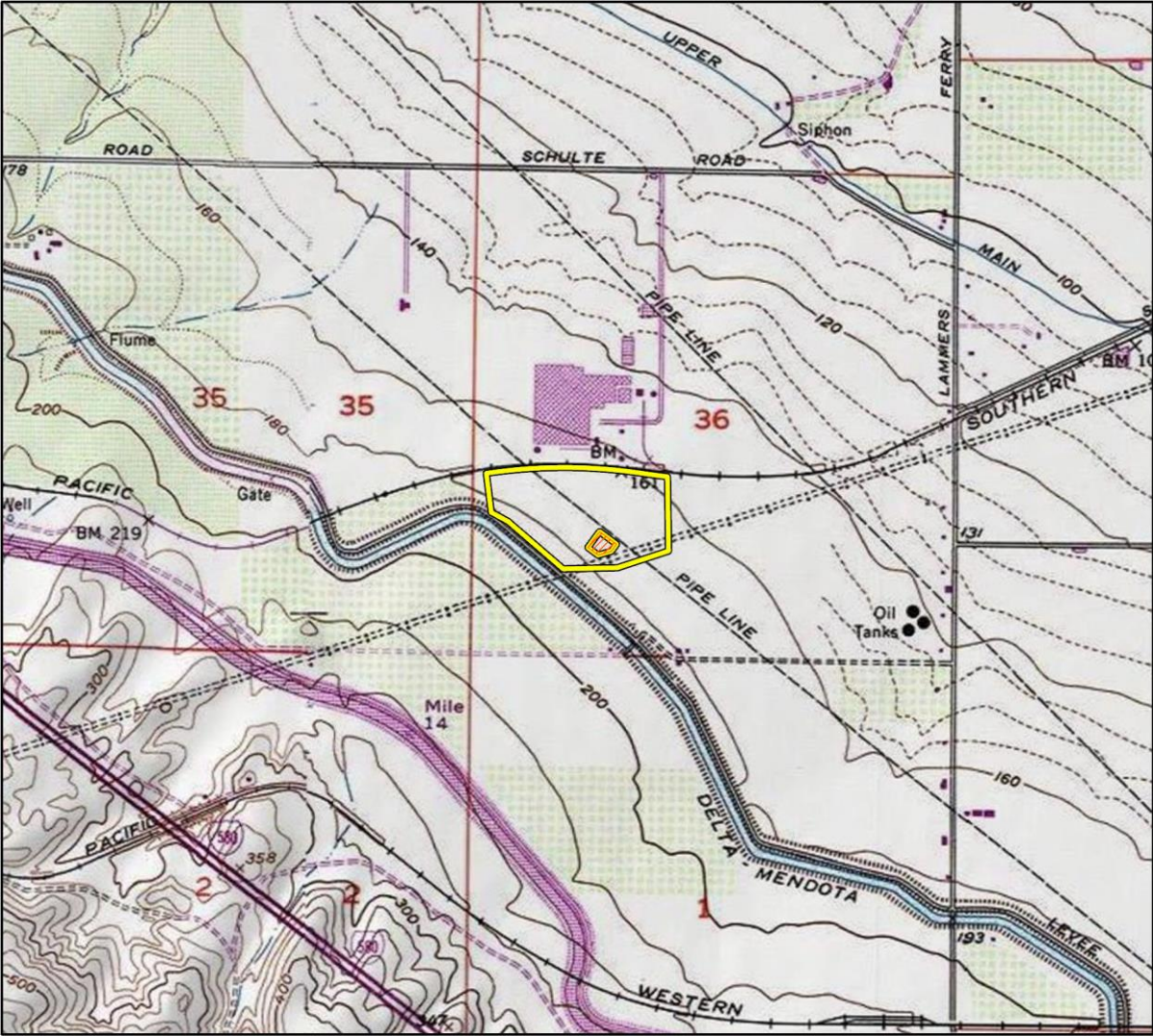
1.1 Project Location

The proposed Project site is located at 14950 West Schulte Road in unincorporated San Joaquin County, on parcel Assessor's Parcel Number 209-240-32 (Study Area), depicted on the *Tracy, California*, United States Geological Survey (USGS) 7.5-minute topographic quadrangle map, within Township 25 South, Range 04 East, Section 36 (Figure 1). The proposed Battery Energy Storage System (BESS) Project will be co-located with the existing natural gas-fired, combined-cycle generating facility—the Tracy Combined-Cycle Power Plant (TCCPP)—currently owned and operated by MRP San Joaquin Energy LLC. The Study Area is bordered to the north by the Southern Pacific Railroad and an industrial/commercial property, to the east by agricultural lands, to the south by the Delta Mendota Canal, and to the west by vacant, graded land, beyond which is more industrial properties. The proposed Project site is located within a generally developed area with mixed agricultural use but is bordered by patches of wild grasses on the undeveloped land to the southwest. The Study Area includes approximately 39.53 acres (Figure 2).

1.2 Project Description

The proposed Tracy LDES Project would support California's current need for additional electrical supply capacity during periods of peak demand. The proposed Project involves the construction and operation of a nominal 40-MW, eight-hour duration, 320-MW hour BESS facility within an approximately 12.8-acre site area north of the existing TCCPP. The existing TCCPP was licensed by the California Energy Commission (CEC) in 2010 (CEC Docket No. 08-AFC-07). The proposed Tracy LDES Project and the existing TCCPP are located on the same parcel (Assessor's Parcel Number 209-240-32). The proposed Tracy LDES Project is located within the former construction laydown area for the TCCPP. The CEC has limited permitting jurisdiction for the proposed Project, which does not include the proposed Tracy LDES Project except for the proposed generation tie (gen-tie) and raw water supply line on the developed portion of the TCCPP property (Figure 3).

Figure 1 Regional Location Map



Basemap provided by National Geographic Society, Esri and their licensors © 2024. Tracy Quadrangle. T02S R04E S36. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

24-15860 CR
Fig X Regional Location Topo

- Study Area
- Not in Study Area

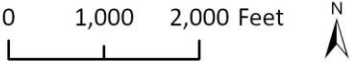


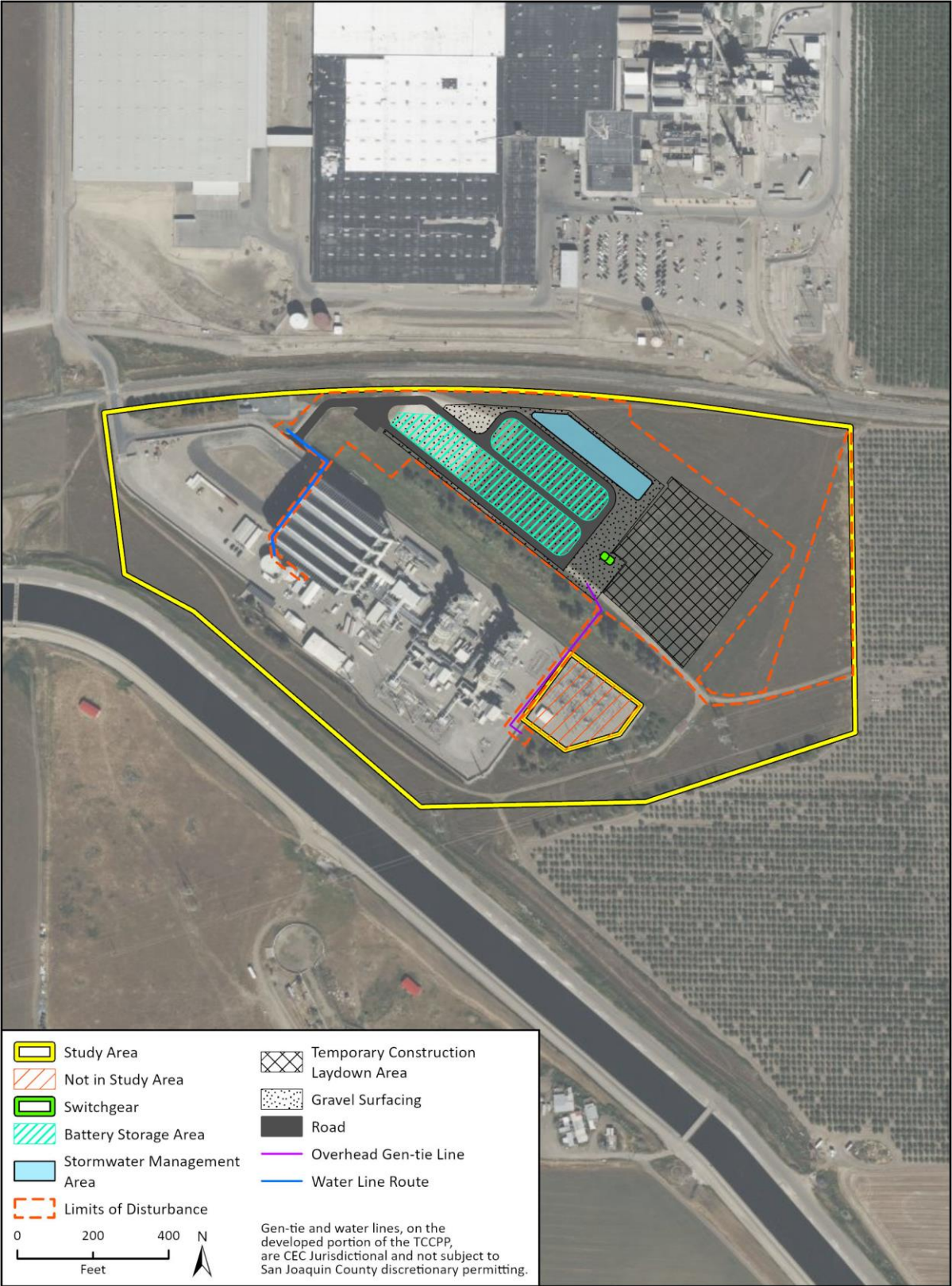
Figure 2 Study Area Map



Imagery provided by Microsoft Bing and its licensors © 2024.

24-15860 CR
Fig X Study Area

Figure 3 Detailed Project Site Map



Imagery provided by Microsoft Bing and its licensors © 2024.

24-15860 CR
Fig X Site Plan CR

The proposed Project includes modular battery and electrical equipment enclosures, a 13.8-kilovolt (kV)/115-kV electrical switchyard, and an overhead 115-kV, gen-tie tap line to connect to the electrical grid via the nearby Pacific Gas and Electric Company (PG&E) Schulte Substation. The proposed Project will connect to the PG&E Schulte Substation by adding a structure to tap the existing 115-kV, gen-tie line that connects the TCCPP to the PG&E Schulte Substation. The proposed Project also includes a fire water tank and a short water supply pipeline connection to the TCCPP water supply. The proposed Project design includes extension of the existing access road on the Project site, addition of a stormwater detention basin, and a temporary construction laydown and parking area.

1.2.1 Battery Energy Storage System Facility

The proposed Tracy LDES Project BESS facility initial design includes approximately 88 battery container enclosures and 44 inverter/power conversion system (PCS) enclosures on skids. The design also includes 34 medium voltage transformers to be located on skids adjacent to the PCS enclosures. The BESS components would be placed on either a concrete pad, drilled pier, or pile foundations. The battery storage technologies being considered are lithium iron phosphate and nickel manganese cobalt, or other technologies that may become commercially available as the BESS project undergoes final design. Augmentation batteries would be installed on existing foundations to maintain system load capacity as the batteries degrade over time.

The BESS enclosures would be approximately 8-feet wide by 9.5-feet tall by 20-feet long and would include internal heating ventilation and air conditioning and internal fire detection and fire suppression systems in each container. These containers would also include a battery management system that monitors battery voltage, current, temperature, security, fault diagnosis and management, and external communication with the power conversion system. The inverter/PCS containers would be 3.5-feet wide by 8-feet tall by 4.5-feet deep. Each PCS would include an inverter, protection equipment, direct current and alternating current circuit breakers, and a connection cabling system. The PCSs would be connected to the battery containers by underground electrical conductors. In addition, medium voltage transformers would be located adjacent to the inverter/PCS skids.

The proposed Project would include a switchyard with switchgear located in the southeastern portion of the proposed BESS facility. The switchgear facilities would include a 13.8-kV/115-kV generation step-up transformer.

1.2.2 Gen-Tie Line

The proposed Project BESS facility would be interconnected with the PG&E Schulte Substation by an overhead and/or underground 115-kV gen-tie line. The 115-kV gen-tie line would run south from the 13.8-kV/115-kV, generation step-up transformer in the proposed BESS switchyard to the proposed tap structure adjacent to the existing 115-kV gen-tie line that connects the TCCPP to the PG&E Schulte Substation. The gen-tie line would be supported by several steel (or wood) poles up to approximately 50 feet in height. The portion of the proposed Tracy LDES project gen-tie line on the developed TCCPP site would be under the CEC's jurisdiction.

1.2.3 Water Supply Pipeline

The proposed Project would have an on-site fire water tank in accordance with San Joaquin County Fire Authority requirements. The capacity is currently planned to be approximately 27,000 gallons and have an adjacent fire hydrant for accessing the fire water supply. The fire water tank would be self-filling through a new pressurized pipeline connection to the TCCPP raw water service. The portion of the Tracy LDES project water supply line on the developed TCCPP site would be under the CEC's jurisdiction.

1.2.4 Construction

Construction of the proposed Project is anticipated to begin in the fourth quarter of 2025 and to begin commercial operation by the first quarter of 2027. Construction activities would occur Monday through Friday between 6:00 a.m. and 9:00 p.m. in accordance with San Joaquin County noise standards. During construction, construction equipment and construction worker vehicles would be staged in the temporary staging and laydown area located adjacent to the eastern border of the BESS facility. During construction, up to 50 workers would be on-site at a time. Truck trips are expected to include up to approximately 30 trips per day during construction.

Construction activities would include extending the access road to the Project site, site preparation and grading, installation of foundations and equipment, installation of wiring, and commissioning. Although the Project site is fairly level, grading would be required throughout most of the site to prepare the ground surface for the construction of roads, switchgear, BESS enclosures, and BESS container pads. Construction would result in approximately 6,300 cubic yards of cut topsoil and native soil and require approximately 3,730 cubic yards of fill materials, which would be sourced off-site. Delivery of construction materials and supplies would reach the Project site by truck delivery routed through U.S. Highway 580, to International Parkway/Mountain House Parkway, to the Project site on West Schulte Road. Construction debris would be hauled to the Tracy Material and Recovery Facility located approximately 8.5-miles southeast of the Project site.

1.2.5 Other Public Agencies Whose Approval is Required

San Joaquin County is the lead agency for permitting the proposed Tracy LDES Project through an Administrative Use Permit. In addition, separate TCCPP license amendment approvals will be required from the CEC for the portions of the 115-kV gen-tie and the raw water line on the developed portion of the TCCPP facility that is under the jurisdiction of the CEC.

1.3 Personnel

Rincon Senior Archaeologist Mark Strother MA, Registered Professional Archaeologist (RPA), managed the preparation of this cultural resources study and provided senior oversight. Mr. Strother meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology (National Park Service 1983). Archaeologist Rachel Bilchak, BA, was a contributing author of this report. Archaeologist Darren Putty, BA, conducted the archaeological field survey and Rincon Geographic Information Systems Analyst Erik Holtz, BA, prepared the figures found in this report. Rincon Cultural Resources Principal Christopher Duran, MA, RPA, reviewed this report for quality control and quality assurance purposes.

2 Regulatory Setting

This section includes a discussion of the applicable state and local laws, ordinances, regulations, and standards governing cultural resources, which must be adhered to before and during implementation of the project.

2.1 California Environmental Quality Act

California Public Resources Code (PRC) Section 21084.1 requires that lead agencies determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the National Register of Historic Places (NRHP) are automatically listed in the CRHR, as are California Historical Landmarks 770 and above; both are therefore historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

State CEQA Guidelines Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a “unique archaeological resource” as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a *unique archaeological resource* as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria if it: 1) contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information, 2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or 3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources will be less than significant and need not be considered further (*State CEQA Guidelines* Section 15064.5[c][4]). *State CEQA Guidelines* Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (*State CEQA Guidelines* Section 15064.5 [b][1]). *Material impairment* is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (*State CEQA Guidelines* Section 15064.5[b][2][A]).

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a][b]).

The requirements for mitigation measures under CEQA are outlined in *State CEQA Guidelines* Section 15126.4(a)(1). In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impacts of the project. Generally, a project that is found to comply with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Standards)* is considered to be mitigated below a level of significance (*State CEQA Guidelines* Section 15126.4 [b][1]). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (*State CEQA Guidelines* Section 15126.4[b][3]).

2.1.1 National Register of Historic Places

Although the project does not have a federal nexus, properties which are listed in or have been formally determined eligible for listing in the NRHP are automatically listed in the CRHR. The following is therefore presented to provide applicable regulatory context. The NRHP was authorized by Section 101 of the National Historic Preservation Act and is the nation's official list of cultural resources worthy of preservation. The NRHP recognizes the quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects. Pursuant to 36 Code of Federal Regulations Part 60.4, a property is eligible for listing in the NRHP if it meets one or more of the following criteria:

- Criterion A:** Is associated with events that have made a significant contribution to the broad patterns of our history
- Criterion B:** Is associated with the lives of persons significant in our past
- Criterion C:** Embodies the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
- Criterion D:** Has yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several of these seven qualities, if not all, defined as follows:

- Location:** The place where the historic property was constructed or the place where the historic event occurred
- Design:** The combination of elements that create the form, plan, space, structure, and style of a property
- Setting:** The physical environment of a historic property
- Materials:** The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property

- Workmanship:** The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory
- Feeling:** A property's expression of the aesthetic or historic sense of a particular period of time
- Association:** The direct link between an important historic event or person and a historic property

Certain properties are generally considered ineligible for listing in the NRHP, including cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions, relocated structures, or commemorative properties. Additionally, a property must be at least 50 years of age to be eligible for listing in the NRHP. The National Park Service states that 50 years is the general estimate of the time needed to develop the necessary historical perspective to evaluate significance (National Park Service 1997: 41). Properties which are less than 50 years must be determined to have "exceptional importance" to be considered eligible for NRHP listing.

2.1.2 California Register of Historical Resources

The CRHR was established in 1992 and codified by PRC Sections 5024.1 and Title 14 Section 4852. The CRHR is an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (PRC 5024.1[a]). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (PRC 5024.1[b]). Unlike the NRHP however, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation 2011). Furthermore, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2011). Generally, the California Office of Historic Preservation recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995: 2).

A property is eligible for listing in the CRHR if it meets one of more of the following criteria:

- Criterion 1:** Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- Criterion 2:** Is associated with the lives of persons important to our past
- Criterion 3:** Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- Criterion 4:** Has yielded, or may be likely to yield, information important in prehistory or history

2.1.3 California Assembly Bill 52 of 2014

As of July 1, 2015, Assembly Bill (AB) 52 was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes, "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the CEQA lead

agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) define tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and that meets at least one of the following criteria, as summarized in *State CEQA Guidelines* Appendix G:

- 1) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
- 2) 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 PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process with California Native American Tribes that must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” California Native American Tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

2.2 California Health and Safety Code

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Coroner of the county in which the remains are discovered has determined if the remains are subject to the Coroner’s authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

2.3 California Public Resources Code Section 5097.98

Section 5097.98 of the PRC states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5, shall immediately notify those persons (i.e., the Most Likely Descendant [MLD]) that it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

2.4 Local Regulations

2.4.1 San Joaquin County General Plan

As of June 2008, approximately 96,788 acres (11 percent) of the County had been surveyed for cultural resources. The County has identified 262 prehistoric archaeological sites, 239 historic archaeological sites, 14 multi-component archaeological sites, and 4,338 historic buildings or structures. These resources are vital for interpretive education and attract both residents and visitors, showcasing the area's rich history. The preservation of these resources is crucial and should be considered in the planning, permitting, and construction of new developments. Goal 6 of the Natural and Cultural Resources Element Section (NCR-6) of the County's General Plan aims to identify ways to protect, preserve, and enhance these valuable cultural and historic resources, which are essential to the County's character (San Joaquin County 2016):

Goal NCR-6. To protect San Joaquin County's valuable architectural, historical, archeological, and cultural resources.

- NCR-6.1** Protect Historical and Cultural Resources: The County shall protect historical and cultural resources and promote expanded cultural opportunities for residents to enhance the region's quality of life and economy.
- NCR-6.2** No Destruction of Resources: The County shall ensure that no significant architectural, historical, archeological, or cultural resources are knowingly destroyed through County action.
- NCR-6.3** Encourage Public and Private Preservation Efforts: The County shall continue to encourage efforts, both public and private, to preserve the historical and cultural heritage of San Joaquin County and its communities and residents.
- NCR-6.4** Registration of Historic Properties: The County shall encourage owners of eligible historic properties to apply for State and Federal registration, to participate in tax incentive programs for historical restoration, and to enter into Mills Act Contracts.
- NCR-6.5** Protect Archeological and Historical Resources: The County shall protect significant archeological and historical resources by requiring an archeological report be prepared by a qualified cultural resource specialist prior to the issuance of any discretionary permit or approval in areas determined to contain significant historic or prehistoric archeological artifacts that could be disturbed by project construction.
- NCR-6.6** Tribal Consultation: The County shall consult with Native American tribes regarding proposed development projects and land use policy changes consistent with the State's Local and Tribal Intergovernmental Consultation requirements.
- NCR-6.7** Adaptive Reuse of Historic Structures: The County shall encourage the adaptive reuse of architecturally significant or historic buildings if the original use of the structure is no longer feasible and the new use is allowed by the underlying land use designation and zoning district.
- NCR-6.8** Land Use and Development: The County shall encourage land uses and development that retain and enhance significant historic properties and sustain historical community character.

Tracy Long Duration Energy Storage Project

- NCR-6.9** Educational Programs: The County shall support educational and outreach programs that promote public awareness of and support preservation of historical and cultural resources.

3 Natural and Cultural Setting

This section provides background information pertaining to the natural and cultural context of the Study Area. It places this study in the context of the broader natural environment that has sustained populations throughout history. This section also provides an overview of regional indigenous history, local ethnography, and post-contact history. This background information describes the distribution and type of cultural resources documented in the vicinity of the Project Area to inform the cultural resources sensitivity assessment.

3.1 Natural Setting

The Study Area is located east of U.S. Highway 580, immediately south of the Union Pacific Railroad and northeast of the Delta-Mendota Canal near Tracy, California. The Study Area is in an area of unincorporated San Joaquin County that can be characterized by utility infrastructure, paved roads, and agriculture. Within the Study Area, two vegetation communities and four additional land cover types were observed: non-native annual grassland, freshwater wetland, landscaped, developed, canal, and orchard. The non-native annual grassland, covering approximately 31.6 acres, is the dominant vegetation community, featuring species such as wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), Italian ryegrass (*Festuca perennis*), and soft chess (*B. hordeaceus*). The freshwater wetland, occupying about 0.06 acres, is characterized by dead cattails (*Typha* spp.), resulting from a previously leaky irrigation pipe. Landscaped areas, covering 2.7 acres, consist of ornamental trees and shrubs, while developed land, encompassing 14.7 acres, includes paved roads and structures. The Delta Mendota Canal, spanning 1.2 acres along the southwestern corner and western edge of the Study Area, outside the Project site, provides agricultural irrigation. Surrounding almond orchards, covering 3.4 acres outside the Project site, are maintained with minimal canopy coverage and exposed understory, impacting local wildlife movement and behavior.

The Study Area, situated at an elevation of approximately 155 to 196 feet above mean sea level, features generally flat topography. Geologically, it is underlain by quaternary alluvium and marine and non-marine sedimentary rocks, comprising unconsolidated and semi-consolidated alluvium, lake, playa, and terrace deposits dating from the Pleistocene to Holocene. According to the latest United States Department of Agriculture Natural Resources Conservation Service soil survey for San Joaquin County, California (United States Department of Agriculture 2019), the Study Area includes two soil map units. Capay clay, covering about 67 percent of the area, is found on basin floors, alluvial fans, and basin rims, derived primarily from sandstone and shale, and is moderately well-drained with a very firm profile throughout. Stomar clay loam, comprising the remaining 33 percent, occurs on alluvial fans and terraces, derived from sedimentary rocks, and is well-drained with many fine roots and a very moist profile throughout.

The Study Area is within an alluvial deposit and predates the Holocene (the age of human occupation); therefore, the archaeological sensitivity for the Study Area, based on sediments alone, is low. However, this does not preclude the potential presence of buried archaeological materials (California Soil Resource Lab 2017).

3.2 Cultural Setting

3.2.1 Indigenous History

The Central Valley has been described as one of the largest intermontane basins in California extending 650 kilometers from the Siskiyou Mountains to the Tehachapis (Rosenthal et al. 2007). No single chronological framework covers the entirety of the Central Valley, but California prehistory is generally divided into three broad time periods: the Paleoindian Period (ca. 11,550–8550 BCE), the Archaic Period (8550 BCE–CE 1100), and the Emergent Occupation (CE 1000–European Contact) (Fredrickson 1973, 1974), which has been updated and adjusted by Rosenthal et al. (2007) to further separate the Archaic Period into Lower (8550 BCE–5550 BCE), Middle (5550 BCE–550 BCE), and Upper (550 BCE–CE 1100). The prehistoric chronological sequence for the Central Valley presented below is based on Rosenthal et al. (2007) and Moratto (1984).

Paleoindian Period (11,550–8550 BCE)

Little is currently known about the Paleoindian Period in the Central Valley. Geoarchaeological studies have demonstrated that erosion and deposition have buried or destroyed early archaeological deposits. This period is primarily represented by isolated finds, and currently, the earliest accepted date of human occupation in the Central Valley ranges from 11,550 to 9550 BCE and comes from fluted projectile points, similar to Clovis points, found at prehistoric sites near Tracy Lake (San Joaquin County) and the Tulare Lake Basin (Fresno, Kings, Kern, and Tulare counties). Along with fluted projectile points, concave base points have been identified along the Tulare Lake shoreline which was occupied during the Late Pleistocene (5.3 million years ago to 11,700 BCE) (Rosenthal et al. 2007).

Lower Archaic (8550–5550 BCE)

Climate change at the end of the Pleistocene caused significant periods of alluvial deposition beginning around 9050 BCE. These new alluvial deposits created a clear stratigraphic boundary between the Late Pleistocene and Holocene sediments. The Lower Archaic, like the Paleoindian Period, is represented mainly by limited isolated finds. However, one Lower Archaic site (CA-KER-116) has been identified in the Central Valley proper and few in the foothills surrounding the valley (Rosenthal et al. 2007).

Typical Lower Archaic artifacts include flaked stone crescents and stemmed points. The identification of projectile points and a diverse faunal assemblage at CA-KER-116 indicate hunting was an important subsistence activity. However, milling tools and plant remains are largely absent in the valley; thus, plant use during the Lower Archaic remains unclear. Several foothill sites contain milling implements and evidence of the use of nut crops such as acorn and pine (LaJeunesse and Pryor 1996). The relationship between foothill and valley floor adaptations is largely unknown during the Lower Archaic; however, foothill sites may have been seasonally used during this time. More distinct adaptations are apparent in the Middle Archaic, and it is possible that these divergent traditions first emerged in the Lower Archaic (Rosenthal et al. 2007).

Middle Archaic (5550–550 BCE)

The Middle Archaic began with substantial climate change to much warmer, drier conditions. Tulare Lake shrank and eventually disappeared. With this came new wetlands that created new habitats, and rising sea levels that led to the creation of the Sacramento-San Joaquin Delta, creating new

deposits. Fans and floodplains stabilized after an initial period of deposition in 5550 BCE. Archaeological deposits dating to the Middle Archaic are rare in the Central Valley proper due to these geomorphic changes. The Middle Archaic archaeological record has identified a pattern of organized subsistence strategies and increased residential stability. The archetypal pattern of the Middle Archaic has been identified as the Windmill Pattern. This pattern is represented by extended burials oriented to the west and a sophisticated material culture (Rosenthal et al. 2007). Middle Archaic sites are relatively common in the foothills surrounding the Central Valley and show relatively little change from the Lower Archaic (McGuire 1995).

During this time, the mortar and pestle became more widespread, suggesting a shift toward more intensive subsistence practices and higher reliance on the acorn. Fishing technologies, such as bone gorges, hooks, and spears, also appear during the Middle Archaic, suggesting a new focus on fishing, especially in the Marsh Creek area. Several other technologies become apparent during this time. Baked-clay impressions of twined basketry, simple pottery, and other baked clay objects have been found at several sites. Personal adornment items also become more frequent. Exchange with outside groups is evidenced by the presence of obsidian, shell beads and ornaments (Rosenthal et al. 2007, Moratto 1984, Burns et al. 2016). Trade also seemed to be focused on utilitarian items such as obsidian or finished obsidian tools from at least five separate sources (Moratto 1984).

Upper Archaic (550 BCE–1100 CE)

The Upper Archaic began with the onset of the Late Holocene, marked by a cooler, wetter climate. The environmental conditions of the Upper Archaic were characterized by the return of lakes that had disappeared during the Middle Archaic and a renewed fan and floodplain deposition. The Upper Archaic is better represented in the archaeological record than earlier periods. Cultural diversity was more pronounced and is marked by contrasting material cultures throughout the valley (Rosenthal et al. 2007).

During this period, numerous specialized technologies were developed, such as bone tools, and implements, Olivella and *Haliotis* beads and ornaments, ceremonial blades, and ground-stone plummets. People living in the San Joaquin Valley region traded with neighboring groups for obsidian.

Upper Archaic period economies varied by region throughout the Central Valley. Economies were primarily focused on seasonal resources, such as acorns, salmon, shellfish, rabbits, and deer (Rosenthal et al. 2007).

Emergent Occupation (1000 CE–Historic)

The stable climatic conditions of the Upper Archaic continued into the Emergent Period. There has been sporadic research in the San Joaquin Valley on this time period, and thus only the Pacheco Complex lithics on the western edge of the valley have been formally defined. After 1000 CE, many of the technologies used during the Archaic disappeared to be replaced by cultural traditions used during European contact. During the Emergent Period, the bow and arrow replaced the atlatl as the preferred hunting method sometime between 1000 and 1300 CE.

Increased social complexity is evidenced by increased variation in burial types and burial items and larger residential communities. Burial items such as shell beads, ornaments, and mortars and pestles are often found in burials. Pottery was frequently obtained through trade with groups living in the foothills to the east. The Panoche side-notched point became important in the western side of the San Joaquin Valley (Rosenthal et al. 2007). In addition to the side-notched point, the Panoche

Complex featured large circular structures, flexed burials, marine shell beads, bone awls, millingstones, and mortars and pestles (Moratto 1984).

As with the Archaic Period, Emergent Period economies varied geographically, and as seen through the archaeological record, fishing and plant harvesting increased in importance. Most Emergent residential sites contain diverse assemblages of mammal and bird remains and large amounts of fish bone. One thousand years ago, the mortar and pestle become the dominant tool type, with small seeds increasing in archaeological deposits over time (Rosenthal et al. 2007).

3.2.2 Ethnographic Overview

The Study Area is located within the ancestral territory of the Penutian-speaking Yokuts, which includes the San Joaquin Valley (Kroeber 1925, Wallace 1978). The Yokuts are traditionally divided into three geographical divisions: Northern Valley, Southern Valley, and Foothill Yokuts, primarily distinguished by their dialects (Mithun 2001).

Over the course of their rich history, the Yokuts established permanent village settlements of varying sizes. These settlements featured different types of structures, including single-family dwellings and larger communal residences accommodating 10 families or more. Villages often included mat-covered granaries and sweathouses (Mithun 2001, Sutton et al. 2016).

The Yokuts traditionally organized themselves into self-governing local groups, each comprising several villages. Each group had a chief who oversaw ceremonies, resolved disputes, administered punishment, hosted visitors, and provided assistance to the less fortunate. In some instances, settlements had two chiefs, one representing each moiety (social or ritual group individuals are divided into). Other significant political positions included the chief's messenger and the spokesman (Wallace 1978). Shamans remain integral to Yokut village life, often acquiring their powers through dreams or visions. Those who embrace the shamanic path engage in prayer, fasting, and the acquisition of talismans to facilitate their healing and spiritual duties. Shamans are revered for their ability to heal the sick, retaining a pivotal place in the community's spiritual and cultural practices (Wallace 1978).

The Yokuts' traditional subsistence strategy revolved around a mixed economy with an emphasis on fishing, gathering, and hunting small game. Fishermen used tule rafts and various tools such as nets, spears, basket traps, and bows and arrows to catch fish. They also gathered mussels and hunted turtles in lakes, rivers, and streams. Wild seeds and roots constituted a significant portion of their diet, with tule roots and various seeds being processed into flour for mush. Certain plant leaves and stems, like clover and fiddle-neck, were also collected. Acorns, a staple for many California Native Americans, were not abundant in the Yokuts' ethnographic territory, leading to trade with neighboring groups for this essential food item (Kroeber 1925).

Yokuts traditional technology heavily relied on tule, with its stems serving as the raw material for crafting baskets, cradles, boats, housing, and various other items. Manos and metates played a crucial role in food and animal hide processing (Barton et al. 2010, Sutton et al. 2016). Tools like knives, projectile points, and scraping implements were typically fashioned from imported lithic materials, as suitable stones were scarce in the Central Valley. Some specialized tools, such as bead drills, were made from obsidian acquired through trade or from more distant sources (Sutton et al. 2016). Marine shells obtained through trade with coastal groups served as both shell currency and personal adornments, including Olivella beads (Sutton et al. 2016, Wallace 1978).

Determining the precise historical-era Yokut population in the region remains challenging for researchers, yet it was not uncommon for the Yokut Tribes to consist of approximately 2,000 members. For thousands of years, the Yokuts stewarded the lands until the California Gold Rush brought settlers that disrupted their ancestral hunting and fishing territories. This upheaval not only displaced them from their lands but also resulted in violence when they resisted the encroachment. Furthermore, they were particularly vulnerable to diseases introduced by European settlers. By 1970, the Yokut population in San Joaquin County had dwindled to 363 individuals. The community continues to maintain a presence in the region to this day.

3.2.3 Post-contact Setting

Post-contact history for the state of California is generally divided into three periods: the Spanish Period (1769 to 1822), Mexican Period (1822 to 1848), and American Period (1848 to present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823 (Mission San Diego 2013). Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American Period when California became a territory of the United States.

Spanish Period (1769 to 1822)

Spanish explorers made sailing expeditions along the coast of California between the mid-1500s and mid-1700s. Juan Rodríguez Cabrillo in 1542 led the first European expedition to observe what was known by the Spanish as Alta (upper) California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968, Rolle 2003). The Spanish crown laid claim to Alta California based on the surveys conducted by Cabrillo and Vizcaíno (Bancroft 1885, Gumprecht 1999). It was during one of these expeditions that in the early nineteenth century, Lieutenant Gabriel Moraga named the San Joaquin River.

By the eighteenth century, Spain developed a three-pronged approach to secure its hold on the territory and counter against other foreign explorers. The Spanish established military forts known as presidios, as well as missions and pueblos (towns) throughout Alta California. The 1769 overland expedition by Captain Gaspár de Portolá marks the beginning of California's historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. Portolá established the Presidio of San Diego as the first Spanish settlement in Alta California in 1769.

Construction of missions and associated presidios was a major emphasis during the Spanish Period in California to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns; just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles).

Spain began making land grants in 1784, typically to retiring soldiers, although the grantees were only permitted to inhabit and work the land. The land titles technically remained property of the Spanish king (Livingston 1914).

Mexican Period (1822 to 1848)

Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Hackel 1997). Prior to 1850, the region of the Study Area was inhabited by the Yokuts, who experienced significant population declines due to a malaria epidemic in 1828 and a subsequent rebellion led by Chief Estanislao.

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos. Commonly, former soldiers and well-connected Mexican families were the recipients of these land grants, which now included the title to the land.

During the supremacy of the ranchos (1834 to 1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary Southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities. Between 1843 and 1846, the region of the Study Area received several Mexican land grants, including Rancho Campo de los Franceses, Pescadero (Grimes), Pescadero (Pico), Sanjon de los Moquelumnes, and Thompson. Charles Weber and Guillermo Gulnac developed Rancho Campos de los Franceses into the city of Stockton, which grew into a major hub during the Gold Rush, drawing miners to the Sierra Nevada.

American Period (1848 to Present)

The United States went to war with Mexico in 1846. During the first year of the war, John C. Fremont traveled from Monterey to Los Angeles with reinforcements for Commodore Stockton, and he evaded Californian soldiers in Santa Barbara's Gaviota Pass by taking the route over the San Marcos grade instead (Kyle 2002). The war ended in 1848 with the Treaty of Guadalupe Hidalgo, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as United States territories. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the California economy through 1850s. The discovery of gold in the northern part of the state led to the Gold Rush beginning in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from Southern to Northern California to feed that region's burgeoning mining and commercial boom.

A severe drought in the 1860s decimated cattle herds and drastically affected many rancheros' source of income. In addition, property boundaries that were loosely established during the Mexican era led to disputes with new incoming settlers, problems with squatters, and lawsuits. Rancheros often were encumbered by debt and the cost of legal fees to defend their property. As a

result, much of the rancho lands were sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns (Dumke 1944).

In the 1860s, the Central Pacific Railroad constructed a line through San Joaquin County, followed by the Western Pacific in 1909 and the Santa Fe Railroad in the early 1900s. These railroads fostered agricultural growth in the region (Dumke 1944).

As the gold economy waned in the 1870s, San Joaquin County transitioned into a significant agricultural center, aided by delta reclamation starting in 1869. This agricultural boom spurred a dynamic industrial sector in Stockton, Lodi, and Rio Vista by the 1880s, with notable companies such as the Sperry Flour Company, Holt Manufacturing Company, R. G. LeTourneau, Samson Ironworks, and the canning empire of Tillie Lewis. Benjamin Holt's Holt Manufacturing pioneered the industrial tractor, and R. G. LeTourneau patented the bulldozer in 1926 (Niemelä 2007).

San Joaquin County

San Joaquin County, established as one of California's original counties at statehood in 1850 and named after the San Joaquin River, boasts a rich and diverse history. From 1850 to 1990, San Joaquin County's agricultural industry experienced significant growth and transformation. Initially serving as a logistical hub during the Gold Rush, the county attracted settlers due to its fertile soil and favorable climate. Early farmers capitalized on these conditions, and the reclamation of Delta lands in the late nineteenth century facilitated the conversion of marshlands into productive farmland. This enabled the cultivation of diverse crops such as wheat, barley, corn, and fruit orchards, particularly grapes and cherries, which marked the beginning of the county's prominence in fruit production (San Joaquin County Historical Museum 2020).

In the mid-twentieth century, San Joaquin County saw increased mechanization and technological advancements in farming practices, boosting productivity and establishing the region as a major supplier of dairy, poultry, fruits, vegetables, and nuts. The development of transportation networks, including highways and railroads, enhanced the distribution of agricultural products. By the late twentieth century, the county's agricultural output had diversified further, and the Lodi wine industry gained international recognition, cementing San Joaquin County's status as a cornerstone of California's agricultural success and contributing significantly to the state's economy (San Joaquin County Historical Museum 2020). On August 7, 1998, a significant environmental incident occurred when a tire fire ignited at S.F. Royster's Tire Disposal near Tracy, burning for over two years, costing \$19 million in cleanup efforts, and resulting in groundwater contamination despite preventive measures. In 2010, the county faced financial upheaval with the closure of Pacific State Bancorp by the California Department of Financial Institutions (California State Parks n.d.).

By 2018, San Joaquin County's agricultural production had reached a valuation of \$2.6 billion, featuring prominent products, such as almonds, grapes, milk, and walnuts, as well as housing one of the world's largest walnut processing facilities, DeRuosi Nut. The local economy is bolstered by major companies, including Archer Daniels Midland, Blue Shield of California, Dart Container, Holz Rubber Company, Kubota Tractors, Lodi Iron Works, Miller Packing Company, Pacific Coast Producers, Tiger Lines, Valley Industries, and Woodbridge-Robert Mondavi. By 2019, the county's employment figures included approximately 260,000 individuals, with nearly 200,000 in private industry and about 44,500 in government roles. Additionally, the goods movement industry, exemplified by an Amazon fulfillment center in Tracy and the Port of Stockton, plays a crucial role in the economic infrastructure of San Joaquin County (San Joaquin Council of Governments California n.d.).

4 Methods

This section presents the methods for each task completed during the preparation of this assessment.

4.1 Background and Archival Research

4.1.1 California Historical Resources Information System

Rincon requested a cultural resources records search of the CHRIS from the Central California Information Center at California State University, Stanislaus in May 2024. The search was performed to identify previously conducted cultural resources studies and previously recorded cultural resources within the Study Area and a 1-mile radius surrounding it. Results from the records search can be found in Appendix A of this report.

4.1.2 Background Research

As part of the background research for this proposed Project, Rincon also reviewed the State Built Environment Resources Directory, NRHP, CRHR, California Historical Landmarks, California Points of Historic Interest, and the California Office of Historic Preservation Archaeological Determinations of Eligibility.

Additionally, the following resources were reviewed:

- Google Earth imagery
- USGS topographic quadrangle Maps
- Aerial photographs dating to 1949, 1957, 1967, 1968, 1982, 1993, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020

4.1.3 Native American Outreach

Rincon contacted the NAHC on May 13, 2024, to request a search of the SLF and a contact list of Native Americans culturally affiliated with the Project vicinity. Appendix B provides documentation of Rincon's outreach effort to locally affiliated Native American Tribes.

4.2 Field Survey

On June 27, 2024, Rincon archaeologist Darren Putty conducted a pedestrian field survey of the 39.53-acre Study Area using transect intervals of 15 meters. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, ground stone milling tools), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, and historic-period debris (e.g., metal, glass, ceramics). Ground disturbances, such as rodent burrows and drainages, were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite unit and a georeferenced map of the Study Area. Site characteristics and survey conditions were documented using field records and a digital camera. Copies of the survey notes and digital photographs are maintained at Rincon's Fresno office.

5 Results

5.1 Known Cultural Resources Studies

The Central California Information Center records search identified 21 previous cultural studies within the 1-mile records search radius. Seven of the studies overlapped with the Study Area, although five of these are large-scale regional overviews and do not include specific details regarding the current Study Area. Two previous studies discuss the current Study Area and provide information relevant to this cultural resources assessment. These two reports are summarized, below.

5.1.1 SJ-04509

SJ-04509 is a cultural resources technical report prepared in 2001 for the Tracy Peaker Project as part of a small power plant exemption application submitted to the CEC. The cultural resources survey conducted during June and July 2001 covered the approximately 40-acre project site plus a 200-foot buffer zone around it, as well as a 400-foot corridor along three potential linear segments extending to the northeast, northwest and east from the footprint of the plant site. The survey included the entirety of the current Study Area and resulted in updates to the records of four previously recorded historical linear resources (the Delta-Mendota Canal [P-39-000089], California Aqueduct [P-39-000090], Western Pacific Railroad [P-39-000098], and Union Pacific Railroad [P-39-000002]), as well as the recordation of three new historical features (telegraph poles [P-39-004288], a telegraph line [P-39-004290], and a fence line [P-39-004287]). No prehistoric archaeological resources were identified during the survey. No cultural resources were identified within the current Study Area by the first iteration of report SJ-04509 submitted to the CEC in August 2001. However, an addendum was subsequently prepared in response to a CEC data inadequacy response to the initial report that identifies an additional historical built environment feature (a network of transmission towers [P-39-004289]) within the project site and within the current Study Area. P-39-004289 consists of three sets of two transmission towers, part of a 137-mile electrical transmission system from Stanislaus to San Francisco. The addendum included an evaluation of the resource in which the towers were recommended ineligible for listing in the NRHP and the CRHR (see section 5.2.1 for additional details).

5.1.2 SJ-05159

SJ-05159 is a 2003 archaeological monitoring report prepared following construction of the Tracy Peaker Project. Monitoring to comply with the CEC's Conditions of Certification was conducted during development of an access road, excavation for an underground utility line from Schulte Road to the plant area, and excavation for a water pipeline trench from the Delta-Mendota Canal. Monitoring within the current Study Area was also conducted during excavation for development of the TCCPP facility. Aside from P-39-004289, no cultural resources were identified within the current Study Area during monitoring. Two historical artifacts (a glass transmission insulator and glass beer bottle) likely associated with construction of the canal were identified in spoils piles during monitoring and were recorded as one historical archaeological isolate located adjacent to the Delta-Mendota Canal, outside the current Study Area.

5.2 Known Cultural Resources

The CHRIS records search and background research identified 11 previously recorded cultural resources within 1 mile of the Project Area (Table 1). One of these resources, P-39-004289, a network of transmission lines known as Tesla-Kasson, Tesla Manteca, and Stanislaus-Newark, is recorded within the Study Area and is discussed in further detail below.

Table 1 Previously Recorded Cultural Resources within 1-Mile Records Search Area

Primary Number	Trinomial/ Temporary No.	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relationship to Project Area
P-39-000002	CA-SJO-000250H	Historical Built Environment Feature	Segment of the former Southern Pacific Railroad	1993 (Woodward-Clyde)	Recommended Not Eligible for NRHP/CRHR	Outside
				1993 (Costello and Marvin)		
				1994 (Woodward-Clyde)		
				1997 (Dore, Norton)		
				2001 (Egherman)		
				2001 (Bakic et al.)		
				2002 (Gross)		
				2002 (Byrd)		
				2002 (Windmiller)		
				2002 (Reno)		
				2003 (Brady)		
				2003 (Schmidt et al.)		
				2005 (Bowen)		
				2006 (Jones)		
				2007 (Jurich and Martinez)		
				2008 (Hibma)		
				2008 (Martinez)		
				2010 (Rainka)		
				2011 (Pappas et al.)		
				2012 (Ford)		
				2016 (Andreazzi)		
				2018 (Wisely)		
				2022 (Clinton-Selin)		
				2022 (Ugan)		
				2022 (Garvey)		
P-39-000066	CA-SJO-000262	Prehistoric Archaeological Site	Small cache of milling equipment; One metate fragment, one mano fragment, one abrading stone	1995 (Foster)	Not Evaluated	Outside

Primary Number	Trinomial/ Temporary No.	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relationship to Project Area
P-39-000089		Historical Built Environment Feature	Segment of the Delta-Mendota Canal	1993 (Woodward-Clyde Consultants) 2001 (Egherman) 2001 (Baker) 2001 (Farrell, Van Cittes and Bisson) 2003 (Larson and Johnson) 2007 (Carey & Co)	Recommended Eligible for NRHP/CRHR	Outside
P-39-000090		Historical Built Environment Feature	Segment of the California Aqueduct	1994 (JRP) 2001 (Egherman) 2007 (Carey & Co.) 2011 (Ambacher)	Recommended Eligible for NRHP/CRHR	Outside
P-39-000104		Historical Built Environment Feature	Segment of the Upper Main Canal	1993 (JRP) 2021 (Barnes & Pollard)	Recommended Not Eligible for NRHP/CRHR	Outside
P-39-004287		Historical Built Environment Feature	Section of historic fence line	2001 (Egherman) 2002 (Reno)	Recommended Not Eligible for NRHP/CRHR	Outside
P-39-004288		Historical Built Environment Feature	Segment of an abandoned telegraph, telephone, and power line	2001 (Egherman) 2002 (Reno)	Not Evaluated	Outside
P-39-004289		Historical Built Environment Feature	Transmission towers	2001 (Hatoff and Egherman)	Recommended Not Eligible for NRHP/CRHR	Within
P-39-004358	CA-SJO-000285H	Historical Built Environment Feature	Abandoned overhead utility line, abandoned fence line	2002 (Reno)	Recommended Not Eligible for NRHP/CRHR	Outside
P-39-004388		Historical Archaeological Isolate	Historic glass bottle and glass insulator	2002 (Reno)	Not Evaluated	Outside
P-39-005501		Prehistoric Archaeological Isolate	Prehistoric stone bead	2021 (Barnes & Pollard)	Recommended Not Eligible for NRHP/CRHR	Outside

CRHR = California Register of Historical Resources; NRHP = National Register of Historic Places

Source: Central California Information Center 2024

5.2.1 P-39-004289

P-39-004289 consists of three sets of two transmission towers, part of a 137-mile electrical transmission system from Stanislaus to San Francisco, known as the Tesla-Kasson, Tesla Manteca, and Stanislaus-Newark Network. The towers in the Study Area were recorded and evaluated by the URS Corporation in 2001. The evaluation notes the original towers were replaced in 1988, losing their original design, materials, and setting. As such, P-39-004289 was recommended ineligible for listing in the NRHP and CRHR under any designation criteria due to a lack of historical or

architectural significance and is not considered a historical resource under CEQA. The Project will also avoid the towers through Project design.

5.3 Background Research

Review of the Built Environment Resource Directory for San Joaquin County did not identify any properties within 1 mile of the Study Area in the NRHP or CRHR. A review of the NRHP and CRHR and other local historical databases was also negative for listings within the 1-mile search radius of the Study Area.

5.3.1 Review of Historical Topographic Maps and Aerial Imagery

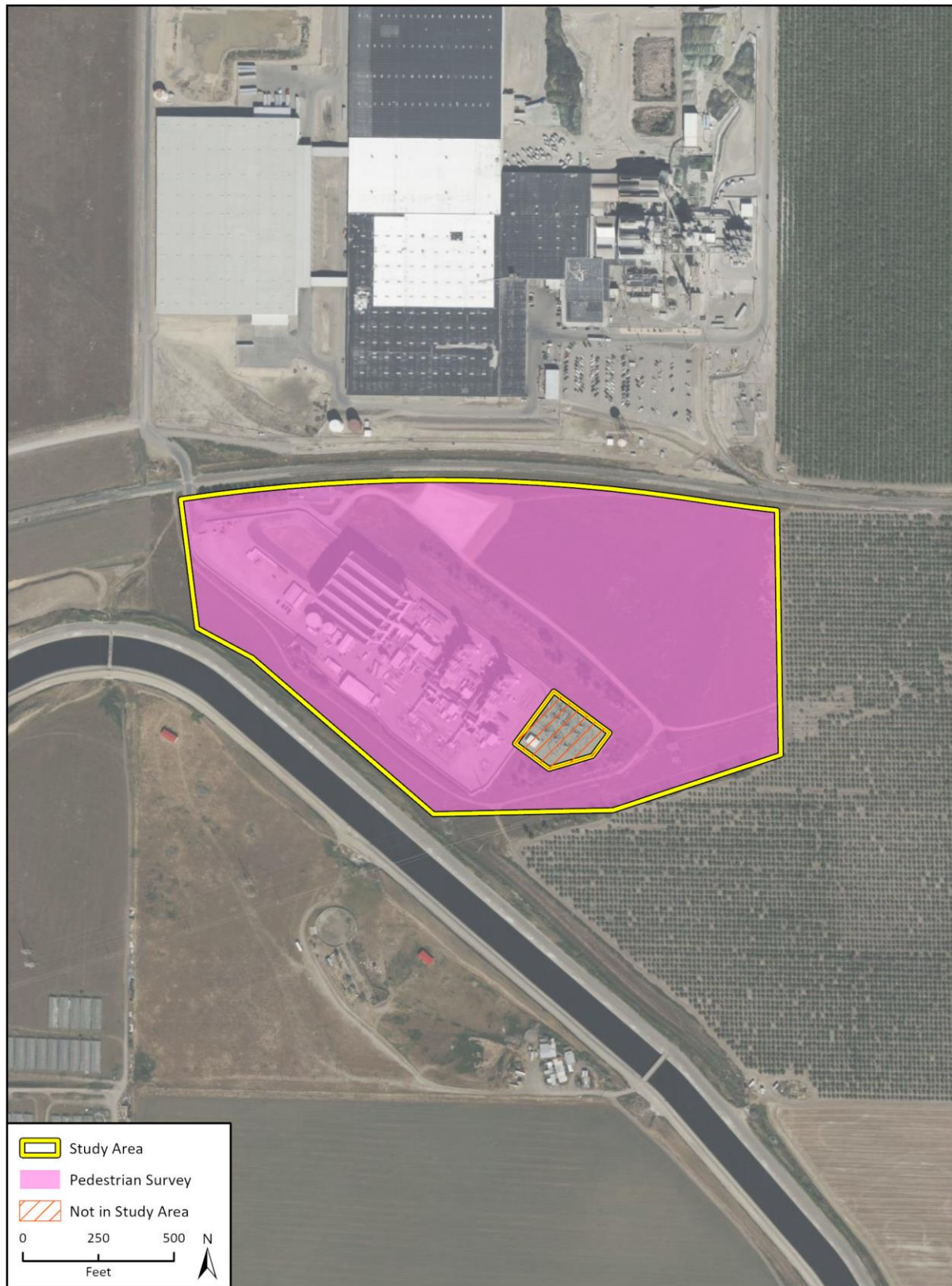
Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the Study Area. Topographic maps from 1949 to 1982 and historical aerial photographs show the Study Area as generally undeveloped, bordered by the canal, agricultural land, and dirt roads. The Study Area has been subject to ground disturbance, including land clearing, plowing, and tilling, as well as development of adjacent land and the construction of roads since the 1950s. Development appears to have increased to the north in the early 1970s and early 1980s, with the construction of an industrial building and U.S. Highway 580 (NETR 2024). Historical aerial imagery indicates that the Study Area was cleared of vegetation and graded by 1982, and the TCCPP appears to have been constructed by 2005 (NETR 2024). The western portion of the Study Area has been fully developed since 2005 (NETR 2024). The eastern portion of the Study Area remains undeveloped with the exception of a network of dirt roads that appear in imagery beginning in 2010. In 2012, the eastern portion of the Study Area was graded and used as a parking area with temporary storage structures, and the western TCCPP facility was expanded northward with the addition of paved roads. By 2014, the temporary storage was removed, and the area was graded again. The TCCPP in the eastern portion of the Study Area appears unchanged from 2014. The western portion of the Study Area has remained undeveloped.

5.3.2 Native American Outreach

A response from the NAHC was received on May 17, 2024, stating results of the SLF search are negative, meaning there is no documentation of resources of Native American origin within the NAHC's SLF database near the Study Area (the SLF search is conducted by USGS quadrangle section, an approximately 2- to 4-square-mile area). A list of 16 individuals from seven tribal groups in the region was provided (see Appendix B).

5.4 Field Survey

Rincon conducted a cultural resources pedestrian survey of the Study Area on June 27, 2024 (Figure 4). Ground visibility was fair with approximately 36 percent exposure. Vegetation included a thick layer of dry grass, sparse patches of thistle, and a tree line along the central western roadway (Figure 5). Soil consisted of gray/brown sandy loam throughout the Study Area, with development including graded roadways and paved surfaces reducing visibility (Figure 6). Transmission towers and poles are visible in the southern portion of the Study Area (Figure 7 and Figure 8). The area has been heavily disturbed from construction and maintenance of the current TCCPP facility (Figure 9 and Figure 10). No cultural materials were identified in the Study Area during the field survey.

Figure 4 Survey Location Map

Imagery provided by Microsoft Bing and its licensors © 2024.

24-15860 CR
Fig X Survey Location Map

Figure 5 View from Central Portion of Study Area, Facing Northeast



Figure 6 View from Central Portion of the Study Area, Facing East



Figure 7 View from Southwestern Boundary of the Study Area, Facing East Southeast



Figure 8 View from Southeastern Boundary of the Study Area, Facing West



Figure 9 View from Southeastern Portion of Study Area, Facing Northeast



Figure 10 View from Northeastern Boundary of the Study Area, Facing Southwest



6 Impacts Analysis and Conclusions

The impact analysis included here is organized based on the cultural resources thresholds included in *State CEQA Guidelines* Appendix G: Environmental Checklist Form.

- a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?
- b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
- c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Threshold A broadly refers to historical resources. To more clearly differentiate between archaeological and built environment resources, Rincon has chosen to limit analysis under Threshold A to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to Section 15064.5 and those that may be considered unique archaeological resources pursuant to Section 21083.2, are considered under Threshold B.

6.1 Historical Built Environment Resources

The field survey and background research identified one built environment historical structure in the Study Area, P-39-004289, consisting of three sets of two transmission towers. However, the towers were recommended ineligible for listing in the NRHP and the CRHR under any designation criteria due to a lack of historical or architectural significance. P-39-004289 is thus not considered a historical resource under CEQA. The Project, which will also avoid the towers through Project design, does not have the potential to impact historical built environment resources, and Rincon recommends a finding of ***no impact to historical resources*** pursuant to CEQA.

6.2 Historical and Unique Archaeological Resources

The records search of the CHRIS, SLF search, and the archaeological field survey identified no archaeological resources within the Study Area. However, two previously recorded archaeological sites (one prehistoric and one historic-era) and two isolated artifacts (one prehistoric and one historic-era) were identified within 1 mile of the Study Area. Although there is no surficial evidence within the Study Area suggesting the proposed Project may impact archaeological resources, the presence of two archaeological sites and two archaeological isolates within 1 mile of the Study Area suggest the Study Area is at least moderately sensitive in terms of the potential to impact such resources that could be present beneath the surface. To address these concerns, Rincon recommends Cultural Resources Sensitivity Training for all on-site construction personnel prior to the start of ground disturbance for the project. Based on the results of this study, Rincon recommends a finding of ***less-than-significant impact to archaeological resources with mitigation incorporated*** under CEQA. A measure for the unanticipated discovery of cultural resources during project development as a best management practice is also provided.

6.2.1 Recommended Mitigation

Cultural Resources Sensitivity Training

Prior to the commencement of project-related, ground-disturbing activities, including, but not limited to, site clearing, grubbing, trenching, and excavation, a qualified archaeologist who meets or exceeds the Secretary of the Interior's Professional Qualifications Standards for Archaeology (National Park Service 1983) shall provide a Cultural Resources Sensitivity Training for the general contractor, subcontractors, and construction workers participating in ground-disturbing activity for Project development. The training shall describe the potential of exposing archaeological resources, types of cultural materials that may be encountered, and directions on the steps that shall be taken if such a find is encountered. Consulting Tribes shall be given an opportunity to review training materials and provide input. This training may be presented alongside other environmental training programs required prior to construction. A Cultural Resources Sensitivity Training acknowledgment form shall be signed by workers who receive the training.

Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via Project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of the California Code of Regulations Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The County shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHRIS, per California Code of Regulations Section 15126.4(b)(3)(C).

6.3 Human Remains

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify an MLD. The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance.

7 References

Bancroft, Hubert How

- 1885 *History of California, Volume III: 1825-1840*. San Francisco, California: A.L. Bancroft & Co.

Barton, Amber, Maria Del Carmen Guzman, and Breeann Romo

- 2010 The Preliminary Results of the 2008 Archaeological Investigations at the Bead Hill Site (KER-450), Beuna Vista Lake, California. *SCA Proceedings* 24: 1–12.

Bean, Walton

- 1968 *California: An Interpretive History*. McGraw-Hill Book Company.

Burns, Gregory, Susan Talcott, Kathryn Demps, Jason Edmonds, John Lambert, Andrew Tremayne, Jelmer Eerkens, and Eric Bartelink

- 2016 Isotopic Evidence for Changing Residence Patterns through the Middle to Late Holocene in Central California. *SCA Proceedings* 26: 164–171.

California Office of Historic Preservation

- 2003 California Historical Resources Status Codes. Electronic document, <http://www.ohp.parks.ca.gov/pages/1069/files/tab8.pdf> (accessed April 14, 2022).

California Soil Resource Lab

- 2017 SoilWeb Viewer – Diablo Series. <https://casoilresource.lawr.ucdavis.edu/sde/?series=diablo#osd> (accessed June 2024).

California State Parks

- n.d. San Joaquin. https://ohp.parks.ca.gov/?page_id=21483 (accessed July 2024).

Dumke, Glenn S.

- 1944 *The Boom of the Eighties in Southern California*. Huntington Library Publications, San Marino, California.

Gumprecht, Blake

- 1999 *The Los Angeles River: Its Life, Death, and Possible Rebirth*. Baltimore, Maryland: Johns Hopkins University Press.

Hackel, Steven W.

- 1997 Land, Labor, and Production: The Colonial Economy of Spanish and Mexican California. *California History* 76(2/3): 111–146.

Kroeber, Alfred J.

- 1925 Handbook of the Indians of California. *Bureau of American Ethnology, Bulletin 78*. Originally published 1925, Smithsonian Printing Office, Washington, D.C. Unabridged reprint 1976, Dover Publications, Inc. New York.

Kyle, Douglas E.

- 2002 *Historic Spots in California*. Stanford, California: Stanford University Press.

LaJeunesse, Roger and John Pryor

- 1996 Skyrocket Appendices. Report on file, Department of Anthropology, California State University, Fresno.

Livingston, M.M.

- 1914 The Earliest Spanish Land Grants in California. Annual Publication of the Historical Society of Southern California 9(3): 195–199.

McGuire, Kelly R.

- 1995 Test Excavations at CA-FRE-61, Fresno County, California. Occasional Papers in Anthropology 5. Museum of Anthropology, California State University Bakersfield.

Mission San Diego

- 2013 Mission History. Electronic document.
<http://www.missionsandiego.com/missionhistory.html> (accessed October 2, 2013).

Mithun, Marianne

- 2001 *The Languages of Native North America*. Reprinted. Originally published 1999. Cambridge University Press, New York.

Moratto, Michael J.

- 1984 *California Archaeology*. Academic Press, New York.

National Park Service

- 1983 *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. Electronic document. http://www.nps.gov/history/local-law/Arch_Standards.htm (accessed April 14, 2022).

Nationwide Environmental Title Research, LLC (NETR)

- 2024 Historic aerials of 14950 West Schulte Road, San Joaquin County, CA. Electronic document. <https://www.historicaerials.com> (accessed July 2024).

Niemelä, John H.

- 2007 A History of R.G. LeTourneau's Earliest Scrapers: Culminating in the 1922 Mountain Mover. Historic Mechanical Engineering Landmark, LeTourneau University, ASME.

Rolle, Andrew

- 2003 *California: A History*. Revised and expanded sixth edition. Harlan Davidson, Inc., Wheeling, Illinois.

Rosenthal, Jeffrey, Gregory White, and Mark Sutton

- 2007 The Central Valley: A View from the Catbird's Seat. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 147–164. AltaMira Press, Lanham Maryland.

San Joaquin Council of Governments California

- n.d. Warehousing and Logistics accessed July 2024 via:
<https://www.sjcog.org/389/Warehousing-and-Logistics>.

San Joaquin County

- 2016 San Joaquin County General Plan. <https://www.sjgov.org/commdev/cgi-bin/cdyn.exe/file/Planning/General%20Plan%202035/GENERAL%20PLAN%202035.pdf> (accessed July 2024).

San Joaquin County Historical Museum

- 2020 History of San Joaquin County. <https://sanjoaquinhistory.org/research-and-archives/resources> (accessed online July 2024).

State of California

- 2019 *CEQA: California Environmental Quality Act Statutes and Guidelines*. Office of Planning and Research, Sacramento, CA. Electronic document.
https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2019_CEQA_Statutes_and_Guidelines.pdf

Sutton, Mark Q., Jille K. Gardner, Kenneth W. Gobalet, and Nancy Valente

- 2016 Archaeological Investigations at the Manifold Site (CA-KER-4220), Buena Vista Lake, Southern San Joaquin Valley, California.

United States Department of Agriculture Natural Resources Conservation Service

- 2019 Web Soil Survey. Soil Survey Area: San Joaquin County, California. Soil Survey Data: Version 12. Available at: <http://websoilsurvey.nrcs.usda.gov/app/> (accessed June 2024).

United States Department of the Interior

- 2004 *National Historic Preservation Act (NHPA): Section 106*. Electronic Document, <https://www.achp.gov/sites/default/files/regulations/2017-02/regs-rev04.pdf> (accessed April 14, 2022).

United States Geological Survey (USGS)

- 2023 *Escondido, California*, United States Geological Survey 7.5-minute topographic quadrangle map, within Township 12 South, Range 02 West, Sections 19 and 20.

Wallace, William J.

- 1978 "Southern Valley Yokuts." In *California*, edited by Robert F. Heizer, pp. 448–461. *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington.

Warren, Claude N.

- 1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by Cynthia Irwin-Williams, pp. 1–14. Eastern New Mexico University Contributions in Anthropology No. 1. Portales.

Appendix A (NOT INCLUDED IN THIS VERSION)

CONFIDENTIAL – Central California Information Center Records Search Results

Appendix A contains sensitive and confidential information concerning archaeological resources, including locational maps and other sensitive information. Appendix A should be held confidential and is not for public distribution. Archaeological site locations are exempt from the California Public Records Act, as specified in Government Code 6254.10, and from the Freedom of Information Act (Exemption 3), under the legal authority of both the National Historic Preservation Act (PL 102-574, Section 304[a]) and the Archaeological Resources Protection Act (PL 96-95, Section 9[a]). Distribution should be restricted appropriately.

Appendix B

Native American Heritage Commission Sacred Land Files Search

**NATIVE AMERICAN HERITAGE COMMISSION**

May 16, 2024

Mark Strother
Rincon Consultants, Inc.Via Email to: mstrother@rinconconsultants.com**Re: Tracy BESS Project, San Joaquin County**

Dear Mr. Strother:

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: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

*Pricilla Torres-Fuentes*Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

CHAIRPERSON
Reginald Pagaling
ChumashVICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki,
NomlakiSECRETARY
Sara Dutschke
MiwokPARLIAMENTARIAN
Wayne Nelson
LuiseñoCOMMISSIONER
Isaac Bojorquez
Ohlone-CostanoanCOMMISSIONER
Stanley Rodriguez
KumeyaayCOMMISSIONER
Laurena Bolden
SerranoCOMMISSIONER
Reid Milanovich
CahuillaCOMMISSIONER
Bennae Calac
Pauma-Yuima Band of
Luiseño IndiansEXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok, Nisenan**NAHC HEADQUARTERS**
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710

Native American Heritage Commission
Native American Contact List
San Joaquin County
5/16/2024

County	Tribal Name	Not Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
San Joaquin	Araya Mutsun Tribal Band	N	Ed Kickedjun, Vice-Chairperson	P.O. Box 6272 Galt, CA 95632	(530) 575-3864 (916) 743-5633		ae@weay5@aol.com yktstcnetcable@aol.com	Catsaram Northern Valley Yokut	Alameda, Calaveras, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	7/20/2023
	Confederated Villages of Luján-Náilon	N	Daga Gould, Language Program Manager	10262 Edies Ave Oakland, CA 94603	(510) 575-9408		calbthe@gmail.com	Bay Muck	Alameda, Contra Costa, Sacramento, Stanislaus	3/22/2023
	Confederated Villages of Luján-Náilon	N	Cornelia Gould, Chairperson	10262 Edies Avenue Oakland, CA 94603	(510) 575-9408		calbthe@gmail.com	Bay Muck	Alameda, Contra Costa, Sacramento, Stanislaus	3/22/2023
	Confederated Villages of Luján-Náilon	N	Cherylene Gould, Tribal Cultural Resource Manager	10262 Edies Ave Oakland, CA 94603	(510) 575-9408		calbthe@gmail.com	Chona Yokut Bay Muck	Alameda, Contra Costa, Sacramento, Stanislaus Yuba, Sutter, Yuba	3/22/2023
	Maewema Ohlone Tribe of the SF Bay Area	N	Charles Niyen, Chairperson	1169 S. Main Street, Ste. 336 Marine, CA 95377	(408) 464-2882 (209) 321-0372		cnl@nheka.org mss@nheka.org	Delia Yokut Catsaram	Alameda, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	3/28/2024
	Maewema Ohlone Tribe of the SF Bay Area	N	Richard Massett, Councilmember/Tribal Rep.	1169 S. Main Street, Ste. 336 Marine, CA 95377	(209) 321-0372		massett@nheka.org	Catsaram	Alameda, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	3/28/2024
	Northern Valley Yokut / Ohlone Tribe	N	Timothy Perez, Tribal Compliance Officer	P.O. Box 717 Linden, CA 95238	(209) 862-2788		hudsonam@gmail.com	Catsaram Northern Valley Yokut	Alameda, Calaveras, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	1/12/2023
	Northern Valley Yokut / Ohlone Tribe	N	Katherine Perez, Chairperson	P.O. Box 717 Linden, CA 95238	(209) 864-8872		carabke@verizon.net	Catsaram Northern Valley Yokut	Alameda, Calaveras, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	4/30/2024
	Tule River Indian Tribe	F	Joye Garfield, Tribal Archaeologist	P.O. Box 589 Potterville, CA 93258	(559) 783-8882	(559) 763-8832	joye.garfield@tuletribe.org	Yokut	Alameda, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	7/22/2016
	Tule River Indian Tribe	F	Keri Vera, Environmental Department	P.O. Box 589 Potterville, CA 93258	(559) 783-8882	(559) 763-8832	kem.vera@tuletribe.org	Yokut	Alameda, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	7/22/2016
	Tule River Indian Tribe	F	Nell Poyon, Chairperson	P.O. Box 589 Potterville, CA 93258	(559) 781-4271	(559) 761-4610	nell.poyon@tuletribe.org	Yokut	Alameda, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	7/22/2016
	Willam Rancheria	F	Herbert Griffin, Executive Director of Cultural Preservation	9728 Kent Street Eureka, CA 95924	(916) 885-4000		hgriffin@willamrancheria-nai.gov	Miwok	Alameda, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	8/17/2023
	Willam Rancheria	F	Dalton Brown, Executive Director of Administration	9728 Kent Street Eureka, CA 95924	(916) 885-4000		dbrown@willamrancheria-nai.gov	Miwok	Alameda, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	8/17/2023
	Willam Rancheria	F	Cultural Preservation Department	9728 Kent Street Eureka, CA 95924	(916) 885-4000		cpd@willamrancheria-nai.gov	Miwok	Alameda, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	8/17/2023
	Wukachin Indian Tribe/Ethnic Valley Band	N	Kenneth Woodfox, Chairperson	1179 Rock Haven Ct. Salinas, CA 93906	(831) 443-9702		wood839@aol.com	Rockall Yokut Miwok	Alameda, Calaveras, Contra Costa, Fresno, Merced, Mariposa, Mendocino, Modoc, Mono, Nevada, Placer, Stanislaus, Sutter, Tehama, Yuba	6/19/2023

This is not only applicable for contacting local Native Americans with regard to cultural resources assessment (or the proposed Tracy BESS Project, San Joaquin County).
This is not only applicable for contacting local Native Americans with regard to cultural resources assessment (or the proposed Tracy BESS Project, San Joaquin County).

Record: P80-2-2024-002652
Report Title: LARA of Tides
Contract: San Joaquin
NAAC Group: All

Appendix D

Preliminary Stormwater Management Report

July 29, 2024

MIDDLE RIVER POWER

Tracy BESS LLC – Tracy LDES Project San Joaquin County, California

Preliminary Stormwater Management Report

PRELIMINARY - FOR PERMITTING

PROJECT NUMBER:

0249671

PROJECT CONTACT:

Jeffrey Molony, EIT

EMAIL:

jeff.molony@powereng.com

PHONE:

513-326-1516



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Preliminary Stormwater Management Report

PREPARED FOR: MIDDLE RIVER POWER

PREPARED BY: JEFFREY MOLONY, EIT

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ACRONYMS AND ABBREVIATIONS

BESS	Battery Energy Storage System
CFS	Cubic feet per second
FPS	Feet per second
HSG	Hydrologic Soil Group
LDES	Long-Duration Energy Storage
Manual	Multi-Agency Post-Construction Stormwater Standards Manual
NOAA	National Oceanic and Atmospheric Administration
Project	Tracy BESS LLC– Tracy LDES Project
SSA	Autodesk Storm and Sanitary Sewer Analysis 2022
SDV	Stormwater Design Volume
TCCPP	Tracy Combined-Cycle Power Plant
WSE	Water Surface Elevation

1.0 PROJECT BACKGROUND

Tracy BESS LLC proposes to construct and operate the Tracy long-duration energy storage (LDES) battery energy storage system (BESS), located north of the Tracy Combined-Cycle Power Plant (TCCPP) facility. The BESS facilities will capture, store, and distribute excess power from the grid that is generated outside of peak demand hours. The TCCPP and Tracy BESS will maintain separate owners and legal responsibilities for operation but will share common infrastructure.

The purpose of this report is to show that the local jurisdictional stormwater requirements are met, and the proposed design does not cause any downstream flooding, water quality issues, or create higher discharge rates than what occurs in the predevelopment condition. The Project property (Parcel # 209-240-320-000) is 38.99 acres in size and currently developed with the TCCPP. The TCCPP occupies the southwestern portion of the property and consists of 12.65 acres of existing impervious surface. Stormwater runoff generated from the impervious surface associated with the existing development is treated by an existing stormwater infiltration basin. As part of this project, 12.80 acres will be disturbed, and the proposed development will create 5.28 acres of new impervious surface.

2.0 PROJECT INFORMATION

2.1 Tracy BESS

Project Name: Tracy BESS LLC – Tracy LDES Project

Project Location: 14950 W Schulte Road, Tracy, CA 95377

Location Coordinates:

Latitude: 37° 42' 43.75"

Longitude: 121° 29' 26.70"

Site Acreage:

Project Property: 38.99 acres

Existing Impervious: 12.65 acres

Proposed Disturbed Area: 12.80 acres

Proposed Impervious Area: 5.28 acres

2.2 Design Criteria

Proposed stormwater facilities were designed per the Multi-Agency Post-Construction Stormwater Standards Manual (Manual), dated June 2015. As a commercial redevelopment creating or replacing greater than one acre of impervious surface, this project will be considered a Hydromodification Management Project, according to Section 1.5 of the Manual. As a redevelopment resulting in a 42% increase in impervious surface, only stormwater runoff from the new and/or replaced impervious surfaces will be managed by the proposed stormwater

facilities. As a Hydromodification Management Project, the proposed storm facilities will be treating the Stormwater Design Volume (SDV) calculated per Manual section 5.2 and will be mitigated via infiltration by the proposed detention basin.

The Soil Conservation Service's (SCS) routing method with a Type I storm distribution was used to determine the peak runoff rate from the 100-year, 24-hour storm event for channel performance and detention basin sizing. National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Point Precipitation Frequency Estimates were utilized for 24-hour precipitation intensities. Table 2-2a of the TR-55 manual was used to determine Curve Numbers for the SCS routing method.

3.0 EXISTING CONDITIONS

3.1 General Description

The 38.99-acre property currently developed with the TCCPP consists of 12.65 acres of existing impervious surface. Stormwater runoff generated from the impervious surface associated with the existing development is treated by an existing stormwater infiltration basin. The proposed development will not adversely affect or increase runoff to the existing stormwater facilities.

The Project site is located north of the TCCPP and is currently undeveloped, grassed land that was previously graded and functioned as a staging area during the TCCPP construction. Stormwater runoff in the existing condition sheet flows to the northeast and flows off the project property to an existing ditch along the adjacent railroad to the north. The Project is in the FEMA Flood Zone X. A Pre-Development Drainage Map is included in Appendix A.

3.2 Soils

The soils on-site are described below.

- » 118, Capay clay, 0 to 2 percent slopes, moderately well drained, Hydrologic Soil Group (HSG) C
- » 252, Stomar clay loam, 0 to 2 percent slopes, well drained, HSG C

Web Soils Survey estimates the capacity of the most limiting layer to transmit water moderately low to moderately high (0.06-0.20 inches per hour). Table 3-1 of the Manual estimates HSG C soils having an infiltration rate of 0.17-0.27 inches per hour. During geotechnical investigation, field percolation tests will be conducted to establish in-situ infiltration rates.

The Web Soils Survey Report is included in Appendix B.

3.3 Curve Numbers

The table below provides the curve numbers used to model stormwater runoff in the pre- and post-development conditions. Curve numbers are based on Table 2-2a of the TR-55 manual, available in Appendix B.

TABLE 1 CURVE NUMBERS

LAND COVER	HSG C
Grass	74
Dirt Road	87
BESS Pad	89
Asphalt Pavement	98

4.0 PROPOSED DEVELOPMENT

4.1 General Description

As noted above, the proposed development consists of 12.80 acres of disturbance and 5.28 acres of new impervious surface. The proposed on-site drainage features include a two-foot-wide concrete channel, HDPE storm pipe, and proposed detention basin. At this preliminary design stage, stormwater runoff produced by the proposed development will primarily sheet flow over the BESS pad and access roads directly to the detention basin. As the design progresses, surface inlets and subsurface storm pipes may be proposed to capture runoff and convey runoff to detention underground.

4.2 On-Site Developments

The BESS pad, switchyard, and access roads have been designed with a minimum 0.50 percent slope to convey drainage off pads and access roads via sheet flow. The maximum sheet flow distance for any stormwater on-site is approximately 300 linear feet. Stormwater landing on the proposed development will primarily sheet flow to the proposed detention basin. The western portion of the BESS pad utilizes a two-foot-wide, one-foot-deep concrete channel to intercept runoff that would otherwise bypass detention and reroute the runoff to the detention basin. The detention basin design includes an outlet control structure with a 5-inch orifice allowing outflow above the SDV water surface elevation, and a 24-inch-wide by 12-inch-high window above the orifice to facilitate flow for large storm events. The outlet control structure directs stormwater to an 18-inch storm discharge pipe. The proposed stormwater detention basin provides detention of the 100-year, 24-hour storm, and retains the SDV calculated in Section 5.0 of this report.

A Post-Development Drainage Map can be seen in Appendix A. Please see Appendix C for the preliminary drawing set for the proposed development.

4.3 Off-Site Developments

There are no off-site drainage features as part of this project.

5.0 STORMWATER RUNOFF

Addressing stormwater runoff at the site includes hydrologic and hydraulic analysis of the post-development site drainage characteristics described above. The management of stormwater includes the development of a detention basin, with the conveyance systems as described above.

Proposed swales, pipes and basin were evaluated utilizing the 100-year, 24-hour storm to ensure flood control for existing, proposed, and downstream facilities. Storm system performance modeling via Autodesk Storm and Sanitary Sewer Analysis 2022 (SSA) is available in Appendix D. NOAA Atlas 14 Point Precipitation Frequency Estimates data utilized to model 24-hour storm events is available in Appendix E.

The below calculations establish the SDV for the Project, per Section 5.2 of the Manual. This volume will be fully retained by the proposed detention basin.

$$C = 0.858 \times i^3 - 0.78 \times i^2 + i + 0.04$$

Where:

C = stormwater runoff coefficient (unitless)

i = imperviousness ratio (decimal)

$$P_0 = (a \times C) \times P_6$$

Where:

P_0 = unit stormwater volume (in.)

a = regression constant (1.963 for 48-hr drawdown)

P_6 = mean annual runoff-producing rainfall depth (in.)

$$SDV = A \times \frac{P_0}{12}$$

Where:

SDV = stormwater design volume (ft³)

P_0 = unit stormwater volume (in.)

A = total area (ft²)

Project SDV

$$i = 0.88$$

$$C = 0.90$$

$$P_6 = 0.33 \text{ in. (Table 5-1 of the Manual)}$$

$$P_0 = 0.58 \text{ in.}$$

$$A = 214.731 \text{ ft}^2$$

$$SDV = 10,379 \text{ ft}^3$$

The tables below illustrate the performance of the proposed stormwater facilities. The detailed hydrologic and hydraulic SSA modeling results can be found in Appendix D.

TABLE 2 PRE-DEVELOPMENT VS POST DEVELOPMENT PEAK FLOWS

PEAK FLOW & VOLUME DATA		
Condition	100-yr - 24-hr Peak (CFS)	100-yr - 24-hr Volume (CF)
Pre-Dev to Outflow	2.95	30,006
Post-Dev to Basin	9.38	44,800
Post-Dev Outflow	2.68	50,040

CFS = cubic feet per second
CF = cubic feet

As seen in Table 2, the post-development peak discharge rate is less than the predevelopment peak discharge.

TABLE 3 CULVERT & PIPE PERFORMANCE

CULVERT & PIPE PERFORMANCE DATA						
Pipe Name	Diameter (inches)	Length (feet)	Slope %	Flow Capacity (CFS)	100-YR - 24-HR Flow (CFS)	Velocity (FPS)
DETENTION OUTLET	18	71	0.28	6.02	1.03	4.19

CFS = cubic feet per second
FPS = feet per second

TABLE 4 CONCRETE CHANNEL PERFORMANCE

CONCRETE CHANNEL PERFORMANCE DATA								
Pipe Name	Width (feet)	Depth (feet)	Length (feet)	Slope %	Flow Capacity (CFS)	100-YR - 24-HR Flow (CFS)	Velocity (FPS)	Flow Depth (feet)
CONCRETE CHANNEL	2	1	226	0.53	6.82	3.26	2.96	0.55

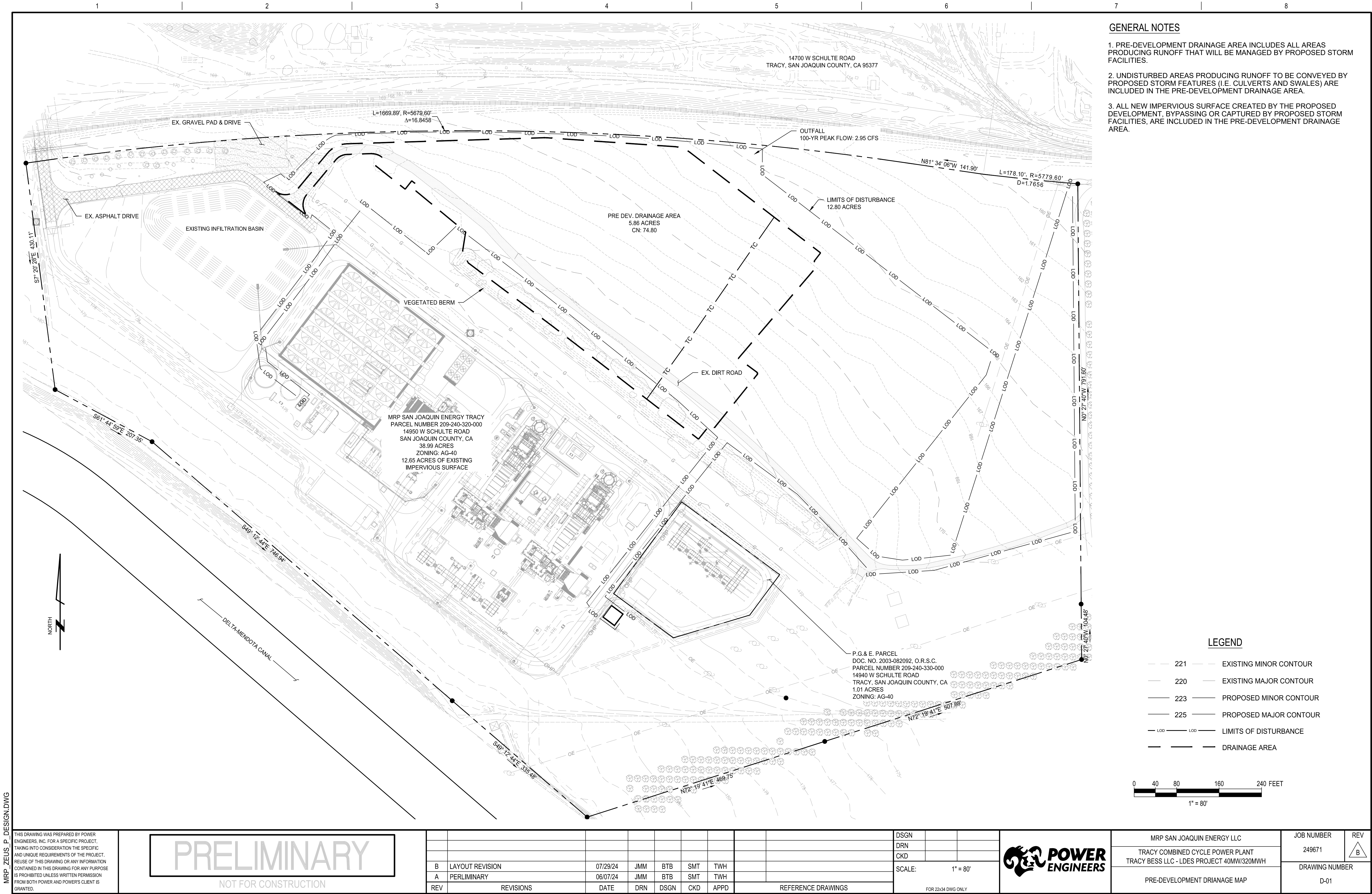
CFS = cubic feet per second
FPS = feet per second

TABLE 5 DETENTION BASIN DATA

DETENTION BASIN DATA	
Top of Basin Elevation	169.00 feet
Basin Invert Elevation	165.20 feet
5" Orifice Elevation	166.20 feet
24"W x 12"H Window Elevation	167.50 feet
Retention Volume	10,400 CF
Total Storage Volume	44,177 CF
POST-100-Year - 24-hr Storm WSE	167.62 feet

WSE = Water Surface Elevation
CF = cubic feet

APPENDIX A PRE-DEVELOPMENT AND POST DEVELOPMENT DRAINAGE MAPS

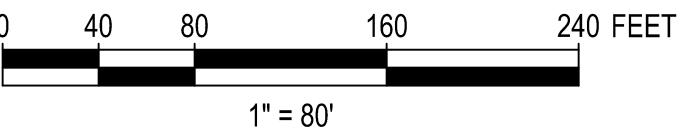


GENERAL NOTES

1. PRE-DEVELOPMENT DRAINAGE AREA INCLUDES ALL AREAS PRODUCING RUNOFF THAT WILL BE MANAGED BY PROPOSED STORM FACILITIES.
2. UNDISTURBED AREAS PRODUCING RUNOFF TO BE CONVEYED BY PROPOSED STORM FEATURES (I.E. CULVERTS AND SWALES) ARE INCLUDED IN THE PRE-DEVELOPMENT DRAINAGE AREA.
3. ALL NEW IMPERVIOUS SURFACE CREATED BY THE PROPOSED DEVELOPMENT, BYPASSING OR CAPTURED BY PROPOSED STORM FACILITIES, ARE INCLUDED IN THE PRE-DEVELOPMENT DRAINAGE AREA.

LEGEND

- 221 EXISTING MINOR CONTOUR
- 220 EXISTING MAJOR CONTOUR
- 223 PROPOSED MINOR CONTOUR
- 225 PROPOSED MAJOR CONTOUR
- LOD LIMITS OF DISTURBANCE
- DRAINAGE AREA



MRP_ZELUS_P_DESIGN.DWG

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PRELIMINARY

NOT FOR CONSTRUCTION

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
B	LAYOUT REVISION	07/29/24	JMM	BTB	SMT	TWH	
A	PERLIMINARY	06/07/24	JMM	BTB	SMT	TWH	

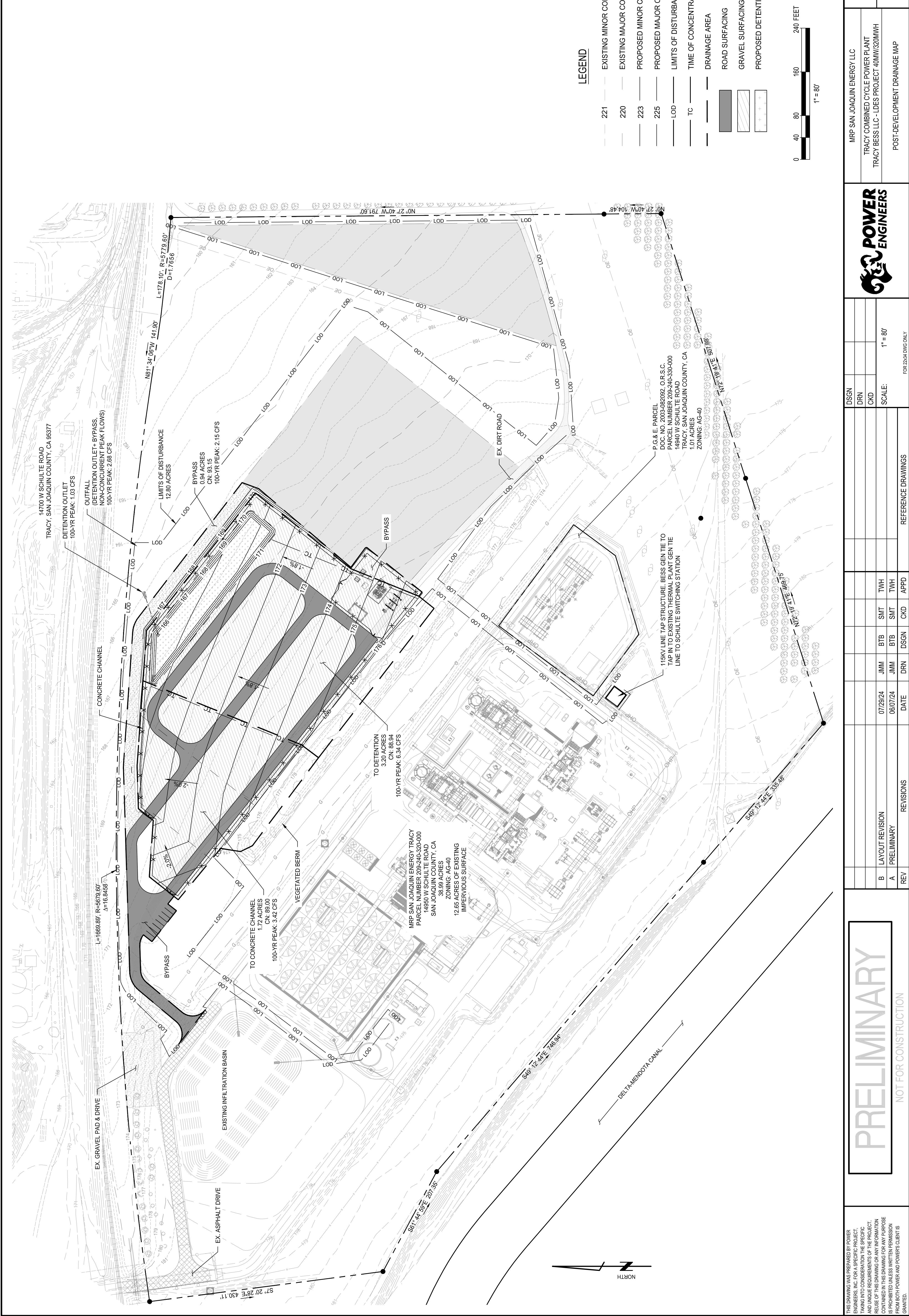
DSGN		
DRN		
CKD		
SCALE: 1" = 80'		
FOR 22x34 DWG ONLY		



MRP SAN JOAQUIN ENERGY LLC	
TRACY COMBINED CYCLE POWER PLANT	
TRACY BESS LLC - LDES PROJECT 40MW/320MWH	
PRE-DEVELOPMENT DRAINAGE MAP	

JOB NUMBER	249671	REV	B
DRAWING NUMBER	D-01		

12



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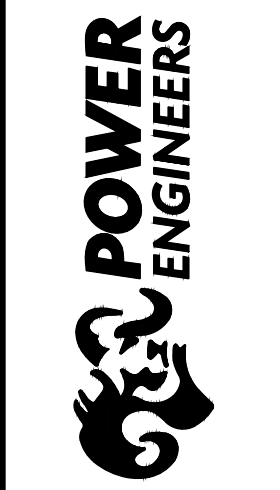
PRELIMINARY

NOT FOR CONSTRUCTION

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD
B	LAYOUT REVISION	07/29/24	JMM	BTB	SMT	TWH
A	PRELIMINARY	06/07/24	JMM	BTB	SMT	TWH

DSGN	DRN	CKD	SCALE:
			1" = 80'

DSGN	DRN	CKD	SCALE:
			1" = 80'



JOB NUMBER	REV	REV
249671	B	
TRACY COMBINED CYCLE POWER PLANT TRACY BESS LLC - LDES PROJECT 40MW/320MWH	DRAWING NUMBER	D-42
MRP SAN JOAQUIN ENERGY LLC	POST-DEVELOPMENT DRAINAGE MAP	

APPENDIX B WEB SOILS SURVEY REPORT & TR-55 TABLE 2-2A



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **San Joaquin County, California**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

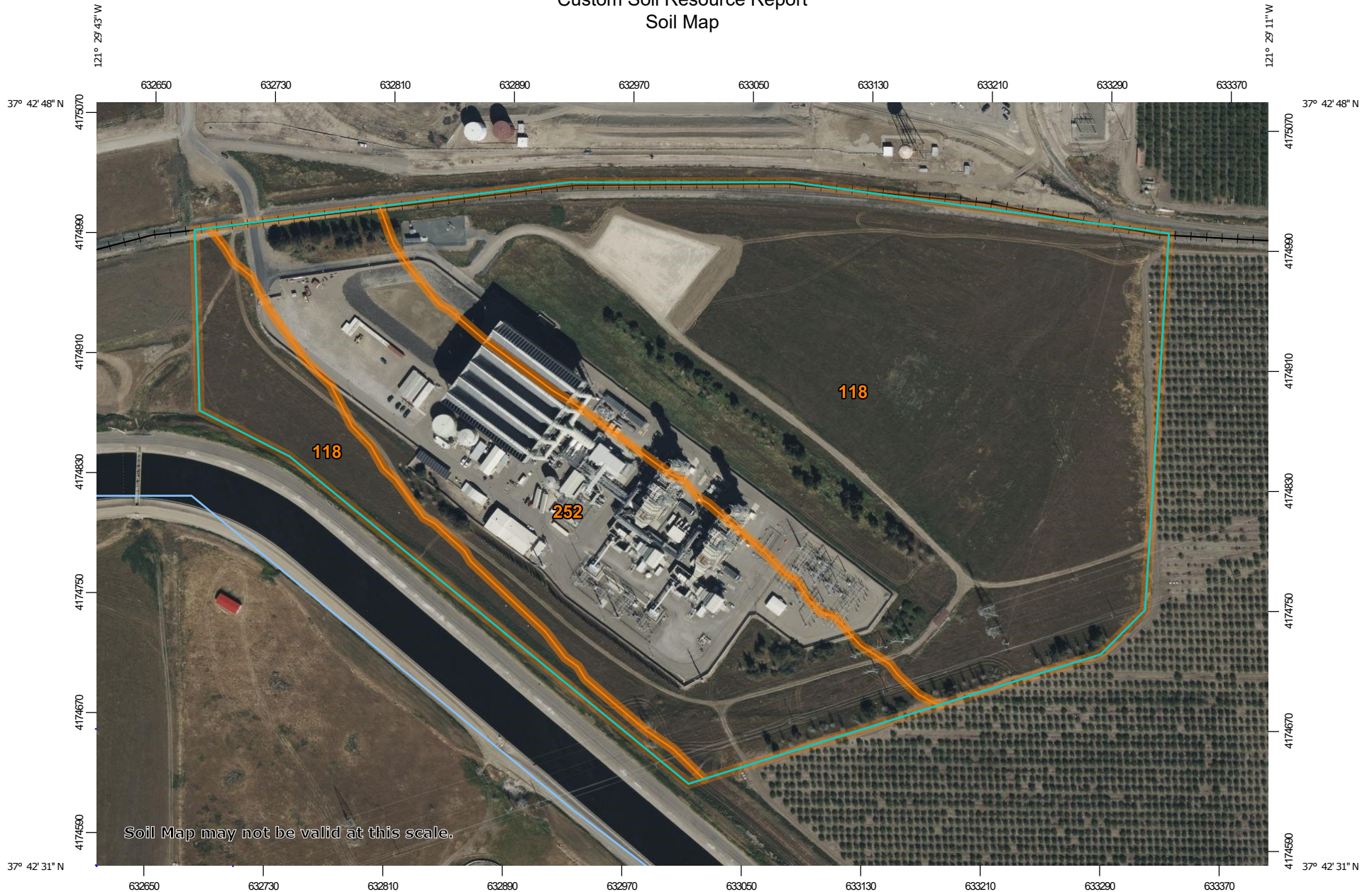
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

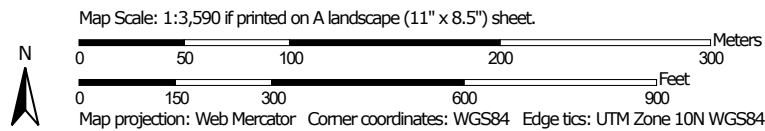
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map




Soil Map may not be valid at this scale.



Custom Soil Resource Report


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot


 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Joaquin County, California
Survey Area Data: Version 17, Sep 11, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 9, 2022—Mar 11, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
118	Capay clay, 0 to 1 percent slopes, MLRA 17	32.3	68.4%
252	Stomar clay loam, 0 to 2 percent slopes	14.9	31.6%
Totals for Area of Interest		47.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

San Joaquin County, California

118—Capay clay, 0 to 1 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2xc8q
Elevation: 20 to 350 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 318 to 337 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Capay and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Capay

Setting

Landform: Basin floors
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 11 inches: clay
A - 11 to 20 inches: clay
Bss1 - 20 to 30 inches: clay
Bss2 - 30 to 39 inches: clay
Bk1 - 39 to 51 inches: clay
Bk2 - 51 to 60 inches: clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 1 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.2 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 3.0
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R017XY901CA - Clayey Basin Group

Hydric soil rating: No

Minor Components

Stomar

Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Vernalis

Percent of map unit: 4 percent
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Willows

Percent of map unit: 4 percent
Landform: Valley floors
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Unnamed, water table at 48 inches

Percent of map unit: 2 percent
Landform: Basin floors
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

252—Stomar clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hwww
Elevation: 40 to 300 feet
Mean annual precipitation: 10 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Stomar and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Stomar

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

A - 0 to 17 inches: clay loam
Btk - 17 to 47 inches: clay
Btk - 47 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R017XY905CA - Dry Alluvial Fans and Terraces
Hydric soil rating: No

Minor Components

Capay

Percent of map unit: 3 percent
Landform: Fan remnants
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

El solyo

Percent of map unit: 3 percent
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Willows

Percent of map unit: 3 percent
Landform: Valley floors
Landform position (three-dimensional): Talf

Custom Soil Resource Report

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Unnamed, water table above 60 c

Percent of map unit: 3 percent
Landform: Valley floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Pescadero

Percent of map unit: 3 percent
Landform: Valley floors
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

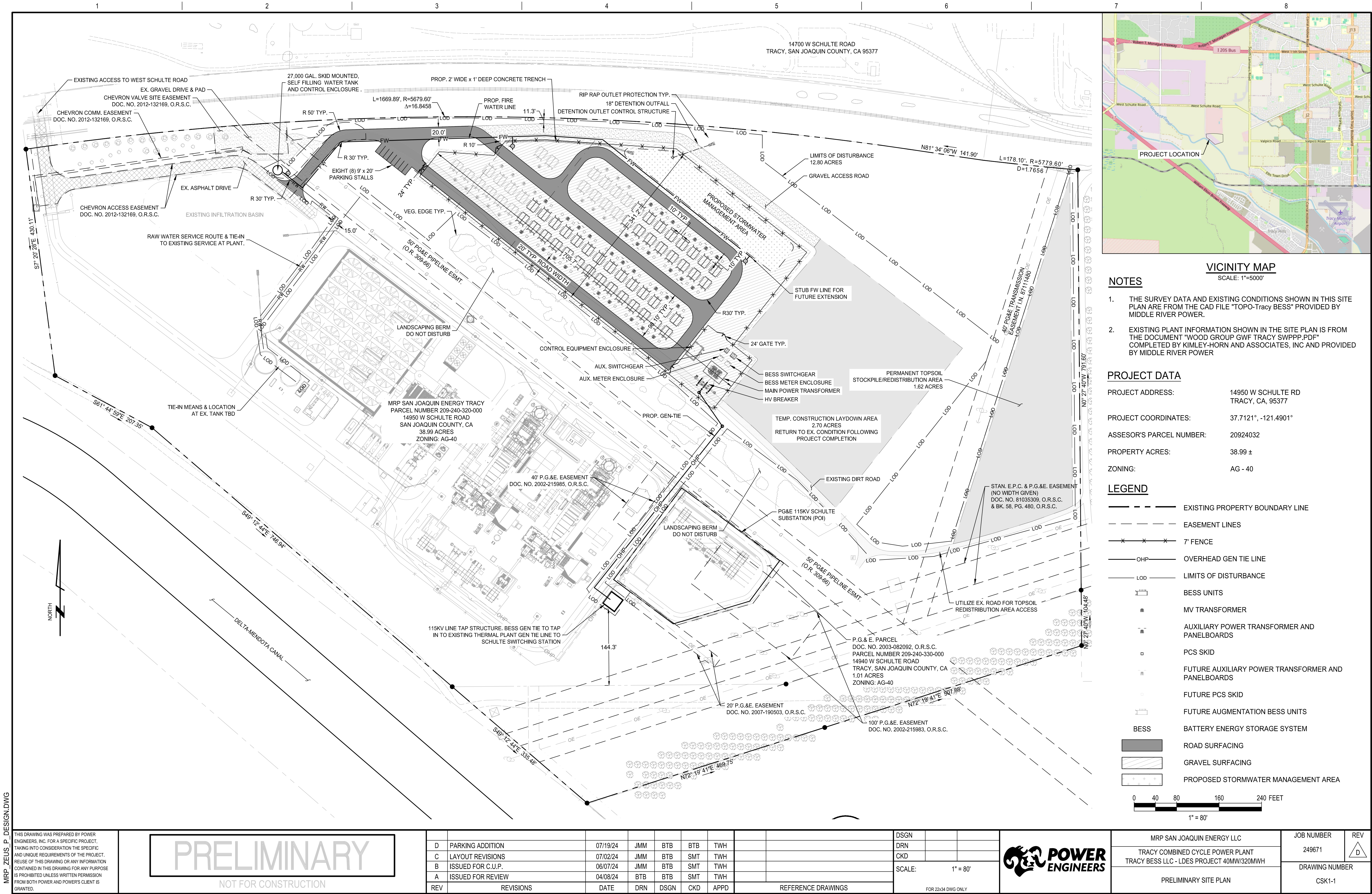
United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

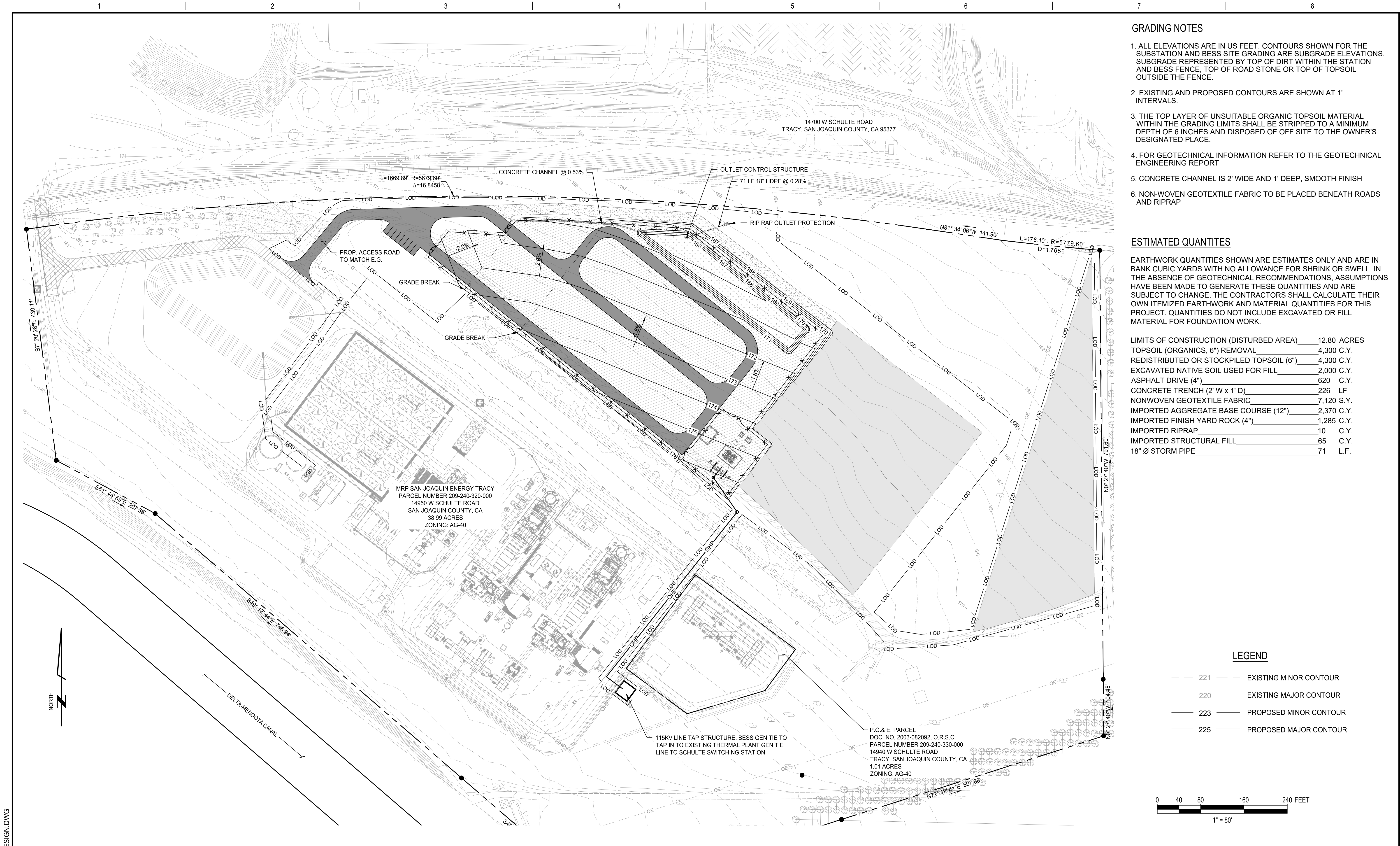
Table 2-2a Runoff curve numbers for urban areas ^{1/}

Cover description		Curve numbers for hydrologic soil group			
Cover type and hydrologic condition	Average percent impervious area ^{2/}	A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) ^{4/}		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas					
(pervious areas only, no vegetation) ^{5/}		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

¹ Average runoff condition, and $I_a = 0.2S$.² The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.³ CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.⁴ Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.⁵ Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

APPENDIX C PRELIMINARY DRAWING SET





GRADING NOTES

1. ALL ELEVATIONS ARE IN US FEET. CONTOURS SHOWN FOR THE SUBSTATION AND BESS SITE GRADING ARE SUBGRADE ELEVATIONS. SUBGRADE REPRESENTED BY TOP OF DIRT WITHIN THE STATION AND BESS FENCE. TOP OF ROAD STONE OR TOP OF TOPSOIL OUTSIDE THE FENCE.
2. EXISTING AND PROPOSED CONTOURS ARE SHOWN AT 1' INTERVALS.
3. THE TOP LAYER OF UNSUITABLE ORGANIC TOPSOIL MATERIAL WITHIN THE GRADING LIMITS SHALL BE STRIPPED TO A MINIMUM DEPTH OF 6 INCHES AND DISPOSED OF OFF SITE TO THE OWNER'S DESIGNATED PLACE.
4. FOR GEOTECHNICAL INFORMATION REFER TO THE GEOTECHNICAL ENGINEERING REPORT
5. CONCRETE CHANNEL IS 2' WIDE AND 1' DEEP, SMOOTH FINISH
6. NON-WOVEN GEOTEXTILE FABRIC TO BE PLACED BENEATH ROADS AND RIPRAP

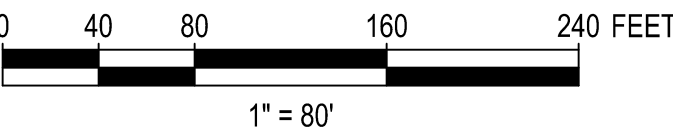
ESTIMATED QUANTITIES

EARTHWORK QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE IN BANK CUBIC YARDS WITH NO ALLOWANCE FOR SHRINK OR SWELL. IN THE ABSENCE OF GEOTECHNICAL RECOMMENDATIONS, ASSUMPTIONS HAVE BEEN MADE TO GENERATE THESE QUANTITIES AND ARE SUBJECT TO CHANGE. THE CONTRACTORS SHALL CALCULATE THEIR OWN ITEMIZED EARTHWORK AND MATERIAL QUANTITIES FOR THIS PROJECT. QUANTITIES DO NOT INCLUDE EXCAVATED OR FILL MATERIAL FOR FOUNDATION WORK.

LIMITS OF CONSTRUCTION (DISTURBED AREA)	12.80 ACRES
TOPSOIL (ORGANICS, 6") REMOVAL	4,300 C.Y.
REDISTRIBUTED OR STOCKPILED TOPSOIL (6")	4,300 C.Y.
EXCAVATED NATIVE SOIL USED FOR FILL	2,000 C.Y.
ASPHALT DRIVE (4")	620 C.Y.
CONCRETE TRENCH (2' W x 1' D)	226 LF
NONWOVEN GEOTEXTILE FABRIC	7,120 S.Y.
IMPORTED AGGREGATE BASE COURSE (12")	2,370 C.Y.
IMPORTED FINISH YARD ROCK (4")	1,285 C.Y.
IMPORTED RIPRAP	10 C.Y.
IMPORTED STRUCTURAL FILL	65 C.Y.
18" Ø STORM PIPE	71 L.F.

LEGEND

---	221	---	EXISTING MINOR CONTOUR
---	220	---	EXISTING MAJOR CONTOUR
---	223	---	PROPOSED MINOR CONTOUR
---	225	---	PROPOSED MAJOR CONTOUR



MRP_ZEUS_P_DESIGN.DWG

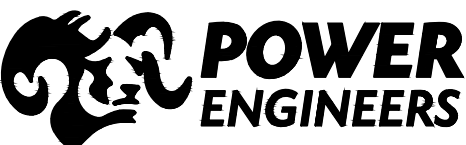
THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS GRANTED.

PRELIMINARY

NOT FOR CONSTRUCTION

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
C	LAYOUT REVISION	07/19/24	JMM	JMM	BTB	TWH	
B	ISSUED FOR C.U.P.	05/31/24	JMM	BTB	SMT	TWH	
A	ISSUED FOR REVIEW	05/08/24	JMM	BTB	SMT	TWH	

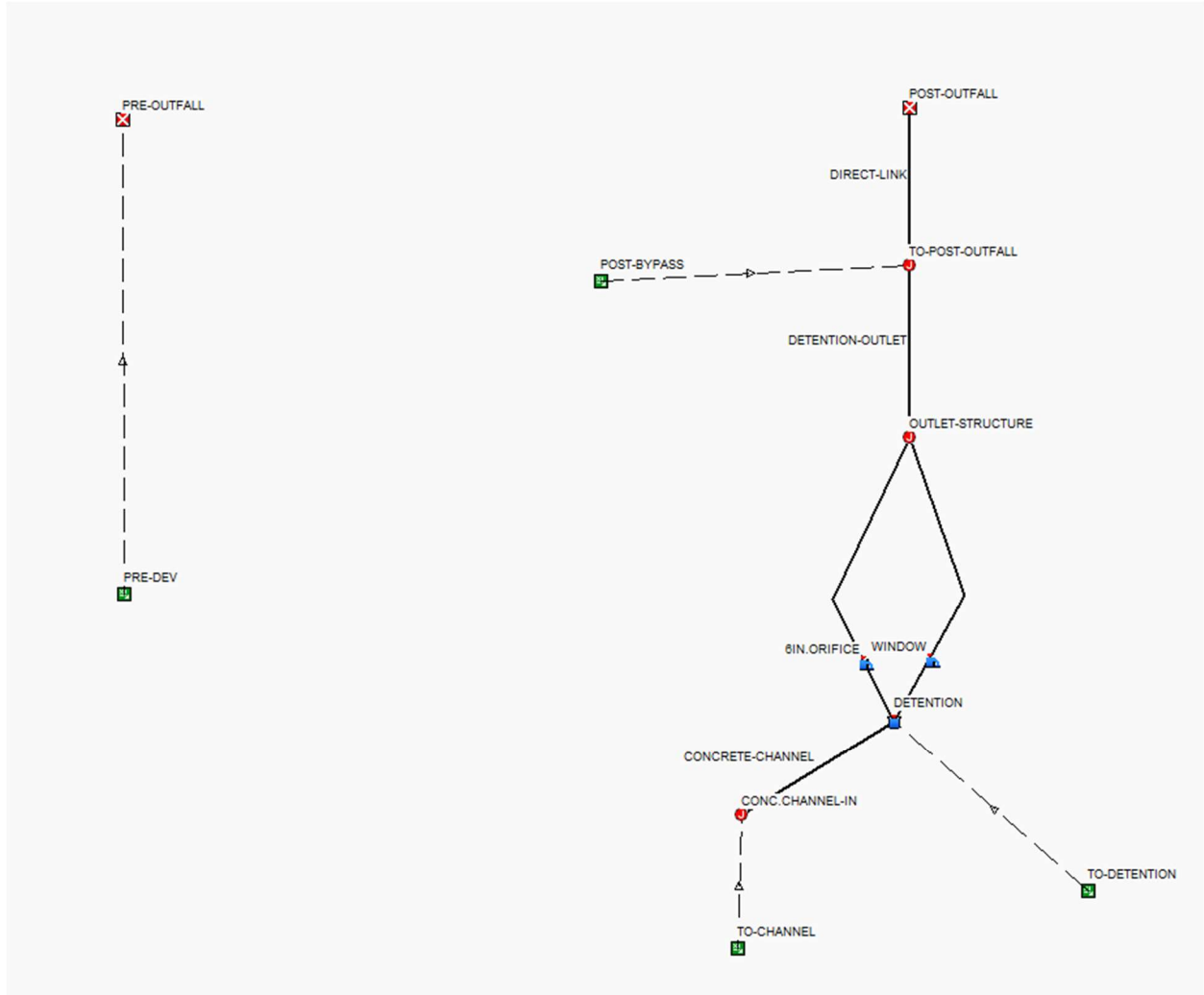
DSGN		
DRN		
CKD		
SCALE:	1" = 80'	
FOR 22x34 DWG ONLY		



MRP SAN JOAQUIN ENERGY LLC	JOB NUMBER	REV
TRACY COMBINED CYCLE POWER PLANT	249671	△
TRACY BESS LLC - LDES PROJECT 40MW/320MWH	DRAWING NUMBER	
PRELIMINARY GRADING PLAN	CSK1-2	

APPENDIX D SANITARY AND STORM SEWER ANALYSIS MODELING RESULTS

AUTODESK STORM AND SANITARY ANALYSIS 2022 MODEL OVERVIEW



SN	Element Description ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period	Rainfall Depth	Rainfall Distribution
								(years)	(inches)	
1	Rain Gage-01	Time Series	100-YR	Cumulative	inches	California	San Joaquin (Tracy)	100	3.67	SCS Type I 24-hr

SN	Element Description ID	Area	Drainage Node ID	Weighted Curve Number	Rain Gage ID	Peak Rate Factor	Total Precipitation	Total Runoff	Peak Runoff	Time of Concentration
		(acres)					(inches)	(inches)	(cfs)	(days hh:mm:ss)
1	POST-BYPASS	0.94	TO-POST-OUTFALL	93.15	Rain Gage-01	484	3.67	2.91	2.15	0 00:06:00
2	PRE-DEV	5.86	PRE-OUTFALL	74.80	Rain Gage-01	484	3.67	1.41	2.97	0 00:38:25
3	TO-CHANNEL	1.72	CONC.CHANNEL-IN	89.00	Rain Gage-01	484	3.67	2.52	3.42	0 00:06:00
4	TO-DETENTION	3.20	DETENTION	88.94	Rain Gage-01	484	3.67	2.51	6.34	0 00:06:00

SN	Element ID	From (Inlet Node)	To (Outlet Node)	Length	Inlet Invert Elevation	Outlet Invert Elevation	Total Drop	Average Slope	Pipe Shape	Pipe Diameter or Height	Pipe Width	Manning's Roughness	Peak Flow
				(ft)	(ft)	(ft)	(ft)	(%)		(inches)	(inches)		(cfs)
1	DETENTION-OUTLET	OUTLET-STRUCTURE	TO-POST-OUTFALL	71.00	165.20	165.00	0.20	0.2800	CIRCULAR	18.000	18.00	0.0120	1.03
		Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Max Flow Depth (ft)					
		0 11:14	4.19	0.28	6.04	0.17	0.20	0.30					

SN	Element ID	From (Inlet Node)	To (Outlet Node)	Length	Inlet Invert Elevation	Outlet Invert Elevation	Average Slope	Channel Type	Channel Height	Channel Width	Channel Manning's Roughness	Peak Flow
				(ft)	(ft)	(ft)	(%)		(ft)	(ft)		(cfs)
1	CONCRETE-CHANNEL	CONC.CHANNEL-IN	DETENTION	226.00	169.20	168.00	0.5300	Rectangular	1.000	2.00	0.0200	3.26
		Time of Peak Flow Occurrence (days hh:mm)	Max Flow Velocity (ft/sec)	Travel Time (min)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Max Flow Depth (ft)				
		0 10:01	2.96	1.27	6.82	0.48	0.55	0.53				

SN	Element	Invert	Boundary	Flap	Peak	Maximum	Maximum
	ID	Elevation	Type	Gate	Inflow	HGL Depth	HGL Elevation
		(ft)			(cfs)	Attained	Attained
						(ft)	(ft)
1	POST-OUTFALL	165.00	NORMAL	NO	2.68	0.00	165.00
2	PRE-OUTFALL	165.00	NORMAL	NO	2.95	0.00	165.00

SN	Element	Invert ID Elevation	Max (Rim) Elevation	Max (Rim) Offset	Initial Water Elevation	Initial Water Depth	Exfiltration Rate	Peak Inflow	Peak Lateral Inflow	Peak Outflow	Peak Exfiltration Flow Rate
		(ft)	(ft)	(ft)	(ft)	(ft)	(inches/hr)	(cfs)	(cfs)	(cfs)	(cfm)
1	DETENTION	165.20	169.00	3.80	165.20	0.00	0.1000	9.38	6.27	1.03	2.04
		Maximum HGL Elevation Attained (ft)	Maximum HGL Depth Attained (ft)	Average HGL Elevation Attained (ft)	Average HGL Depth Attained (ft)	Time of Maximum HGL Occurrence (days hh:mm)	Total Exfiltration Volume (1000-ft ³)	Total Flooded Volume (ac-inches)	Total Time Flooded (minutes)	Total Retention Time (seconds)	
		167.62	2.42	166.08	0.88	0 11:13	4.68	0.00	0.00	0.00	

SN	Element ID	Invert Elevation	Ground/Rim (Max) Elevation	Initial Water Elevation	Peak Inflow	Peak Lateral Inflow	Maximum HGL Elevation Attained	Maximum HGL Depth Attained	Average HGL Elevation Attained	Average HGL Depth Attained	Time of Maximum HGL Occurrence
		(ft)	(ft)	(ft)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(days hh:mm)
1	CONC.CHANNEL-IN	168.60	169.20	168.60	3.37	3.37	169.86	1.26	169.22	0.62	0 10:01
2	OUTLET-STRUCTURE	165.20	169.00	165.20	1.03	0.00	165.70	0.50	165.30	0.10	0 11:14
3	TO-POST-OUTFALL	165.00	175.00	165.00	2.68	2.13	165.09	0.09	165.02	0.02	0 11:14

SN	Element ID	From (Inlet) Node	To (Outlet) Node	From (Inlet) Node Invert Elevation (ft)	To (Outlet) Node Invert Elevation (ft)	Flap Gate	Crest Elevation (ft)	Crest Offset (ft)	Length (ft)	Weir Total Height (ft)	Discharge Coefficient	Peak Flow (cfs)
1	WINDOW	DETENTION	OUTLET-STRUCTURE	165.20	165.20	NO	167.50	2.30	2.00	1.00	3.33	0.29

SN	Element ID	From (Inlet) Node	To (Outlet) Node	From (Inlet) Node Invert Elevation (ft)	To (Outlet) Node Invert Elevation (ft)	Orifice Shape	Circular Orifice Diameter (inches)	Orifice Invert Elevation (ft)	Orifice Invert Offset (ft)	Orifice Coefficient	Peak Flow (cfs)	Time of Peak Flow Occurrence (days hh:mm)
1	5IN.ORIFICE	DETENTION	OUTLET- STRUCTURE	165.20	165.20	CIRCULAR	5.00	166.20	1.00	0.6140	0.74	0 11:13

APPENDIX E NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES



NOAA Atlas 14, Volume 6, Version 2
Location name: Tracy, California, USA*
Latitude: 37.7113°, Longitude: -121.4906°
Elevation: 175 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.082 (0.069-0.098)	0.098 (0.082-0.117)	0.121 (0.102-0.146)	0.143 (0.119-0.174)	0.178 (0.143-0.224)	0.210 (0.165-0.271)	0.249 (0.189-0.330)	0.296 (0.218-0.404)	0.374 (0.264-0.536)	0.451 (0.306-0.671)
10-min	0.117 (0.099-0.140)	0.140 (0.118-0.168)	0.174 (0.146-0.209)	0.205 (0.171-0.249)	0.255 (0.205-0.322)	0.301 (0.236-0.389)	0.356 (0.272-0.473)	0.424 (0.313-0.580)	0.537 (0.378-0.769)	0.647 (0.439-0.962)
15-min	0.142 (0.120-0.170)	0.169 (0.142-0.203)	0.210 (0.176-0.252)	0.248 (0.206-0.301)	0.309 (0.247-0.389)	0.364 (0.285-0.470)	0.431 (0.328-0.571)	0.512 (0.378-0.701)	0.649 (0.458-0.930)	0.782 (0.531-1.16)
30-min	0.192 (0.162-0.230)	0.229 (0.193-0.275)	0.285 (0.239-0.342)	0.336 (0.280-0.408)	0.418 (0.335-0.527)	0.494 (0.387-0.637)	0.584 (0.445-0.775)	0.694 (0.513-0.950)	0.880 (0.620-1.26)	1.06 (0.719-1.58)
60-min	0.269 (0.227-0.322)	0.320 (0.270-0.384)	0.398 (0.334-0.478)	0.470 (0.391-0.570)	0.585 (0.469-0.737)	0.691 (0.541-0.891)	0.817 (0.622-1.08)	0.971 (0.717-1.33)	1.23 (0.867-1.76)	1.48 (1.01-2.20)
2-hr	0.387 (0.327-0.464)	0.459 (0.387-0.550)	0.565 (0.474-0.679)	0.661 (0.550-0.803)	0.811 (0.650-1.02)	0.944 (0.739-1.22)	1.10 (0.834-1.45)	1.27 (0.939-1.74)	1.55 (1.09-2.22)	1.80 (1.22-2.67)
3-hr	0.468 (0.395-0.560)	0.555 (0.468-0.665)	0.683 (0.574-0.821)	0.798 (0.664-0.968)	0.974 (0.781-1.23)	1.13 (0.882-1.45)	1.30 (0.988-1.72)	1.49 (1.10-2.04)	1.79 (1.26-2.56)	2.05 (1.39-3.05)
6-hr	0.613 (0.517-0.734)	0.733 (0.618-0.879)	0.904 (0.759-1.09)	1.06 (0.878-1.28)	1.28 (1.03-1.61)	1.47 (1.15-1.90)	1.68 (1.28-2.22)	1.91 (1.41-2.61)	2.25 (1.59-3.22)	2.54 (1.72-3.78)
12-hr	0.786 (0.663-0.941)	0.959 (0.808-1.15)	1.20 (1.01-1.45)	1.41 (1.18-1.72)	1.72 (1.38-2.17)	1.98 (1.55-2.55)	2.25 (1.71-2.98)	2.55 (1.88-3.48)	2.98 (2.10-4.26)	3.34 (2.26-4.96)
24-hr	0.991 (0.876-1.14)	1.24 (1.09-1.43)	1.57 (1.39-1.82)	1.86 (1.63-2.17)	2.27 (1.93-2.72)	2.59 (2.17-3.17)	2.94 (2.41-3.67)	3.31 (2.64-4.23)	3.84 (2.96-5.08)	4.26 (3.19-5.81)
2-day	1.20 (1.06-1.38)	1.49 (1.32-1.73)	1.89 (1.67-2.19)	2.22 (1.94-2.59)	2.67 (2.27-3.20)	3.02 (2.52-3.69)	3.38 (2.77-4.22)	3.76 (3.00-4.80)	4.27 (3.29-5.65)	4.67 (3.49-6.36)
3-day	1.32 (1.16-1.52)	1.64 (1.45-1.90)	2.07 (1.82-2.40)	2.42 (2.11-2.82)	2.88 (2.45-3.46)	3.24 (2.71-3.96)	3.60 (2.95-4.49)	3.97 (3.17-5.07)	4.47 (3.45-5.92)	4.85 (3.63-6.61)
4-day	1.43 (1.26-1.65)	1.78 (1.58-2.06)	2.25 (1.98-2.60)	2.62 (2.29-3.06)	3.12 (2.65-3.74)	3.49 (2.92-4.26)	3.86 (3.16-4.82)	4.24 (3.39-5.42)	4.75 (3.66-6.28)	5.12 (3.83-6.99)
7-day	1.72 (1.52-1.98)	2.14 (1.89-2.48)	2.70 (2.38-3.12)	3.14 (2.74-3.66)	3.71 (3.16-4.46)	4.14 (3.46-5.06)	4.56 (3.74-5.69)	4.98 (3.98-6.37)	5.53 (4.26-7.32)	5.93 (4.44-8.09)
10-day	1.91 (1.68-2.20)	2.39 (2.11-2.76)	3.00 (2.64-3.48)	3.49 (3.05-4.07)	4.13 (3.51-4.95)	4.60 (3.84-5.61)	5.05 (4.13-6.30)	5.50 (4.39-7.02)	6.08 (4.69-8.05)	6.50 (4.86-8.86)
20-day	2.48 (2.19-2.86)	3.13 (2.76-3.62)	3.95 (3.48-4.58)	4.59 (4.02-5.36)	5.41 (4.60-6.49)	6.00 (5.02-7.33)	6.57 (5.38-8.20)	7.12 (5.69-9.10)	7.81 (6.02-10.3)	8.29 (6.20-11.3)
30-day	2.86 (2.53-3.30)	3.64 (3.21-4.20)	4.60 (4.05-5.33)	5.34 (4.67-6.23)	6.29 (5.35-7.55)	6.97 (5.82-8.51)	7.60 (6.22-9.48)	8.21 (6.56-10.5)	8.96 (6.91-11.9)	9.47 (7.09-12.9)
45-day	3.53 (3.12-4.07)	4.50 (3.97-5.20)	5.69 (5.01-6.59)	6.59 (5.77-7.69)	7.74 (6.58-9.28)	8.55 (7.14-10.4)	9.31 (7.62-11.6)	10.0 (8.01-12.8)	10.9 (8.40-14.4)	11.5 (8.58-15.6)
60-day	4.23 (3.74-4.89)	5.40 (4.77-6.24)	6.81 (6.00-7.89)	7.87 (6.88-9.18)	9.19 (7.82-11.0)	10.1 (8.46-12.4)	11.0 (9.00-13.7)	11.8 (9.43-15.1)	12.8 (9.85-16.9)	13.4 (10.0-18.3)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

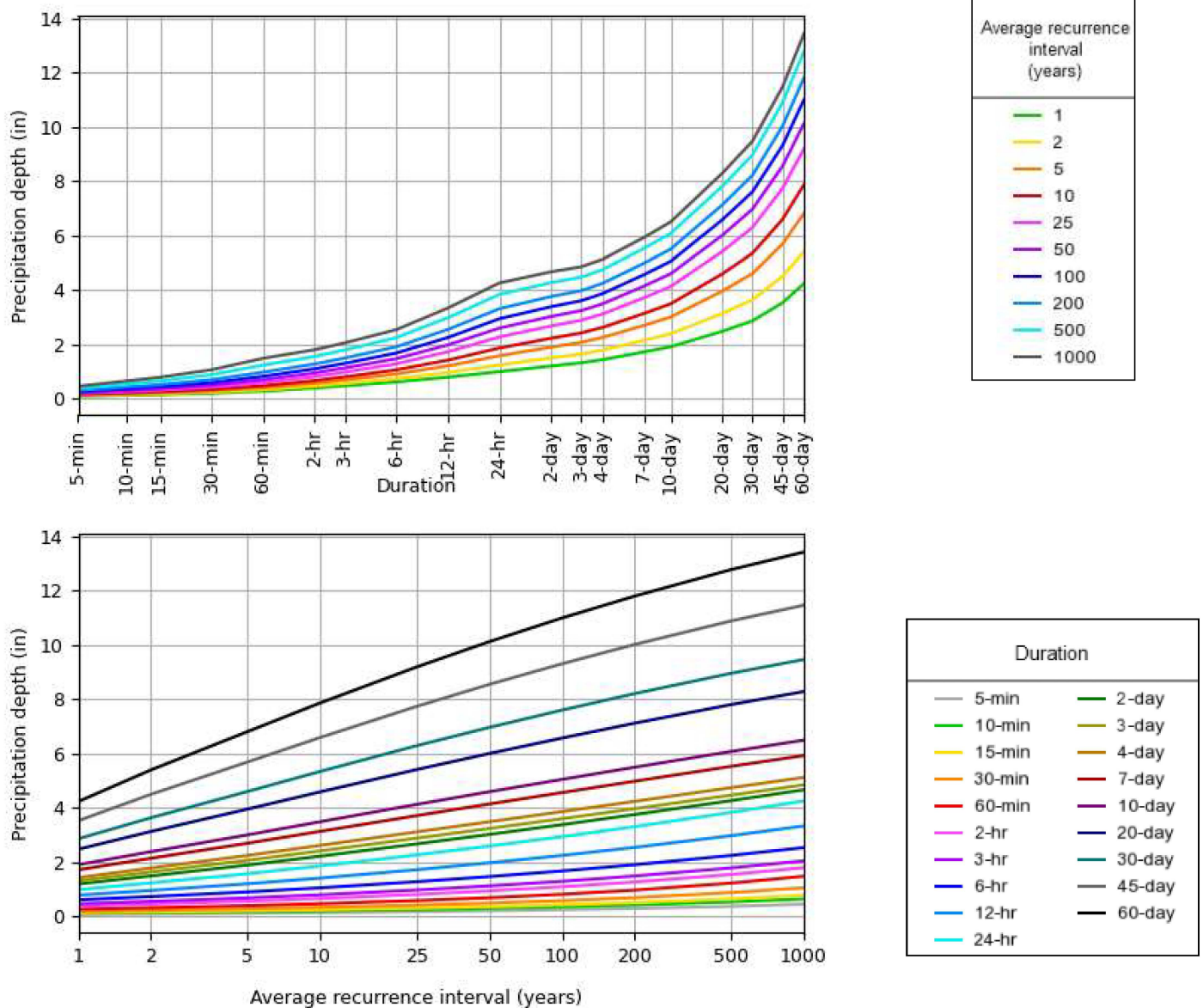
Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

PDS-based depth-duration-frequency (DDF) curves

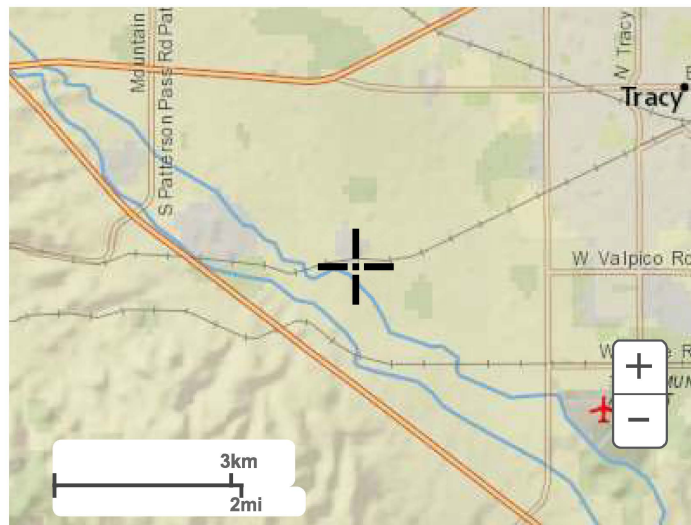
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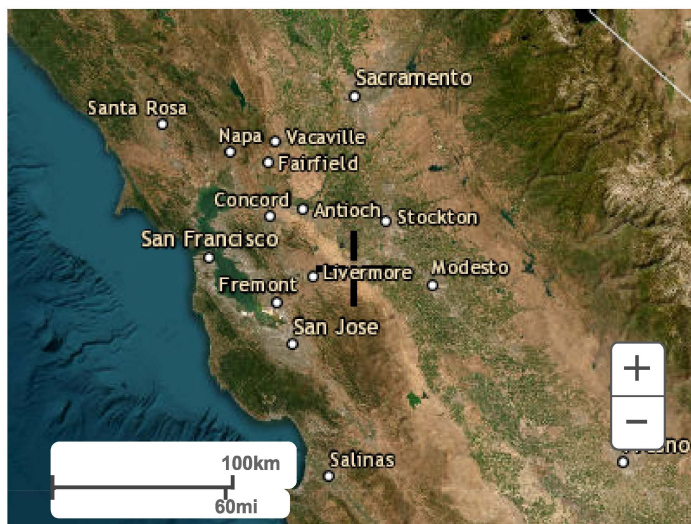


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Appendix E

Phase I Environmental Site Assessment

Phase I Environmental Site
Assessment
Tracy Combined Cycle Power Plant
14950 West Schulte Road
Tracy, California

Middle River Power, LLC
Chicago, Illinois

Project Number: 60690637

September 2022

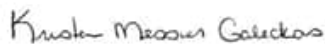
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Executive Summary

Middle River Power, LLC (MRP) contracted with AECOM Technical Services, Inc. (AECOM) to perform a Phase I Environmental Site Assessment (ESA) of the Tracy Combined Cycle (TCC) Power Plant located at 14950 West Schulte Road, Tracy, San Joaquin County, California. AECOM previously conducted a Phase I ESA of this property in September 2021, and this report serves as an update to that initial Phase I ESA. This Phase I ESA was performed in general conformance with the scope and limitations of ASTM Standard Practice Designation E1527-13 for ESAs. Exceptions to, or deletions from, this practice are described in this report.

The site visit occurred on August 22, 2022. The subject property is developed with a 330-megawatt (MW) natural gas-fired power plant situated on approximately 44 acres of land. The power plant is located in the western portion of the subject property while the northeastern and eastern portions of the subject property consist of grass-covered land which is traversed by buried natural gas and crude oil pipelines. An electrical substation operated by Pacific Gas and Electric (PG&E) is located on the southern portion of the subject property, adjacent to the southeast of the power plant. The TCC Power Plant operates one steam turbine generator (STG) and associated air-cooled condenser and two heat recovery steam generators (HRSGs) each with associated combustion turbine generators (CTGs). Subject property operations include the use of an in-ground oil-water separator (OWSs), a wastewater lift station, and two turbine wastewater sumps. An unlined stormwater retention basin is located in the northwestern portion of the power plant. A Control and Maintenance Building is located in the southwestern portion and modular office trailers that include restrooms are located in the western portion of the power plant. A septic tank and leach field are located along the southwestern boundary of the power plant, adjacent to the northwest of the Control and Maintenance Building. During the site visit, no visual evidence of underground storage tanks (USTs) (e.g., vent pipes, fill ports), potable or irrigation water wells, monitoring wells, oil/gas wells, or dry wells was observed on the subject property.

The subject property is bordered to the north by a Union Pacific Railroad right-of-way, beyond which is Owens-Brockway Glass, a glass manufacturing facility. The subject property is bordered to the east and southeast by agricultural land planted with almond orchards. The subject property is bordered to the south and southwest by Delta-Mendota Canal, a concrete-lined surface water canal, beyond which are a rural residential property and agricultural land. The subject property is bordered to the west by vacant land. AECOM did not observe gasoline service stations or dry cleaners in the immediate vicinity (i.e., 500 feet) of the subject property. Based on AECOM's site reconnaissance and a review of the site-specific environmental database report, no off-site sources of environmental concern were identified.

Historical research indicates that from at least the late 1930s through the late 1990s the subject property was in agricultural use (row crops); however, during that time the existing overhead power lines traversed the southeastern portion of the subject property and the existing buried pipelines easement also appeared to traverse northwest-southeast through the central portion of the subject property. In approximately 2003, the subject property was developed with the present-day power plant. The subject property has remained relatively unchanged from 2003 through the present-day. No historical on-site or off-site sources of environmental concern were identified during the course of this assessment.

In 2001, five near surface soil samples were collected in the northwestern corner of the subject property to evaluate whether residual concentrations of pesticides and/or herbicides were present in shallow soils beneath the subject property. Analytical results from the samples identified several organochlorine pesticides (OCPs) in the soil at concentrations well below regulatory guidance levels.

The subject property was identified in the Facility and Manifest Data (HAZNET), California Environmental Reporting System (CERS), Hazardous Waste Tracking System (HWTS), HAULERS, Facility Index System (FINDS), Enforcement and Compliance History Online (ECHO), Resource Conservation Recovery Act (RCRA) Large Quantity Generator (LQG), aboveground storage tank (AST), RCRA Non-Generator/No Longer Regulated (NonGen/NLR), CERS Hazardous Waste (HAZ WASTE), CERS TANKS, Emissions Inventory Data (EMI), National Pollutant Discharge Elimination System (NPDES), California Integrated Water Quality System (CIWQS), Integration Compliance Information System (ICIS), and United

States Aerometric Information Retrieval System (US AIRS) databases in the site-specific environmental database report. These database listings are related to the generation of hazardous waste and air emissions and a zero-discharge stormwater permit. The subject property is not listed on a contamination-related database. No on-site or off-site sources of environmental concern were identified during AECOM's regulatory research of the subject property and surrounding area.

Based on the above-described activities, no recognized environmental conditions (RECs), controlled RECs (CRECs), or historical RECs (HRECs) were identified in connection with the subject property. The following de minimis conditions (DMCs) were identified:

- Prolonged direct application of fertilizers, herbicides, and pesticides associated with agricultural practices can result in impacts to soil, shallow groundwater, or surface water. However, based on the current industrial use and condition of the subject property, the historic land applications at the subject property are considered a DMC, in AECOM's opinion.
- An in-ground drainage system utilizing floor drains within the turbine and generator enclosures routes equipment wash water and incidental leaks from collection pans to an in-ground collection sump, from which it is pumped to a wastewater AST. Additionally, stormwater that collects in the in-ground containment for the aqueous ammonia AST, transformer containment areas, and the cable trays is routed to a 4,000-gallon in-ground OWS. AECOM was not able to inspect the integrity of the in-ground systems; however, due to the nature of the materials discharged (non-hazardous waste and stormwater), and the lack of reported releases, the in-ground drainage systems are considered DMCs, in AECOM's opinion.

No vapor encroachment conditions (VECs), were identified during completion of a Tier 1 vapor encroachment screening (VES) following ASTM International, Designation: E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* dated October 2015 (ASTM E2600-15).

1. Introduction

1.1 Purpose

This Phase I Environmental Site Assessment (ESA) was performed pursuant to a purchase order between AECOM Technical Services, Inc. (AECOM) and Middle River Power, LLC (MRP) dated August 10, 2022 (PO# 1027). The purpose of this Phase I ESA is to provide the client with information for use in evaluating recognized environmental conditions (RECs) associated with the subject property.

Per ASTM International, Designation: E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13), potential findings can include RECs, historical RECs (HRECs), controlled RECs (CRECs), and de minimis conditions (DMCs). A REC is defined by the ASTM standard as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any 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.” The term includes hazardous substances or petroleum products even under conditions in compliance with laws. HRECs are 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 established by a regulatory authority, without subjecting the property to any required controls. CRECs are 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. DMCs are those situations that do not present a material risk of harm to public health or the environment and generally would not be subject to enforcement action if brought to the attention of the regulating authority.

In addition, a Tier 1 vapor encroachment screening (VES) is completed as part of this assessment. This screening is conducted in general accordance with the ASTM International, Designation: E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* dated October 2015 (ASTM E2600-15). The objective of the VES is to evaluate if a vapor encroachment condition (VEC) exists or if a VEC does not exist.

This assessment is based on a review of existing conditions, reported pre-existing conditions, and observed operations at the subject property and adjacent properties.

1.2 Scope of Work

The Phase I ESA included a site visit, regulatory research, historical review, and a review and an environmental database analysis of the subject property. In conducting the Phase I ESA, AECOM assessed the subject property for visible signs of possible contamination, researched public records for the subject property and adjacent properties (as applicable), and conducted interviews with persons knowledgeable about the subject property.

This project was performed in general accordance with ASTM Standard Practice Designation E1527-13 and the purchase order dated August 10, 2022 (PO# 1027). Conclusions reached in this

report are based upon the assessment performed and are subject to limitations set forth in Sections 1.3, 1.4, and 1.5 below.

1.3 Study Limitations

This report describes the results of AECOM's Phase I ESA to identify the presence of conditions materially affecting the subject facility and/or property within the limits of the established scope of work as described in our proposal.

As with any due diligence assessment, there is a certain degree of dependence upon oral information provided by facility or site representatives, which is not readily verifiable through visual observations or supported by any available written documentation. AECOM shall not be held responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed by facility or site representatives at the time this assessment was performed. In addition, the findings and opinions expressed in this report are subject to certain conditions and assumptions, which are noted in the report. Any party reviewing the findings of the report must carefully review and consider all such conditions and assumptions.

This report and all field data and notes were gathered and/or prepared by AECOM in accordance with the agreed upon scope of work and generally accepted engineering and scientific practice in effect at the time of AECOM's assessment of the subject property. The statements, findings and opinions contained in this report are only intended to give approximations of the environmental conditions at the subject property.

As specified in ASTM E1527-13, it is incumbent that the client and any other parties who review and rely upon this report understand the following inherent conditions surrounding any Phase I ESA:

- Uncertainty Not Eliminated - No Phase I ESA can wholly eliminate uncertainty regarding the potential for REC in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for REC in connection with a property, and this practice recognizes reasonable limits of time and costs. (Section 4.5.1 of ASTM E1527-13)
- Not Exhaustive - "All appropriate inquiry" does not mean an exhaustive assessment of a clean property. There is a point at which the cost of information obtained outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an Phase I ESA and the reduction of uncertainty about unknown conditions resulting from additional information. (Section 4.5.2 of ASTM E1527-13)
- Comparison with Subsequent Inquiry – Phase I ESAs must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent Phase I ESAs should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors. (Section 4.5.4 of ASTM E1527-13)

A similar set of inherent limitations exist in cases where the Phase I ESA included a screening-level assessment of vapor migration or vapor encroachment; such an assessment is a required part of a

Phase I ESA when ASTM E1527-13 is employed. According to ASTM E2600-15, the following limitations apply:

- Uncertainty Not Eliminated in Screening - No VES can wholly eliminate uncertainty regarding the identifications of VECs in connection with the target property. (Section 4.5.1 of ASTM E2600-15)
- Not Exhaustive - The guide is not meant to be an exhaustive screening. There is a point at which the cost of information obtained outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of real estate transactions. One of the purposes of this guide is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing a VES and the reduction of uncertainty about unknown conditions resulting from additional information. (Section 4.5.2 of ASTM E2600-15)
- Comparison with Subsequent Investigations - It should not be concluded or assumed that an investigation was not adequate because the investigation did not identify any VECs in connection with a property. The VES must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent VESs should not be considered valid bases to judge the appropriateness of any prior screening if based on hindsight, new information, use of developing technology or analytical techniques, or similar factors. (Section 4.5.4 of ASTM E2600-15)

This report was prepared pursuant to an agreement between MRP (Client) and AECOM and is for the exclusive use of the Client. No other party is entitled to rely on the conclusions, observations, specifications, or data contained herein without first obtaining AECOM's written consent and provided any such party signs an AECOM-generated Reliance Letter. A third party's signing of the AECOM Reliance Letter and AECOM's written consent are conditions precedent to any additional use or reliance on this report.

The passage of time may result in changes in technology, economic conditions, site variations, or regulatory provisions, which would render the report inaccurate. Reliance on this report after the date of issuance as an accurate representation of current site conditions shall be at the user's sole risk.

1.4 Site-Related Limiting Conditions

The following site-specific limiting conditions were encountered during the course of this assessment:

- During the site visit, AECOM was not provided with access to the Pacific Gas & Electric (PG&E) substation that is located in the southeastern portion of the power plant. According to the site contact, PG&E operates the substation. Based upon the identified use (substation developed with aboveground electrical equipment), AECOM's review of a site-specific environmental database search report and other environmental records available online, and AECOM's visual observations of the PG&E substation from outside of a chain-link fence, AECOM does not consider this limiting condition to be a significant limitation to this assessment.
- The north-northeastern and eastern portions of the subject property were covered with tall grass at the time of the site visit. As a result, it was not feasible to fully, visually evaluate these portions of the subject property. Rather, AECOM observed these portions of the subject property from an unpaved access road that traversed these areas. Based on

information obtained from the interviews conducted with the site contact about the historical and current uses of the subject property, AECOM does not consider this limiting condition to be a significant limitation to this assessment.

- It was not feasible to evaluate every individual room or space within the buildings during the site visit. AECOM's evaluation of these buildings focused on areas where hazardous substances are handled. Based on the use of the subject property (office/administrative), this particular site-related limiting condition is not expected to have a significant limitation to this assessment.
- During the site visit, AECOM did not access the roofs of the subject property buildings. AECOM's evaluation of the subject property focused on areas where hazardous substances are handled. The site contact did not report any hazardous materials associated with the roofs. Based on this information, this particular site-related limiting condition is not expected to have a significant limitation to this assessment.

1.5 Data Gaps/Data Failure

AECOM's ESA identified the following data failures/gaps:

- As specified in the agreed upon scope of work, title searches and environmental lien searches were not conducted as part of this ESA. However, in October 2017, AECOM contracted with Environmental Data Resources, Inc. (EDR) to conduct environmental lien searches of the subject property parcels. At that time, no environmental liens or activity use limitations (AULs) were identified in the environmental lien search report. Based upon this information and historical data collected from other sources, this data gap is not expected to impact the results of this assessment.
- A limitation was encountered in determining the historical use of the subject property. The earliest source of historical information reasonably ascertainable within the time frame of this ESA in which usage could be determined was an aerial photograph from 1937. At the time of the photograph, the subject property was shown developed as agricultural (field/crop) land (a developed use as per the ASTM E1527 standard). Therefore, the ASTM E1527 requirement to determine all obvious uses of the property from the present back to the property's first obvious developed use, or back to 1940, whichever is earlier, could not be achieved. Based upon the identified historical agricultural land use, it is unlikely that there had been significant prior development; therefore, this data failure is not expected to impact the results of this assessment.
- It should be noted that not all standard historical sources, as defined per ASTM, were reviewed as part of this assessment. In addition to recorded land title records, zoning/land use records were not reviewed; and fire insurance map coverage is not available for the area of the subject property. Based on information provided from the remaining standard historical sources, additional historical information would not likely have assisted in meeting the historical use requirement; therefore, this data gap is not expected to impact the results of this assessment.
- Per ASTM, past owners, operators, and occupants of the subject property who are likely to have material information regarding the potential for contamination at the subject property shall be contacted to the extent that they can be identified and that the information likely to be obtained is not duplicative of information already obtained from other sources. AECOM was unable to interview past owners and/or operators at the subject property. However, based

upon historical data collected from other sources, this data gap is not expected to impact the results of this assessment.

2. Site Description

2.1 Site Location and Parcel Description

The subject property is located at 14950 West Schulte Road, Tracy, San Joaquin County, California. The subject property is located approximately ½-mile south of West Schulte Road, between the Union Pacific Railroad right-of-way (northern property boundary) and the Delta-Mendota Canal (southwestern property boundary). The subject property is situated approximately two miles to the south of the 205 Freeway and approximately ¾ miles to the northeast of the 580 Freeway. The subject property is accessed via an unnamed access road off of West Schulte Road.

The subject property consists of three contiguous parcels identified as San Joaquin County Assessor Parcel Numbers (APNs): 209-240-32 (approximately 39 acres), 209-240-33 (approximately 1 acre), and 209-240-338 (approximately 3.4 acres). APN 209-240-32 is an irregularly-shaped parcel that contains the TCC Power Plant facility. APN 209-240-33 is occupied by the PG&E-operated substation and is inset into the south-central portion of the larger TCC Power Plant parcel. The PG&E substation comprises the entirety of APN 209-240-33. APN 209-240-38 is an irregularly-shaped parcel situated in the southeastern portion of the subject property. The approximate location of the subject property is illustrated on Figure 1 - Site Location Map.

2.2 Site Ownership

According to the site contact, the subject property is owned by MRP San Joaquin Energy, LLC and operated by NAES Inc. (NAES).

2.3 Site Visit

Mr. Michael Maldonado with AECOM's Sacramento, California office visited the subject property on August 22, 2022. During the site visit, Mr. Maldonado interviewed Mr. Taylor Leach (Environmental Health and Safety Specialist) with NAES. Mr. Leach has been associated with the subject property since May 2021. Mr. Leach also provided escort to Mr. Maldonado while on-site.

AECOM's site visit methodology consisted of viewing the subject property building interiors and exteriors, traversing the subject property exterior and perimeters, and walking portions of the surrounding area. The following sections summarize the results of AECOM's site visit.

2.3.1 Site and Facility Description

The subject property consists of three contiguous parcels totaling approximately 44 acres of land developed with the Tracy Combined Cycle (TCC) Power Plant, a PG&E electrical substation, a stormwater retention basin, and a Chevron Valve Station. The northeastern and eastern portions of the subject property consist of vacant grass-covered land which is traversed from the northwest to southeast by a buried natural gas pipeline (operated by PG&E) and a buried crude oil pipeline (formerly operated by Chevron and currently reportedly operated by Crimson). No structures are located on these portions of the subject property. The TCC Power Plant is a 330-megawatt (MW) natural gas-fired power plant developed in the western portion of the subject property, with a stormwater retention basin located adjacent to the northwest of the power plant (northwestern portion of the property), a Chevron Valve Station further northwest outside of the power plant fence,

and the substation operated by PG&E located adjacent to the southeast of the power plant (south-central portion of the property).

The TCC Power Plant operates one steam turbine generator (STG) and associated air-cooled condenser, and two heat recovery steam generators (HRSGs) each with associated combustion turbine generators (CTGs). An on-site switchyard is located in the southern portion of the power plant and a Control and Maintenance Building is located along the southwestern boundary of the power plant. Transformers situated within concrete secondary containment structures are located throughout the power plant. Aqueous ammonia, diesel fuel, and water treatment chemicals used throughout the power plant are stored in aboveground storage tanks (ASTs) and are provided with secondary containment. A hazardous materials/waste storage area designed as a covered, concrete secondary containment structure is located to the north of the Control and Maintenance Building, adjacent to the southeast of the air-cooled condenser.

The Control and Maintenance Building is constructed of steel beam framing, metal sided walls with insulation and a pitched metal roof on a concrete slab foundation. Interior areas in the control room/office portion of the building include restrooms, a kitchen, offices and conference rooms. Interior finishes in these areas include vinyl floor tile, ceramic tile floors and walls in the restrooms, painted wallboard with base boards, and drop-in ceiling tiles with fluorescent lighting. The parts section of the Control and Maintenance Building contains an electric forklift. Incandescent lighting is located in the maintenance portion of the building. A carport canopy area with roof-mounted solar panels is located immediately west of the Control and Maintenance Building. Modular office trailers that include restrooms are additionally located in the west-northwestern portion of the power plant, adjacent to the west of the air-cooled condenser. An automated laboratory for conducting general wet chemistry analysis of the process waters recycled throughout the power plant is located in the vicinity of the southeastern-most HRSG and associated CTG.

No visual evidence of underground storage tanks (USTs) (e.g., vent pipes, fill ports), potable or irrigation water wells, monitoring wells, oil/gas wells, or dry wells was observed on the subject property. Power plant operations include the use of a 4,000-gallon oil-water separator (OWS), a wastewater lift station, and two turbine wastewater sumps. An unlined stormwater retention basin is located to the northwest of the power plant buildings. A septic tank and leach field are located along the southwestern boundary of the power plant, adjacent to the northwest of the Control and Maintenance Building. No visual evidence of discolored soil, water, or unusual vegetative conditions or odors was noted in connection with the subject property. The general layout of the subject property is illustrated on Figure 2 - Site Plan, Figure 3 - Power Generation Plant Layout, and Representative Site Photographs are provided in Appendix A.

2.3.2 Surrounding Properties

The subject property is bordered to the north by a Union Pacific Railroad (UPRR) right-of-way, beyond which is Owens-Brockway Glass (14700 West Schulte Road), a glass manufacturing facility. The subject property is bordered to the east and southeast by agricultural land planted with almond orchards. The subject property is bordered to the south and southwest by Delta-Mendota Canal, a concrete-lined surface water canal, beyond which are a rural residential property and agricultural land. The subject property is bordered to the west by vacant land.

AECOM did not observe gasoline service stations or dry cleaners in the immediate vicinity (i.e., 500 feet) of the subject property. In addition, no sensitive receptors (i.e., day care centers, schools, hospitals, surface water bodies) are located adjacent to the subject property, except for the adjacent

Delta-Mendota Canal. Based on AECOM's site reconnaissance of the surrounding area and a review of the site-specific database report, no off-site sources of environmental concern were identified.

2.3.3 Petroleum Products and Hazardous Materials

During the site visit, AECOM observed aqueous ammonia, diesel fuel (No. 2), and water treatment chemicals (e.g., 15 percent ammonia solution, 29 percent ammonia hydroxide solution) located throughout the power plant stored in ASTs and provided with secondary containment (see Section 2.3.5 below for further discussion). Other hazardous materials including 55-gallon drums of lubricating oils and water treatment chemicals were observed to be stored within the hazardous/waste storage area located to the southwest of the air-cooled condenser. Flammable materials storage cabinets also located within the hazardous/waste storage area were observed to contain hazardous materials including 10-gallon or smaller containers of paint, thinner, lacquer, diesel fuel, and aerosols. Four-liter or smaller containers of acids, molybdate, and buffer solutions are stored within the automated laboratory located along the northwest side of the southeastern-most HRSG. Six lead-acid batteries are in use within the fire water pump shed. Acetylene, oxygen, nitrogen, air, and nonflammable gases are stored in cylinders located throughout the power plant. According to the site contact, a small amount of antifreeze is also utilized within in the closed cooling water loops, up to 25 percent of the system volume.

No evidence of a hazardous materials release (e.g., stains, spills) was observed in connection with the storage of petroleum products or hazardous materials handled or stored at the subject property. According to the site contact, there has been no chlorinated solvent use at the subject property.

2.3.4 Polychlorinated Biphenyls

Polychlorinated biphenyls (PCB)-containing dielectric fluids have been widely used as coolants and lubricants in transformers, capacitors, and other electric equipment due to their insulating and nonflammable properties. Based on the age of the subject property (post-1979), PCBs are not expected to be present on-site.

AECOM observed oil-filled equipment including two pad-mounted main CTG transformers (12,855- gallons each), two pad-mounted auxiliary CTG transformers (572-gallons each), one pad-mounted main STG transformer (9,847-gallons), two pad-mounted auxiliary STG transformers (2,278-gallons each), one CTG oil system and reservoir (3,300-gallons), one STG oil system and reservoir (4,750-gallons), a 400-gallon diesel emergency generator, a 500-gallon diesel tank in the fire water pump shed, and a 490-gallon portable diesel storage tank in the hazardous waste storage area¹. Additionally, AECOM observed oil-filled equipment including two hydraulic turbine starters (100-gallons each) at the subject property. According to the site contact, none of the transformers located at the subject property are PCB-containing. During the site visit, no staining was observed within the concrete secondary containment structures associated with the transformers located throughout the power plant.

No other electrical or hydraulic equipment (i.e., trash compactors, elevators, lifts) was observed, or was reported by the site contact to be located at the subject property.

¹ AECOM notes that during the 2022 site inspection, the capacity observed on the label of this AST was 450-gallons; however, the 2019 Spill Prevention, Control, and Countermeasures (SPCC) plan for the subject property states this AST has a 490-gallon capacity.

2.3.5 Aboveground Storage Tanks

During the site visit, AECOM observed one approximate 10,000-gallon aqueous ammonia AST provided with secondary containment located between the HRSGs; one 500-gallon diesel fuel double-walled steel AST located inside the fire water pump shed; one 400-gallon diesel fuel double-walled steel AST contained within the emergency generator housing; and one 490-gallon diesel fuel double-walled steel AST located inside the hazardous materials/waste storage area². Various water treatment chemicals stored in polyurethane ASTs provided with secondary containment were also observed throughout the power plant. Additionally, a Raw Water AST, a Service Water AST, a Domestic Water AST, and a Deionized (DI) Water AST are located throughout the power plant. No other ASTs were observed on the subject property or reported to be located at the subject property by the site contact. The location of each of these ASTs is depicted on Figure 2.

2.3.6 Underground Storage Tanks

With the exception of the OWS and septic tank, no visual evidence of USTs (e.g., vent pipes, fill ports) was observed at the subject property. In addition, no USTs were listed in the site-specific environmental database report, or otherwise identified during AECOM's review of available online information/reports reviewed as part of this assessment. According to the site contact, no USTs were historically or are currently located at the subject property.

2.3.7 Solid Waste

According to the site contact, trash, cardboard recycle, electrical waste, and scrap metal waste are generated at the power plant as part of operations. During the site visit, AECOM observed one trash dumpster and one cardboard recycle dumpster. The site contact reported that trash and cardboard recycling are removed from the subject property by Tracy Delta Disposal Service for off-site disposal and/or recycling. No staining or visual evidence of a hazardous materials release was observed in the vicinity of dumpsters or bins.

2.3.8 Hazardous Waste

During the site visit, AECOM observed hazardous waste stored at the subject property including 55-gallon drums or smaller containers of used oil, oil/water, oily debris, and waste cation exchange resin within the hazardous/waste storage area. No evidence of a hazardous materials release (e.g., stains, spills) was observed in connection with the storage of hazardous waste generated at the subject property. The subject property was identified as a hazardous waste generator in the site-specific environmental database report discussed in Section 5.3.1.

According to the site contact, universal wastes generated at the subject property may include aerosol cans, batteries, and mercury-containing fluorescent lamps. The site contact reported that ACTenviro or Stericycle removes hazardous and universal wastes from the subject property for off-site disposal and/or recycle.

² AECOM notes that during the 2022 site inspection, the capacity observed on the label of this AST was 450-gallons; however, the 2019 SPCC plan for the subject property states this AST has a 490-gallon capacity.

2.3.9 Water

Potable water is not currently provided to the subject property. According to the site contact, bottled water is provided for drinking purposes. Furthermore, according to the site contact, no potable water or irrigation wells are located at the subject property.

Non-potable water for domestic use (restrooms) at the subject property and to supply the power plant with process water is obtained from the Delta-Mendota Canal via two electric-powered water pumps located in the southern portion of the power plant. The site contact reported that water pumped from the canal is processed through a water treatment system on a skid, and then stored in a tank before it is used in the toilets, sinks, eyewash stations, and safety showers at the power plant and that the treated water is not for human consumption. The skid and water tank are located under a covered area next to the larger water storage tanks in the south-central portion of the plant. Water from the canal is also pumped through a trailer for deionization and into a deionized water tank for use in the steam generating turbines.

2.3.10 Wastewater

Sanitary wastewater generated at the subject property from domestic uses (restrooms) is discharged to the on-site septic tank and leach field located along the southwestern boundary of the power plant, adjacent to the northwest of the Control and Maintenance Building. According to the site contact, there have been no issues associated with the septic tank system, and it is emptied via a vacuum truck on an as needed, albeit infrequent basis. Aboveground polyurethane septic holding tanks are associated with the modular office trailers in the northwestern portion of the power plant, which according to the site contact, are emptied via a vacuum truck weekly.

The site contact reported that wastewater generated from operations associated with the power plant is recycled back through the on-site operations through the use of an oil-water separator and a wastewater lift station. The power plant is reportedly designed so that all drains within the plant area discharge to the OWS or the wastewater lift station. According to the site contact, very limited amounts of oil (if any) enter the OWS, and no sludge removal has been required to-date from the OWS. Recycled water passes through a filtration system located at the hazardous materials storage area and then stored in the Service Water AST located to the southwest of the air-cooled condensers. The OWS is located in the southeastern area of the power plant, adjacent to (north, northwest) of the ammonia AST.

Two turbine wastewater sumps are associated with the CTGs. The turbine wastewater sumps are utilized as test points that receive turbine wash-down, or turbine wastewater. The site contact reported that the turbine wastewater sumps have to be manually pumped out via a vacuum truck and turbine wastewater is removed from the subject property by Stericycle for off-site disposal and/or recycling.

2.3.11 Stormwater

An unlined stormwater retention basin is located to the northwest of the power plant buildings. Stormwater that enters the stormwater catch basins located throughout the power plant is directed to the on-site stormwater retention basin. According to the site contact, the TCC Power Plant is a zero-discharge facility. No visual evidence of discolored soil, water, or unusual vegetative conditions or odors was noted in connection with the on-site stormwater retention basin.

Based on AECOM's site visit observations, no stormwater conveyances (e.g., ditches, swales, catch basins) are located in the northeastern or eastern undeveloped portions of the subject property. Stormwater in these portions of the subject property is anticipated to either infiltrate subject property soils or flow toward the surrounding properties.

2.3.12 Heating and Cooling

According to the site contact, the modular office trailers and Control and Maintenance Building are equipped with ground-mounted, electric-powered heating, ventilation and air conditioning (HVAC) units. Electricity is provided to the subject property by either the TCC Power Plant or PG&E. According to the site contact, the CTGs and boilers associated with the power plant are natural gas fired. PG&E also supplies natural gas to the subject property.

3. Environmental Setting

3.1 Topography

Based on a review of the United States Geological Survey (USGS) topographic maps of the subject property area (Tracy, California quadrangle) and the Google Earth website, the elevation of the subject property ranges from approximately 160 to 180 feet above mean sea level. Based on a review of these resources and AECOM's site visit, it appears that the subject property is generally flat with an overall regional downward slope to the north-northeast.

3.2 Soil/Geology

Site-specific geologic information was not identified during the course of this assessment. According to soil information provided in the site-specific environmental database report, the subject property is primarily underlain with Stomar clay loam and Capay clay. The Stomar soils are described as having slow infiltration rates and as being well drained. The Capay soils are described as having very slow infiltration rates and as being moderately well drained. Both of these soil types are further described as silt-clay fine-grained soils down to a depth of approximately 5 feet below ground surface (bgs), and both are classified as partially hydric (partially supporting wetlands).

According to geologic information provided in the site-specific environmental database report, the bedrock geology of the subject property area is of the Cenozoic Era, Quaternary System, Quaternary Series and consists of a stratified sequence.

3.3 Groundwater/Hydrology

Site-specific hydrologic information was not identified during the course of this assessment. Based on the surface topography of the subject property, groundwater beneath the subject property is anticipated to flow north-northeasterly. Groundwater beneath the subject property is anticipated range from approximately 100 to 200 feet bgs. The actual groundwater flow direction and depth in the vicinity of the subject property cannot be determined without groundwater monitoring well data.

4. Site and Area History

Historical information for the subject property and surrounding sites is based on AECOM's review and analysis of the following historical sources:

- Topographic maps dated 1916, 1922, 1947, 1954, 1968, and 1981 provided by EDR;
- Aerial photographs dated 1937, 1940, 1949, 1957, 1963, 1968, 1975, 1982, 1993, 1998, 2005, 2006, 2009, 2010, and 2012 provided by EDR;
- City directories searched from 1959 through 2013 (in approximate 5-year intervals) provided by EDR;
- Google Earth images dated 1985, 1993, 2003 through 2006, 2008 through 2015, and 2017 through 2022;
- Interview with the site contact; and
- County of San Joaquin building permit records searched from 1991 through 2020.

According to EDR, Certified Sanborn® Map coverage is not available for the area of the subject property. History obtained from AECOM's review of previously prepared environmental reports is summarized in Section 4.3 below.

4.1 Subject Property

According to the historical sources reviewed, the subject property was developed as agricultural land (row crops) from least 1937 through at least 1998. The existing overhead power line traversed the southeastern portion of the subject property and the existing buried pipeline easement also appeared to traverse northwest-southeast through the central portion of the subject property as early as 1937. In the 1993 aerial photograph, the buried pipeline easement appeared re-graded/re-developed, but still traversing its historical and existing easement.

According to the site contact, in 2003, the subject property was developed with a Peaker Power Plant presumably including the PG&E Substation (confirmed by Google Earth imagery). In the 2005 through 2009 aerial photographs, the existing Raw Water AST, water treatment system canopy, Control and Maintenance Building, CTGs, and PG&E Substation appeared developed. A former on-site stormwater retention basin was located where the existing air-cooled condenser is currently located. The present-day stormwater retention basin was constructed circa 2010-2011. According to the site contact, in 2011, the subject property was expanded for the existing TCC Power Plant. In the 2010 aerial photograph, the west-northwestern and northeastern portions of the subject property were graded in preparation for construction expansion activities. In the 2012 aerial photograph, the existing stormwater retention basin and air-cooled condenser appeared developed. The area adjacent to the southwest of the stormwater retention basin was utilized as a construction laydown area and the northeastern portion of the subject property was utilized as an unpaved parking lot and included an additional former on-site stormwater retention basin. At the time of AECOM's 2017, 2019, 2021, and 2022 site visits (discussed in Section 4.3 below), the northeastern and eastern portions of the subject property appeared as a vacant field/grass land.

In the 1999 and 2003 city directories searched by EDR, Thermal Energy Development Partnership LP/Tracy Biomass Plant was listed under the address of 14800 West Schulte Road. In 2008, Tracy Operators was listed under the same address. In the 2013 city directory searched, the subject

property was listed under its current address of 14950 Schulte Road as occupied by GWF Power Systems/Wood Group.

Four building permit records were identified for the subject property in the building permit records searched, including for a fence and foundation installation in 2012, a solar ground mount for the Chevron valve site in 2013, a replacement of fire supply piping below grade in 2015, and a carport with roof-mounted solar panels in 2020. For a short period of time circa 2015, the area adjacent to the southwest of the stormwater retention basin was utilized for the storage of temporary water storage containers. In November 2015, the subject property changed ownership from GWF Energy, LLC to AltaGas San Joaquin Energy, Inc. At the end of 2018, the subject property changed ownership from AltaGas San Joaquin Energy, Inc. to MRP San Joaquin Energy, LLC (current property owner), which is operated by NAES. No historical on-site sources of environmental concern were identified.

4.2 Off-site Properties

According to the historical sources reviewed, in at least 1916, the existing railroad right-of-way located adjacent to the north of the subject property was depicted as developed. In the earliest aerial photograph reviewed dated 1937, the surrounding area was shown developed with the railroad tracks adjacent to the north and the overhead power lines adjacent to the southwest and east-southeast. The surrounding area was shown as either vacant land or developed with agricultural land as fields/crops at that time. By 1949, the Delta-Mendota Canal was shown developed adjacent to the southwest of the subject property. By 1963, the site located adjacent to the north of the subject property, across the railroad tracks, was shown developed with the existing building. By 1993, this northerly adjacent facility was shown expanded to the west. By 2006, the rural residential property located adjacent to the south of the subject property, across Delta-Mendota Canal, was shown developed. According to the city directories searched, West Schulte Road was first listed in 1992. In 1999, Owens Brockway Glass Containers, a division of Owens Illinois was first listed as occupying 14700 West Schulte Road (north of the railroad). No historical off-site sources of environmental concern were identified.

4.3 Previously Prepared Environmental Reports

AECOM was provided with the following previously prepared environmental reports for the subject property. AECOM's review of these reports is summarized below.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated July 9, 2015, prepared for Star West Generation, LLC of Houston, Texas, prepared by TRC Environmental Corporation of Cincinnati, Ohio.

TRC Environmental Corporation (TRC) conducted a Phase I ESA of the portion of the subject property that includes APN 209-240-32, which is developed with the TCC Power Plant. TRC conducted the Phase I ESA in accordance with ASTM E1527-13. At the time of TRC's assessment, the TCC Power Plant was operated by Star West, owned by GWF Energy LLC. TRC's historical analysis of the subject property and surrounding properties is similar to AECOM's historical analysis.

TRC reviewed a number of previously prepared environmental reports as part of their assessment. According to TRC's summary of the reports, during a Phase I ESA completed in 2001 by Harding ESE, Harding ESE collected five near surface soil samples in the northwestern corner of the subject

property to evaluate whether residual pesticides/herbicides were present at the subject property. Results identified organochlorine pesticides (OCPs) 4,4-dichlorodiphenyldichloroethylene (DDE) and 4,4-dichlorodiphenyltrichloroethane (DDT) in one soil sample at concentrations of 0.20 and 0.11 milligrams per kilogram (mg/kg), respectively. Additionally, the chlorinated herbicide compound 2,4-dichlorophenoxy (2,4-DB) was detected in soil samples at concentrations ranging between 35 to 92 micrograms per kilogram (µg/kg). The [4,4-DDE and 4,4-DDT] concentrations each were below their respective EPA Region 4 Preliminary Remediation Goal (PRG). There was no established cleanup criteria for 2,4-DB. AECOM notes that the more appropriate regulatory guidance value to compare these results to would be the U.S EPA Region 9 Regional Screening Levels (RSLs). Regardless, these concentrations are well below the Region 9 RSLs for industrial property.

TRC's Phase I ESA revealed no evidence of RECs, CRECs, or HRECs in connection with the TCC Power Plant site.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated October 2015, prepared for Stoel Rives LLP on behalf of AltaGas Power Holdings (U.S.) Inc. of Vancouver, British Columbia, prepared by AECOM of Camarillo, California.

In September 2015, AECOM conducted a Phase I ESA of the subject property. At that time, the subject property was developed similarly as it was observed during the current assessment. The historical analysis of the subject property and surrounding properties remain consistent between the 2015 and current assessment. In 2015, no RECs, CRECs, HRECs, or DMCs were identified in connection with the subject property.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated October 2017, prepared for AltaGas Power Holdings (U.S.) Inc. of Dallas, Texas, prepared by AECOM of Camarillo, California.

In October 2017, AECOM conducted a Phase I ESA of the subject property. At that time, the subject property was developed similarly as it was observed during the current assessment. The historical analysis of the subject property and surrounding properties remain consistent between the 2017 and current assessment. In 2017, no RECs, CRECs, HRECs, or DMCs were identified in connection with the subject property.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated August 2018, prepared for AltaGas Power Holdings (U.S.) Inc. of Dallas, Texas, prepared by AECOM of Camarillo, California.

In August 2018, AECOM conducted a Phase I ESA of the subject property, which was developed similarly as it was observed during the current assessment. The historical analysis of the subject property and surrounding properties remain consistent between the 2018 and the current assessment. In 2018, no RECs, CRECs, or HRECs were identified in connection with the subject property. The following DMC was identified in 2018:

- An approximately two square-foot transformer oil stain was observed beneath the northernmost transformer that is situated adjacent to the north of the switchyard. The transformer was observed located within an in-tact concrete secondary containment structure, which is connected to the on-site OWS system.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated July 2019, prepared for Middle River Power, LLC of Chicago, Illinois, Texas, prepared by AECOM of Camarillo, California.

In July 2019, AECOM conducted a Phase I ESA of the subject property, which was developed similarly as it was observed during the current assessment. The historical analysis of the subject property and surrounding properties remain consistent between the 2019 and the current assessment. In 2019, no RECs, CRECs, or HRECs were identified in connection with the subject property. The same DMC was identified in 2019 as during the 2018 assessment. *It should be noted that this staining was not observed during the 2021 (discussed below) or current assessments.*

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated September 2021, prepared for Middle River Power, LLC of Chicago, Illinois, Texas, prepared by AECOM of Camarillo, California.

In August 2022, AECOM conducted a Phase I ESA of the subject property, which was developed similarly as it was observed during the current assessment. The historical analysis of the subject property and surrounding properties remain consistent between the 2021 and the current assessment. In 2021, no RECs, CRECs, or HRECs were identified in connection with the subject property. The 2021 report noted the historic use of fertilizers, herbicides, and pesticides as a DMC.

5. Database and Records Review

5.1 User Provided Information

Section 6 of the ASTM Standard states that certain tasks, which will help to determine the possibility of RECs associated with the proposed project area, are generally conducted by the report user. These tasks include the following: reviewing title records for environmental liens or activity and land use limitations and considering awareness of any specialized knowledge (e.g., information about previous ownership or environmental litigation); experience related to RECs at the proposed project area; or significant reduction in the purchase price of the proposed project area. Typically, information related to these items should be provided by the report user. To assist the user in gathering information that may be material to identifying RECs, AECOM provided MRP (the property owner) with the User Questionnaire from the ASTM Standard. As part of this Phase I ESA, Mr. Jon Boyer of MRP completed the User Questionnaire on September 2, 2022. Mr. Boyer was not aware of any environmental liens or AULs having been placed on the subject property. Mr. Boyer also indicated that he did not have specialized knowledge or experience that is material to RECs in connection with the subject property.

5.2 Title Records/Environmental Liens

As specified in the agreed upon scope of work, title searches and environmental lien searches were not conducted as part of this ESA. However, in October 2017, AECOM contracted with EDR to conduct environmental lien searches of the three subject property parcels. At that time, no environmental liens or AULs were identified in the environmental lien search report in connection with the subject property parcels (APNs 209-240-32, 209-240-33, and 209-240-38). In addition, the user did not provide information concerning environmental liens or AULs associated with the subject property (refer to Section 5.1).

5.3 Database Information

In accordance with the scope of work and ASTM Standard E1527-13, a search of various governmental databases was conducted by EDR. The site-specific environmental database report was reviewed to evaluate if soil and/or groundwater from an on-site and/or off-site sources of concern has the potential to impact the subject property. The database abbreviations are provided in the site-specific environmental database report.

The database report includes various reports detailing database information for each of the sites identified/geocoded within the specified radius. In some cases, additional sites are identified within the database report; however, EDR is unable to map them to specific locations due to insufficient/contradicting address information. These sites were included in the database report as "orphan" or "unmapped" sites. Based upon AECOM's review, there does not appear to be any significant concerns associated with the one orphan site. A summary of AECOM's review and analysis of the site-specific environmental database report is presented below. A copy of the database report is provided in Appendix B.

Based on AECOM's research, the subject property is not located on or within a 1-mile radius of tribal lands.

5.3.1 Subject Property

The subject property was identified in the Facility and Manifest Data (HAZNET), California Environmental Reporting System (CERS), HAULERS, Hazardous Waste Tracking System (HWTS), Facility Index System (FINDS), Enforcement and Compliance History Online (ECHO), AST, Resource Conservation Recovery Act (RCRA) Non-Generator/No Longer Regulated (NonGen/NLR), RCRA Large Quantity Generators (RCRA-LQG), ICIS, US AIRS, CERS Hazardous Waste (HAZ WASTE), CERS TANKS, Emissions Inventory Data (EMI), National Pollutant Discharge Elimination System (NPDES), and California Integrated Water Quality System (CIWQS) databases in the site-specific environmental database report under the names Tracy Combined Cycle Power Plant, MRP San Joaquin Energy, LLC; PG&E Schulte Substation, I-474 L-002 MP 122.14-158 ILI Piggling (Location I), GWF Energy, LLC-Tracy Peaker Plant, GWF Energy LLC, and Altagas San Joaquin Energy Tracy Combined Cycle. A summary of the on-site database listings is provided below:

- The HAZNET and HWTS databases indicate that in 2002 through 2019 the subject facility generated state-regulated wastes including “liquids with pH \leq 2 with metals; unspecified oil-containing waste; unspecified organic liquid mixture; off-specification, aged or surplus organics; unspecified aqueous solution; other organic solids; other spent catalyst; other inorganic solid waste; unspecified solvent mixture; waste oil and mixed oil; and other empty containers 30- gallons or more” that were manifested for off-site disposal and/or recycling.
- The CERS database identifies the facility under the regulatory programs: Chemical Storage Facilities; US EPA Air Emission Inventory System (EIS); Hazardous Chemical Management; Hazardous Waste Generator; and Aboveground Petroleum Storage. The CERS database reports that the most recent inspection was performed on August 12, 2021 and violations were noted, which subsequently returned to compliance.
- The FINDS database, a pointer database to other databases, in this case pointing to several other environmental interest/information system registry including CAMDBS (Clean Air Markets Division Business System); AFS (Aerometric Information Retrieval System (AIRS)); RCRAInfo; US Emissions & Generation Resource Database (EGRID); State Master; Air Major; Electric Generator; Greenhouse Gas Reporter; Air Program; US NPDES; and Hazardous Waste Biennial Reporter, which are all compliance-related in nature.
- The ECHO database reports that no violations were identified for the past three years related to air emissions inventory reporting (Clean Air Act; CAA) and hazardous wastes (RCRA). The previous report indicated that from 2012 through 2016, the facility received four Notices of Violations (NOVs) from the State pertaining to its air emissions inventory reporting that resulted in penalty fines. According to ECHO, the last agency inspection pertaining to the facility’s air emissions compliance was conducted on January 28 2021. No inspection date was reported in the ECHO database related to RCRA. The ECHO database also reports that the subject facility has terminated permit under the Clean Water Act (CWA).
- The facility is listed on the AST database with total gallons not reported.
- The RCRA database reports that the Tracy Combined Cycle Power Plant was classified as a non-generator in 2016 and 2019 with no reported violations and GWF Energy LLC was classified as a non-generator in 2002 with no violations.
- The facility is listed on the EMI database which records reportable annual air emissions.

- The NPDES and CIWQS database listings are related to a former construction stormwater permit.

Each of these database listings are non-contamination related to soil and/or groundwater, and are compliance-related in nature, and therefore, are not considered to present a REC to the subject property, in AECOM's opinion.

PG&E (substation inset into the subject property) was identified in the RCRA Large Quantity Generator (LQG), CERS, Integration Compliance Information System (ICIS), US AIRS, and FINDS databases. The CERS database reports that the most recent inspection was performed on August 12, 2021 and violations were noted, which were subsequently returned to compliance. The RCRA database reports that PG&E was classified as a LQG in 2019 and 2020 for generation of mercury (waste code D009) and benzene (waste code D018) with no reported violations found. PG&E was also identified in the CERS database as "Chemical Storage Facilities". The ICIS database related to the US AIRS listing. The FINDS database points to the US AIRS and RCRA listings. These database listings compliance-related in nature and are non-contamination related to soil and/or groundwater, and therefore, are not considered to present a REC to the subject property, in AECOM's opinion.

5.3.2 Surrounding Sites

No adjacent or surrounding sites were identified within the respective ASTM and/or EDR search distances from the subject property in the environmental database report. However, based on AECOM's previous assessments, one site, Owens-Brockway Glass (14700 West Schulte Road), located adjacent to the north (across the railroad tracks) and topographically down-gradient of the subject property, was identified in prior environmental database reports with listings on several compliance-related databases including: RCRA-LQG, Toxic Chemical Release Inventory System (TRIS), US AIRS, Waste Discharge System (WDS), HIST UST (as a historically listed UST site), and Enforcement Action Listing (ENF). This site was identified with three historical USTs and the ENF listing had several NOV's that were related to the facility's WDS permit. This northerly adjacent site also was identified in the prior environmental database reports with listings in several contamination-related databases including: leaking underground storage tank (LUST)/HIST CORTESE (as a historically listed "Cortese" Hazardous Waste and Substances Site List), and Spills, Leaks, Investigations and Cleanups (SLIC; currently referred to as Cleanup Program Sites [CPS]) databases. According to information provided within the prior environmental database reports, this adjacent site received a no further action (NFA) letter issued by the Central Valley Regional Water Quality Control Board (RWQCB) on June 3, 2002 and the site received a completed - case closed LUST status on June 17, 2002 for a gasoline release. On October 5, 2002, the site was listed as an open SLIC listing for a release of total petroleum hydrocarbons (TPHs). The SLIC cleanup status was reported as inactive. No other information about the closed LUST or open SLIC cases was provided within the prior environmental database reports. The State of California Water Resources Control Board (SWRCB) online GeoTracker database (refer to Section 5.5.3 below) identifies this site as a closed LUST cleanup site for a release of gasoline; the case was closed on June 17, 2002. This adjacent site was not identified as an open or closed CPS-SLIC site on the online GeoTracker database.

5.4 Vapor Encroachment Screening

AECOM conducted a Tier 1 vapor encroachment screening (VES) as part of this assessment. This screening was conducted in general accordance with the ASTM E2600 *Standard Guide for Vapor*

Encroachment Screening on Property Involved in Real Estate Transactions dated October 2015. The objective of the VES was to determine if a VEC exists or if a VEC does not exist.

5.4.1 Subject Property

No on-site sources of vapor encroachment (e.g. UST, contaminated soil, groundwater plume, etc.) were identified during this assessment. Based on this information, a VEC due to an on-site source does not appear to exist.

5.4.2 Off-site

To conduct the VES of the nearby area, AECOM conducted a detailed review and analysis of the site-specific environmental database report with particular focus on the follow two types of sites:

1. Off-site properties that are impacted by chlorinated volatile organic compounds (VOCs) and/or semi-volatile-organic compounds (SVOCs) and are located within approximately 1,750 feet of the subject property, and
2. Off-site properties that are impacted by petroleum hydrocarbons and are located within approximately 525 feet of the subject property.

The following paragraph summarizes the results of AECOM's VES of the nearby area.

A review of the site-specific environmental database report, the State of California Department of Toxic Substance Control's (DTSC's) online EnviroStor database (refer to Section 5.5.2 below), and the SWRCB's online GeoTracker database indicates that no chlorinated VOC/SVOC sites are located within prescribed search radii, but one petroleum hydrocarbon-impacted site is located with the above-referenced radii of the subject property. However, as previously discussed, this petroleum-impacted site can be ruled out due to regulatory status (i.e., regulatory closure has been issued), and topographical position from the subject property (i.e., down-gradient or cross-gradient). Based on this information, it is AECOM's opinion that a VEC at the subject property due to an off-site source does not appear to exist.

5.5 Agency File Review

5.5.1 County

AECOM reviewed property information on the San Joaquin County Assessor's online database. Information on the subject property has been incorporated throughout this report where appropriate.

The San Joaquin County Environmental Health Department (EHD) [approved by the State as the California Unified Program Agency (CUPA) for San Joaquin County in January of 1997] administers Hazardous Material Business Plan (HMBP), California Accidental Release Prevention (Cal-ARP), Aboveground Petroleum Storage Act (APSA), Hazardous Waste Generator, Hazardous Waste On-site Treatment (Tiered Permitting), and UST programs. AECOM performed a search of EHD records available online which included records from Hazardous Materials Program, Hazardous Waste Program, Emergency Response Program (complaint information), Land Use Program, Aboveground Petroleum Storage Program compliance information (pre-2019), and Liquid Waste/Water Well Permits (geotechnical soil boring only, no environmental sampling). The majority of the records are related to facility upgrades that were approved in 2012. Waste generator and

hazardous materials program facility inspections were performed by EHD in 2020 at which time several violations were noted. Waste streams found included used oil, oil filters, oily debris, ammonia chips, and cation exchange polymer resin cartridges. A Return to Compliance Certification was subsequently issued in 2020. A hazardous materials program inspection was also performed by EHD in 2021 and no violations were found at the time of the 2021 inspection. These records appear to be compliance-related in nature, are non-contamination related, and not indicative of a release to soil and/or groundwater.

5.5.2 State

AECOM searched the CalEPA Regulated Site Portal database, which combines information from the CERS, EnviroStor, GeoTracker, CIWQS, and the federal Toxics Release Inventory (TRI) databases. The subject property address was identified on the online CalEPA Regulated Site Portal database in several regulatory programs, as discussed below:

- GWF Energy, LLC-Tracy Peaker Plant was listed in the US EPA Emission Inventory System (EIS) regulatory program.
- Tracy Combined Cycle Power Plant in the Aboveground Petroleum Storage, Chemical Storage Facilities, Hazardous Chemical Management, and Hazardous Waste Generator regulatory programs. Violations were noted at the time of the most recent inspection in 2020 related to California Accidental Release Prevention (CalARP), Hazardous Waste Generator, and Hazardous Materials Release Response Plans (HMRRP).
- PG&E: Schulte Substation was listed in the Chemical Storage Facilities regulatory program. Violations were noted at the time of the most recent inspection in 2021 related to HMRRP.

These regulatory program listings are consistent with the database listings discussed in Section 5.3.1.

AECOM searched the DTSC's online EnviroStor database for California Cleanup Sites involving the DTSC. The EnviroStor database consists of federal Superfund sites, state response sites, voluntary cleanup sites, and school cleanup sites. Neither the subject property, nor adjacent sites were identified in the online EnviroStor database.

AECOM searched the California EPA's SWRCB online GeoTracker database. The GeoTracker database regards contaminated property investigations consisting of LUST sites, Cleanup Program Sites (formerly SLIC sites), Military Cleanup Sites, and including Waste Discharge Requirement (WDR) Sites, Permitted UST(s) sites, Land Disposal Sites, Irrigated Lands Regulatory Program Sites, and Oil/Gas Sites at properties located throughout California. The subject property was not identified in the online GeoTracker database. As previously discussed in Section 5.3.2 above, the adjacent site identified as Owens-Brockway Glass (14700 West Schulte Road), located to the north of (topographically down-gradient of) the subject property, across the railroad tracks, was identified in the online GeoTracker database as a closed LUST cleanup site.

AECOM searched the California Energy Commission's (CEC) website. The subject property was identified as GWF Tracy Combined-Cycle Power Plant, a 330-MW combined-cycle facility in unincorporated San Joaquin County. The CEC approved the TCC Power Plant Application for Certification on March 24, 2010 and the facility began commercial operation on November 1, 2012. The license allowed the project developer, GWF Energy LLC, to modify their existing 169-MW simple-cycle Tracy Peaker Plant that was certified by the CEC in 2020 and began operation in 2003. The existing plant consists of two General Electric Model PG 7121 EA CTGs equipped with a

dry low NO_x (DLN) combustor system to control the NO_x concentration exiting each CTG. The plant also includes two on-site 115-kilovolt switchyards, a natural gas supply interconnection, an electric transmission line, an approximately 1,470-foot water supply pipeline, improvements to an existing dirt access road approximately one mile in length, and an air-cooled condenser. Annual water use for evaporative cooling of inlet air (when ambient conditions dictate) and for make-up water for the steam cycle is approximately 54 acre-feet per year. Water is sourced from the Byron-Bethany Irrigation District via the Delta-Mendota Canal adjacent to the project site. On July 30, 2015, the CEC approved a Post-Certification Amendment (TN 205634) to allow GWF Tracy to use alternative water supplies (four alternatives are proposed) to avoid being forced to reduce or suspend operations. All alternative water source options could use temporary on-site infrastructure.

AECOM searched the California Department of Conservation Geologic Energy Management Division (CalGEM) online mapping application Well Finder WellSTAR database. No oil/gas wells were depicted on the subject property in the online WellSTAR database. The subject property is not depicted as located in an oil/gas field.

5.5.3 Federal

AECOM searched the U.S. EPA's Superfund Enterprise Management System (SEMS) and Envirofacts online databases. The SEMS database replaced the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) which has since been retired. SEMS includes the same data fields and content as CERCLIS. The Envirofacts database retrieves information obtained from 17 national systems, including the CERCLIS, Superfund program (NPL sites), hazardous waste sites, and potential hazardous waste sites. The subject property was identified within the Envirofacts database in the following regulatory programs: ICIS-NPDES (terminated general permit covered facility), ICIS-AIR (contains compliance and permit data for stationary sources of air pollution regulated by EPA, state and local air pollution agencies), Green House Gas (GHG) (annual air emissions inventory reporting), and RCRAInfo (hazardous materials/wastes inventory), which is consistent with the database listings discussed in Section 5.3.1. The subject property was not listed on the SEMS database.

AECOM performed a review of online records available on the National Pipeline Mapping System (NPMS) public map viewer maintained by the U.S. DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA), for natural gas transmission or hazardous liquid [petroleum] pipelines on or adjacent to the subject property. A natural gas transmission is depicted transecting the subject property from northwest to southeast along the northeast side of the plant. No hazardous liquid [petroleum] pipelines are depicted on or adjacent to the subject property that are within the PHMSA's jurisdiction.

6. Findings and Opinions

AECOM performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM Practice E1527-13, which meets the requirements of Title 40, Code of Federal Regulations Part 312 and is intended to constitute *all appropriate inquiry* for purposes of the landowner liability protections. Any exceptions to, or deletions from, this practice are described in Section 1.3 through 1.5 of this report.

The following sections summarize the findings and opinions of this Phase I ESA of the subject property.

6.1 Recognized Environmental Conditions

Based on the above-described activities, no RECs were identified in connection with the subject property.

6.2 Controlled Recognized Environmental Conditions

Based on the above-described activities, no CRECs were identified during this assessment.

6.3 Historical Recognized Environmental Conditions

Based on the above-described activities, no HRECs were identified in connection with the subject property.

6.4 De Minimis Conditions

Based on the above-described activities the following de minimis conditions (DMCs) were identified in connection with the subject property:

- Prolonged direct application of fertilizers, herbicides, and pesticides associated with agricultural practices can result in impacts to soil, shallow groundwater, or surface water. However, based on the current industrial use and condition of the subject property, the historic land applications at the subject property are considered a DMC, in AECOM's opinion.
- An in-ground drainage system utilizing floor drains within the turbine and generator enclosures routes equipment wash water and incidental leaks from collection pans to an in-ground collection sump, from which it is pumped to a wastewater AST. Additionally, stormwater that collects in the in-ground containment for the aqueous ammonia AST, transformer containment areas, and the cable trays is routed to the 4,000-gallon in-ground OWS. AECOM was not able to inspect the integrity of the in-ground systems; however, due to the nature of the materials discharged (non-hazardous waste and stormwater), and the lack of reported releases, the in-ground drainage systems are considered DMCs, in AECOM's opinion.

6.5 Vapor Encroachment Conditions

Based on the above-described activities, no VECs were identified in connection with the subject property.

7. Conclusions

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-13 of the TCC Power Plant located at 14950 West Schulte Road, Tracy, San Joaquin County, California. Any exception to, or deletions from, this practice are described in Sections 1.3 through 1.5 of this report. This assessment has revealed no evidence of RECs or CRECs in connection with the subject property.

8. Environmental Professional Statement

Ms. Kristen Galeckas was the Environmental Professional (EP) for this project. Ms. Galeckas' EP statement is below and her resume is provided in Appendix C.

I declare that, to the best of my professional knowledge and belief, I meet the definition of an EP as defined in §312.10 of 40 Code of Federal Regulations (CFR) and that I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Signature: Kristen Margaret Galeckas

Date: September 17, 2022

9. References

9.1 Persons Interviewed

Taylor Leach, Environmental Health and Safety (EHS) Specialist, MRP San Joaquin Energy, LLC, 209-275-7079.

9.2 Agencies Contacted

County, San Joaquin Assessor, ParcelQuest Lite, <https://assr.parcelquest.com/Home>

County, San Joaquin Environmental Health Department (EHD), CUPA related public records request for the subject property, <https://www.sigov.org/department/envhealth/public-records>

County, San Joaquin Environmental Health Department (EHD), Online EHD Program Records, <https://lfweb.sigov.org/EHD/Welcome.aspx>

State, California Department of Conservation, Geologic Energy Management Division (CalGEM), WellSTAR Well Finder, <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal>

State, California Department of Toxic Substances Control (DTSC), EnviroStor online database, <http://www.envirostor.dtsc.ca.gov/public/>

State, California Department of Toxic Substances Control (DTSC). Hazardous Waste Tracking System online database, http://hwts.dtsc.ca.gov/report_list.cfm

State, California Energy Commission (CEC) online database, <https://www.energy.ca.gov/powerplant/combined-cycle/gwf-tracy-combined-cycle-power-plant>

State, California Environmental Protection Agency (EPA), Site Portal online database, <https://siteportal.calepa.ca.gov>

State, California Water Resources Control Board (SWRCB). Groundwater Ambient Monitoring and Assessment (GAMA) database, <http://geotracker.waterboards.ca.gov/gama/>

State, California Water Resources Control Board (SWRCB), GeoTracker database, <http://geotracker.waterboards.ca.gov/>

United States Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA), National Pipeline Mapping System (NPMS) public map viewer, <https://pvnpm.phmsa.dot.gov/PublicViewer/>

U.S. Environmental Protection Agency (EPA). Envirofacts online database, <https://www3.epa.gov/enviro/facts/multisystem.html>

U.S. Environmental Protection Agency (EPA). SEMS online database, <https://www.epa.gov/enviro/sems-search>

9.3 Documents Reviewed

ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, dated November 2013. www.astm.org

ASTM E2600-15, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, dated October 2015. www.astm.org

EDR Aerial Photo Decade Package prepared for 14950 West Schulte Road, Tracy, California 95377 dated August 24, 2015. Inquiry number 4388528.12. Aerial photographs dated 1937, 1940, 1949, 1957, 1963, 1968, 1975, 1982, 1993, 1998, 2005, 2006, 2009, 2010, and 2012. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

EDR Building Permit Report prepared for 14950 West Schulte Road, Tracy, California 95377 dated August 20, 2015. Inquiry number 4388528.8. Building permit records searched from 1991 through 2015. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

EDR Certified Sanborn® Map Report prepared for 14950 West Schulte Road, Tracy, California 95377 dated August 20, 2015. Inquiry number 4388528.3. Unmapped Property. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

EDR-City Directory Image Report prepared for 14950 West Schulte Road, Tracy, California 95377 dated September 17, 2015. Inquiry number 4388528.8. City directories searched from 1959 through 2013 (in approximate 5-year intervals). Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

EDR Environmental Lien and AUL Search prepared for 14950 West Schulte Road, Tracy, California 95377 dated October 9, 2017. Inquiry number 5064707.5R. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

EDR Historical Topographic Map Report prepared for 14950 West Schulte Road, Tracy, California 95377 dated August 27, 2015. Inquiry number 4388528.4. Topographic Maps dated 1916, 1922, 1947, 1954, 1968, and 1981. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

EDR Property Tax Map Report prepared for 14950 West Schulte Road, Tracy, California 95377 dated August 20, 2015. Inquiry number 4388528.6. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

EDR Radius Map™ Report with GeoCheck® prepared for 14950 West Schulte Road, Tracy, California 95377 dated July 1, 2019. Inquiry number 05703628.1r. Report prepared by Environmental Data Resources Inc., 6 Armstrong Road, Shelton, Connecticut 06484, (800) 352-0050, www.edrnet.com.

Google Earth Pro software application © Google Inc.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated July 9, 2015, prepared for Star West Generation, LLC of Houston,

Texas, prepared by TRC Environmental Corporation of Cincinnati, Ohio, TRC Project No. 236168.0000.0000.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated October 2015, prepared for Stoel Rives LLP on behalf of AltaGas Power Holdings (U.S.) Inc. of Vancouver, British Columbia, prepared by AECOM of Camarillo, California, AECOM Project Number 60344680.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated October 2017, prepared for AltaGas Power Holdings (U.S.) Inc. of Dallas, Texas, prepared by AECOM of Camarillo, California, AECOM Project Number 60555900.

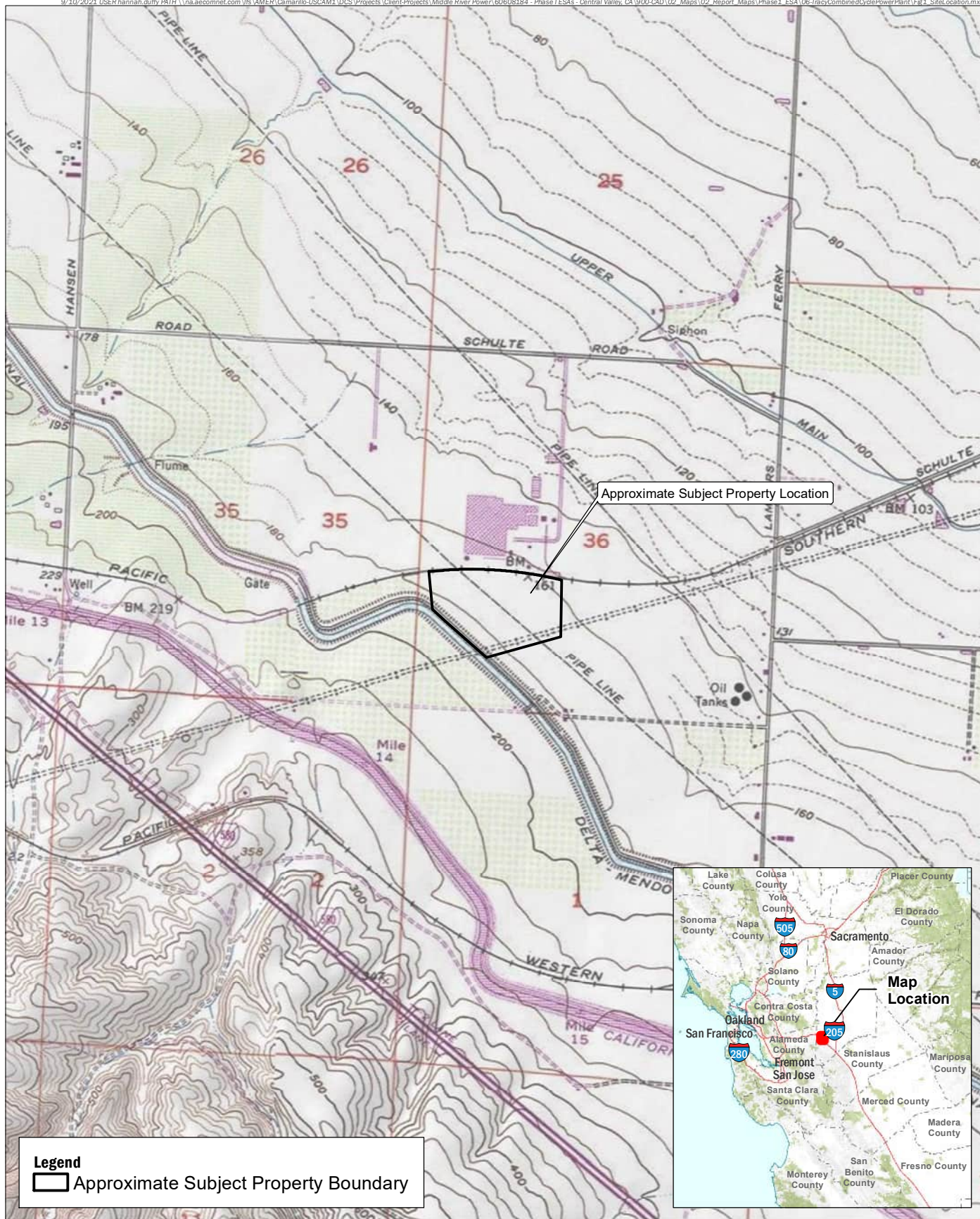
Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated August 2018, prepared for AltaGas Power Holdings (U.S.) Inc. of Dallas, Texas, prepared by AECOM of Camarillo, California, AECOM Project Number 60585700.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated July 2019, prepared for Middle River Power, LLC of Chicago, Illinois, Texas, prepared by AECOM of Camarillo, California, AECOM Project Number 60608184.

Phase I Environmental Site Assessment, Tracy Combined Cycle Plant, 14950 West Schulte Road, Tracy, California 95377, dated September 2021, prepared for Middle River Power, LLC of Chicago, Illinois, Texas, prepared by AECOM of Camarillo, California, AECOM Project Number 60608184.

Spill Prevention Control and Countermeasure (SPCC) Plan, MRP San Joaquin Energy, LLC, Tracy Combined Cycle Power Plant, 14950 West Schulte Road, Tracy, California. Prepared by TRC for MRP San Joaquin Energy, LLC. Dated May 2019.

Figures



0 2,000
Feet

AECOM

Tracy Combined Cycle Power Plant
 14950 WEST SCHULTE ROAD
 TRACY, CALIFORNIA

FIGURE 1
 Site Location Map

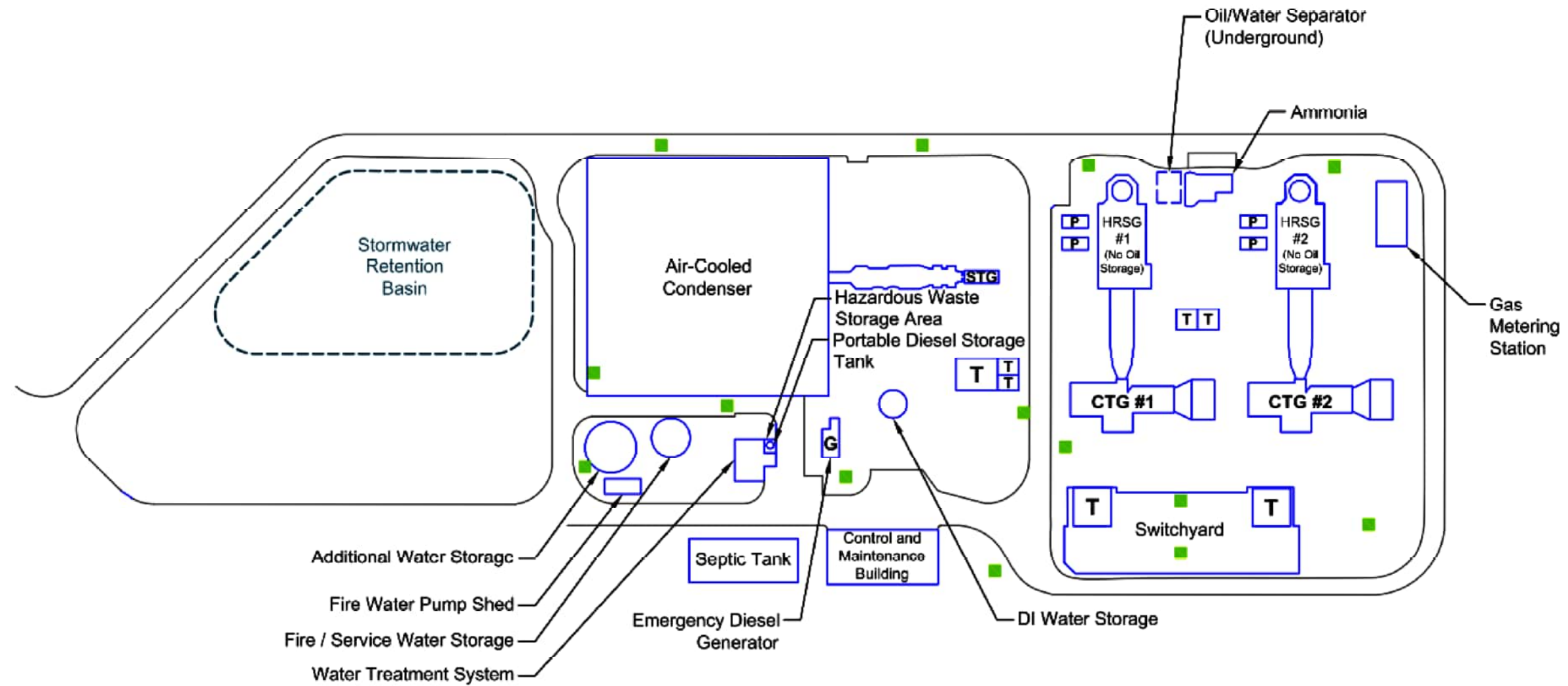


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Feet

AECOM

Tracy Combined Cycle Power Plant
14950 WEST SCHULTE ROAD
TRACY, CALIFORNIA

FIGURE 2
Site Plan



Source: Phase I Site Assessment, TRC Environmental Corporation, 05/2019.

Appendix A Representative Site Photographs

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
1

Date:
8/22/22

Direction Photo Taken:

West

Description:

Overview of the Tracy Combined Cycle (TCC) Power Plant (background) and the PG&E Substation from the eastern corner of the subject property.



Photo No.
2

Date:
8/22/22

Direction Photo Taken:

Southeast

Description:

View of solar panel parking area (includes four charging stations) and Control and Maintenance Building beyond (far left).



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
3

Date:
8/22/22

Direction Photo Taken:

East

Description:

View of the raw water aboveground storage tank (AST) and the fire water pump shed housing a 500-gallon diesel AST (far right).



Photo No.
4

Date:
8/22/22

Direction Photo Taken:

Northeast

Description:

View of the service water AST.



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
5

Date:
8/22/22

Direction Photo Taken:

Northwest

Description:

View of the on-site hazardous material/waste storage area located in the western portion of the plant.

Also visible in the photograph (foreground) is a trash dumpster (left).



Photo No.
6

Date:
8/22/22

Direction Photo Taken:

East

Description:

View of the diesel-powered emergency generator (left of center) which includes an integrated 400-gallon diesel AST. The distilled (DI) water storage AST is located behind the generator.



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
7

Date:
8/22/22

Direction Photo Taken:

West

Description:

View of the septic system for the Control and Maintenance Building. The leach field extends between the building and the fence in this photo.



Photo No.
8

Date:
8/22/22

Direction Photo Taken:

South

Description:

View inside of the parts and tools portion of the Control and Maintenance Building.



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
9

Date:
8/22/22

Direction Photo Taken:

South

Description:

Representative view of water treatment chemicals stored/handled throughout the TCC Power Plant facility.



Photo No.
10

Date:
8/22/22

Direction Photo Taken:

North

Description:

View of the in-ground oil water separator, located in the southeastern area of the power plant, adjacent to (north, northwest) of the ammonia AST.



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
11

Date:
8/22/22

Direction Photo Taken:

Southwest

Description:

View of aqueous ammonia AST located in the southeastern portion of the power plant.



Photo No.
12

Date:
8/22/22

Direction Photo Taken:

East

Description:

View of the water deionizing trailer (orange arrow) and deionized (DI) Water AST.



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
13

Date:
8/22/22

Direction Photo Taken:

East

Description:

View of the water filtration system located at the on-site hazardous material/waste storage area.



Photo No.
14

Date:
8/22/22

Direction Photo Taken:

West

Description:

View of two on-site transformers and associated concrete secondary containment structures.



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
15

Date:
8/22/22

Direction Photo Taken:

Southwest

Description:

Representative view of an on-site transformer and associated concrete secondary containment structure. No staining was observed.



Photo No.
16

Date:
8/22/22

Direction Photo Taken:

Northwest

Description:

View of hazardous material/waste storage area with 490 gallon diesel AST to the right. AECOM notes that the capacity of this AST was labeled 450 gallons, but the 2019 SPCC plan lists the capacity of this AST as 490 gallons.



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
17

Date:
8/22/22

Direction Photo Taken:

Northwest

Description:

View of hazardous material/waste storage. Note the 55-gallon drums containing waste cation resin, oily debris, oil/water, and used oil.



Photo No.
18

Date:
8/22/22

Direction Photo Taken:

Northwest

Description:

View of the stormwater retention basin located to the northwest of the power plant buildings.



PHOTOGRAPHIC LOG

Client Name:
Middle River Power, LLC

Site Location: Tracy Combined Cycle Power Plant,
14950 West Schulte Road, Tracy, California

Project No.
60690637.06

Photo No.
19

Date:
8/22/22

Direction Photo Taken:

North

Description:

View of the vacant land located adjacent to the east of the power plant.



Photo No.
20

Date:
8/22/22

Direction Photo Taken:

East

Description:

View of the northern portion of the subject property, along the buried pipelines' easement.



Appendix B Environmental Database Report



Tracy Combined Cycle Power Plant

14950 West Schulte Road

Tracy, CA 95377

Inquiry Number: 7085835.2s

August 12, 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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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

14950 WEST SCHULTE ROAD
TRACY, CA 95377

COORDINATES

Latitude (North): 37.7113400 - 37° 42' 40.82"
Longitude (West): 121.4906230 - 121° 29' 26.24"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 633044.2
UTM Y (Meters): 4174655.5
Elevation: 175 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 12008792 TRACY, CA
Version Date: 2018

Southwest Map: 12008740 MIDWAY, CA
Version Date: 2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140628
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
14950 WEST SCHULTE ROAD
TRACY, CA 95377

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	PG&E: SCHULTE SUBSTA	14950 W SCHULTE RD	CERS		TP
A2	TRACY COMBINED CYCLE	14950 W SCHULTE RD	RCRA NonGen / NLR		TP
A3	MRP SAN JOAQUIN ENER	14950 WEST SCHULTE R	HAULERS		TP
A4	TRACY COMBINED CYCLE	14950 W SCHULTE RD	AST		TP
A5	I-474 L-002 MP 122.1	14950 W SCHULTE RD	HAZNET, HWTS		TP
A6	I-474 L-002 MP 122.1	14950 W SCHULTE RD	RCRA-LQG		TP
A7	MRP SAN JOAQUIN ENER	14950 W SCHULTE RD	CERS HAZ WASTE, CERS TANKS, EMI, HAZNET, NPDES,...		TP
A8	PG&E: SCHULTE SUBSTA	14950 W SCHULTE RD	ICIS, US AIRS, FINDS		TP
A9	GWF ENERGY, LLC-TRAC	14950 W. SCHULTE ROA	FINDS, ECHO		TP
A10	G W F ENERGY LLC	14950 W SCHULTE RD	HAZNET, CERS, HWTS		TP
A11	I-474 L-002 MP 122.1	14950 W SCHULTE RD	ECHO		TP
A12	G W F ENERGY LLC	14950 W SCHULTE RD	FINDS, ECHO		TP
A13	ALTAGAS SAN JOAQUIN	14950 W SCHULTE RD	FINDS, ECHO		TP
A14	TRACY COMBINED CYCLE	14950 W SCHULTE RD	RCRA NonGen / NLR		TP
A15	G W F ENERGY LLC	14950 W SCHULTE RD	RCRA NonGen / NLR		TP

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
PG&E: SCHULTE SUBSTA 14950 W SCHULTE RD TRACY, CA 95377	CERS	N/A
TRACY COMBINED CYCLE 14950 W SCHULTE RD TRACY, CA 95377	RCRA NonGen / NLR EPA ID:: CAL000442227	CAL000442227
MRP SAN JOAQUIN ENER 14950 WEST SCHULTE R TRACY, CA 95377	HAULERS Facility ID: 1939549	N/A
TRACY COMBINED CYCLE 14950 W SCHULTE RD TRACY, CA 95377	AST Database: AST, Date of Government Version: 07/06/2016	N/A
I-474 L-002 MP 122.1 14950 W SCHULTE RD TRACY, CA 95377	HAZNET GEPAID: CAP000301036 HWTS	N/A
I-474 L-002 MP 122.1 14950 W SCHULTE RD TRACY, CA 95377	RCRA-LQG EPA ID:: CAP000301036	CAP000301036
MRP SAN JOAQUIN ENER 14950 W SCHULTE RD TRACY, CA 95377	CERS HAZ WASTE CERS TANKS EMI Facility Id: 4597 HAZNET GEPAID: CAL000442227 GEPAID: CAL000414217 NPDES CIWQS CERS HWTS	N/A
PG&E: SCHULTE SUBSTA 14950 W SCHULTE RD TRACY, CA 95377	ICIS FRS ID:: 110018862337 US AIRS Database: US AIRS (AFS), Date of Government Version: 10/12/2016	N/A

EXECUTIVE SUMMARY

	EPA plant ID:: 110018862337 FINDS Registry ID:: 110055817647	
GWF ENERGY, LLC-TRAC 14950 W. SCHULTE ROA TRACY, CA 95377	FINDS Registry ID:: 110018862337 ECHO Registry ID: 110018862337	N/A
G W F ENERGY LLC 14950 W SCHULTE RD TRACY, CA 95377	HAZNET GEPAID: CAL000258560 CERS HWTS	N/A
I-474 L-002 MP 122.1 14950 W SCHULTE RD TRACY, CA 95377	ECHO Registry ID: 110070633408	N/A
G W F ENERGY LLC 14950 W SCHULTE RD TRACY, CA 95377	FINDS Registry ID:: 110070452198 ECHO Registry ID: 110070452198	N/A
ALTAGAS SAN JOAQUIN 14950 W SCHULTE RD TRACY, CA 94509	FINDS Registry ID:: 110070096155 ECHO Registry ID: 110070096155	N/A
TRACY COMBINED CYCLE 14950 W SCHULTE RD TRACY, CA 95377	RCRA NonGen / NLR EPA ID:: CAL000414217	CAL000414217
G W F ENERGY LLC 14950 W SCHULTE RD TRACY, CA 95377	RCRA NonGen / NLR EPA ID:: CAL000258560	CAL000258560

EXECUTIVE SUMMARY

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-SQG..... RCRA - Small 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

EXECUTIVE SUMMARY

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR..... EnviroStor Database

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

LUST..... Geotracker's Leaking Underground Fuel Tank Report
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

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS..... Considered Brownfields 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
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
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
AQUEOUS FOAM..... Former Fire Training Facility Assessments Listing

EXECUTIVE SUMMARY

PFAS..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing
HIST UST..... Hazardous Substance Storage Container Database
CA FID UST..... Facility Inventory Database

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
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 MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines
UXO..... Unexploded Ordnance Sites

EXECUTIVE SUMMARY

DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program 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
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

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 not identified.

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

EXECUTIVE SUMMARY

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

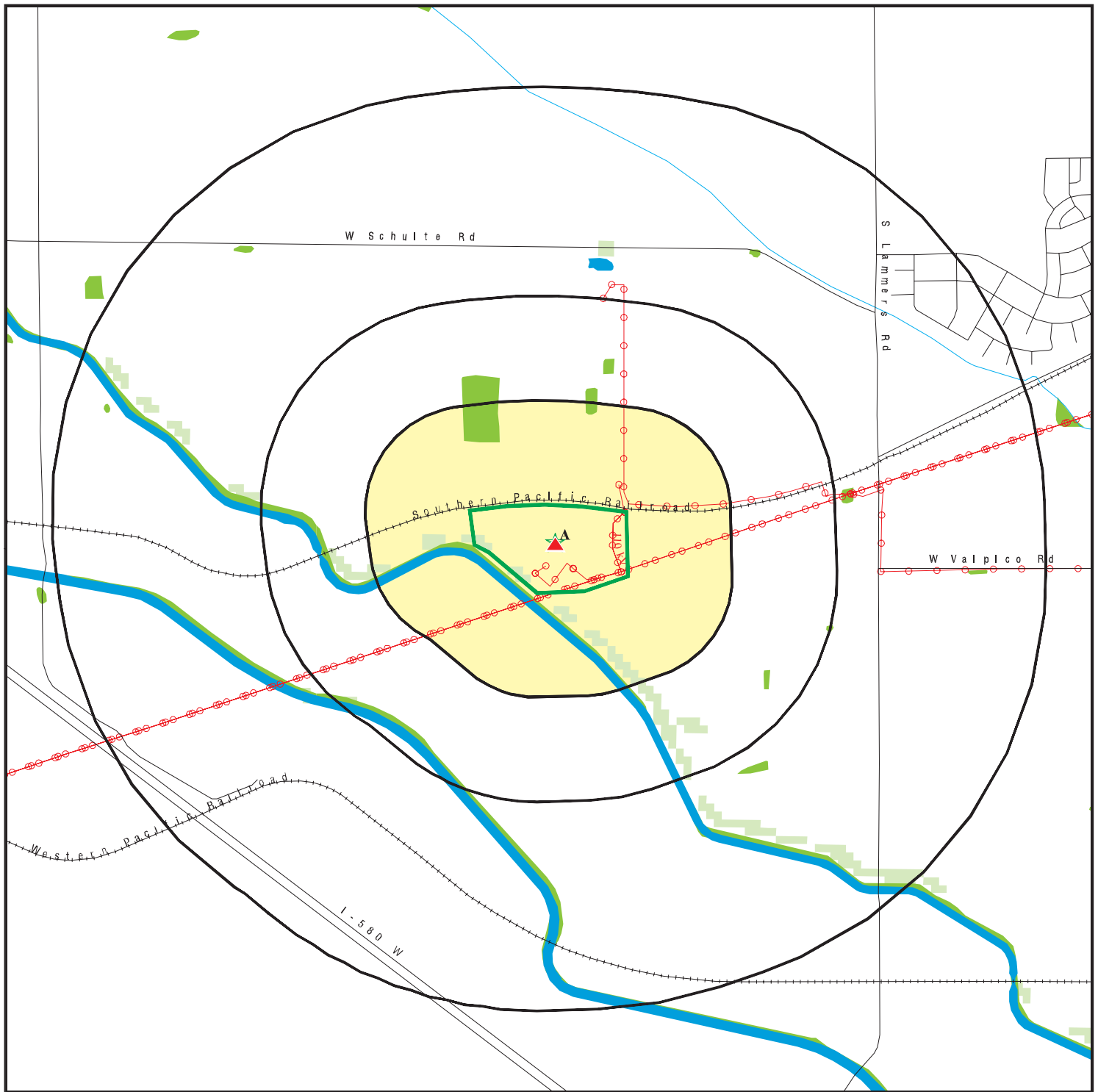
Site Name

SOUTHERNCARLSON, INC (OA)


Database(s)


CERS HAZ WASTE, CERS

OVERVIEW MAP - 7085835.2S



 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

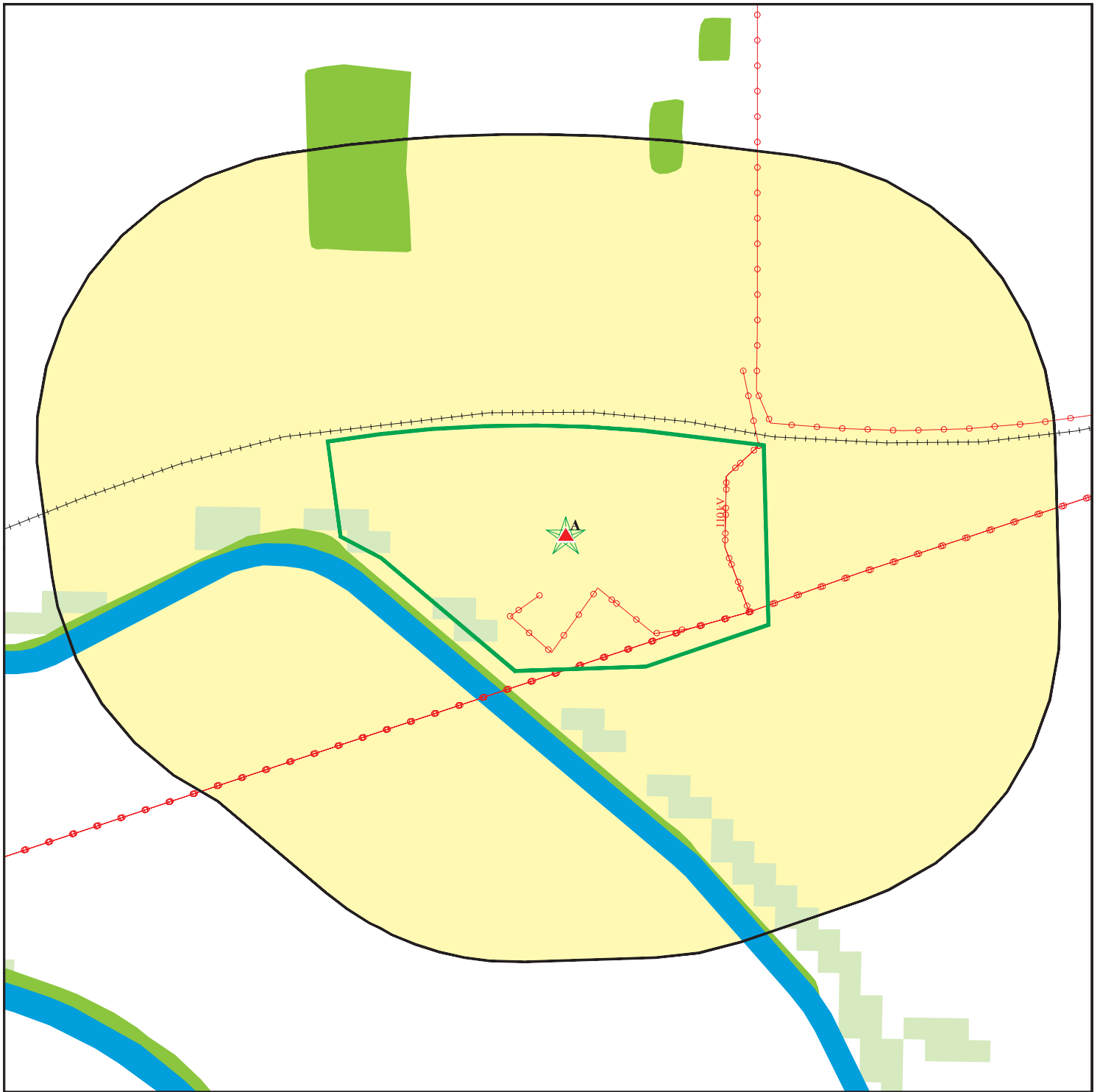
 Areas of Concern

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: Tracy Combined Cycle Power Plant
ADDRESS: 14950 West Schulte Road
Tracy CA 95377
LAT/LONG: 37.71134 / 121.490623

CLIENT: AECOM
CONTACT: Sarah M Perhala
INQUIRY #: 7085835.2s
DATE: August 12, 2022 5:00 pm

DETAIL MAP - 7085835.2S



- 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.

SITE NAME: Tracy Combined Cycle Power Plant
 ADDRESS: 14950 West Schulte Road
 Tracy CA 95377
 LAT/LONG: 37.71134 / 121.490623

CLIENT: AECOM
 CONTACT: Sarah M Perhala
 INQUIRY #: 7085835.2s
 DATE: August 12, 2022 5:01 pm

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								
<i>Lists of Federal NPL (Superfund) sites</i>								
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
<i>Lists of Federal Delisted NPL sites</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Lists of Federal sites subject to CERCLA removals and CERCLA orders</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Lists of Federal CERCLA sites with NFRAP</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Lists of Federal RCRA facilities undergoing Corrective Action</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Lists of Federal RCRA TSD facilities</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Lists of Federal RCRA generators</i>								
RCRA-LQG	0.250	1	0	0	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
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
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>Lists of state- and tribal (Superfund) equivalent sites</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>Lists of state- and tribal hazardous waste facilities</i>								
ENVIROSTOR	1.000		0	0	0	0	NR	0
<i>Lists of state and tribal landfills and solid waste disposal facilities</i>								
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
<i>Lists of state and tribal leaking storage tanks</i>								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<i>Lists of state and tribal registered storage tanks</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250	1	0	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>Lists of state and tribal voluntary cleanup sites</i>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<i>Lists of state and tribal brownfield sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP	1	NR	NR	NR	NR	NR	1
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
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
CERS HAZ WASTE	0.250	1	0	0	NR	NR	NR	1
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250	1	0	0	NR	NR	NR	1

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
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
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	3	0	0	NR	NR	NR	3
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	1	NR	NR	NR	NR	NR	1
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	1	NR	NR	NR	NR	NR	1
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	4	NR	NR	NR	NR	NR	4
UXO	1.000		0	0	0	0	NR	0
ECHO	TP	4	NR	NR	NR	NR	NR	4
DOCKET HWC	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
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP	1	NR	NR	NR	NR	NR	1
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	3	NR	NR	NR	NR	NR	3
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP	1	NR	NR	NR	NR	NR	1
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
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	1	NR	NR	NR	NR	NR	1
CERS	TP	3	NR	NR	NR	NR	NR	3
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
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
HWTS	TP	3	NR	NR	NR	NR	NR	3

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 --		30	0	0	0	0	0	30
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MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
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NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

A1
Target
Property

PG&E: SCHULTE SUBSTATION
14950 W SCHULTE RD
TRACY, CA 95377

CERS **S121745105**
N/A

Site 1 of 15 in cluster A

Actual:
175 ft.

CERS:

Name: PG&E: SCHULTE SUBSTATION
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Site ID: 143500
CERS ID: 10148249
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 143500
Site Name: PG&E: Schulte Substation
Violation Date: 08-12-2021
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description: Failure to complete and electronically submit a site map with all required content.
Violation Notes: Returned to compliance on 08/13/2021. OBSERVATION: The site map has not been annually certified/submitted as a part of the business plan. The site map was not submitted for the year of 2021. The site map has not been submitted since 1/15/2020. REGULATION GUIDANCE: Per H&SC 25508.2, the business owner/operator shall annually review and certify that the business plan is complete, accurate, up-to-date and in compliance with Section 11022 of Title 42 of the United States Code. An annual electronic submittal satisfies these requirements. The annual business plan shall be submitted/certified by January 15 of each calendar year and may be submitted beginning November 1 of the previous year. CORRECTIVE ACTION: Immediately log into the CERS at <http://cers.calepa.ca.gov/>, review and submit/certify the current information.
Violation Division: San Joaquin County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 143500
Site Name: PG&E: Schulte Substation
Violation Date: 08-12-2021
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
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 08/13/2021. OBSERVATION: The chemical inventory has not been annually certified/submitted as a part of the business plan. The chemical inventory was not submitted for the year of 2021. The chemical inventory has not been submitted since 1/15/2020. REGULATION GUIDANCE: Per H&SC 25508.2, the business owner/operator shall annually review and certify that the business plan is complete, accurate, up-to-date and in compliance with Section 11022 of Title 42 of the United States Code. An annual electronic submittal satisfies these requirements. The annual business plan shall be submitted/certified by January 15 of each calendar year and may be submitted beginning November 1 of the previous year. CORRECTIVE ACTION: Immediately log into the CERS at <http://cers.calepa.ca.gov/>, review and submit/certify the current information.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

S121745105

Violation Division: San Joaquin County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 143500
Site Name: PG&E: Schulte Substation
Violation Date: 08-12-2021
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)

Violation Description: Failure to establish and/or electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material. *Verify agricultural handler exemption HSC 25507.1

Violation Notes: Returned to compliance on 08/13/2021. OBSERVATION: The training program has not been annually certified/submitted as a part of the business plan. The employee training program was not submitted for the year of 2021. The training program has not been submitted since 1/15/2020. REGULATION GUIDANCE: Per H&SC 25508.2, the business owner/operator shall annually review and certify that the business plan is complete, accurate, up-to-date and in compliance with Section 11022 of Title 42 of the United States Code. An annual electronic submittal satisfies these requirements. The annual business plan shall be submitted/certified by January 15 of each calendar year and may be submitted beginning November 1 of the previous year. CORRECTIVE ACTION: Immediately log into the CERS at <http://cers.calepa.ca.gov/>, review and submit/certify the current information.

Violation Division: San Joaquin County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 143500
Site Name: PG&E: Schulte Substation
Violation Date: 08-12-2021
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)

Violation Description: Failure to report program data electronically.

Violation Notes: Returned to compliance on 08/13/2021. OBSERVATION: Business activities and the owner operator identification page has not been annually certified/submitted as a part of the business plan. The business activities and the owner operator identification page was not submitted for the year of 2021. The business activities and the owner operator identification page has not been submitted since 1/15/2020. REGULATION GUIDANCE: Per H&SC 25508.2, the business owner/operator shall annually review and certify that the business plan is complete, accurate, up-to-date and in compliance with Section 11022 of Title 42 of the United States Code. An annual electronic submittal satisfies these requirements. The annual business plan shall be submitted/certified by January 15 of each calendar year and may be submitted beginning November 1 of the previous year. CORRECTIVE ACTION: Immediately log into the CERS at <http://cers.calepa.ca.gov/>, review and submit/certify the current information.

Violation Division: San Joaquin County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 143500
Site Name: PG&E: Schulte Substation

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

S121745105

Violation Date: 08-12-2021
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
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 08/13/2021. OBSERVATION: The emergency response procedures and contingency plan have not been annually certified/submitted as a part of the business plan. The emergency response procedures and contingency plan were not submitted for the year of 2021. The emergency response procedures and contingency plan have not been submitted since 1/15/2020. REGULATION GUIDANCE: Per H&SC 25508.2, the business owner/operator shall annually review and certify that the business plan is complete, accurate, up-to-date and in compliance with Section 11022 of Title 42 of the United States Code. An annual electronic submittal satisfies these requirements. The annual business plan shall be submitted/certified by January 15 of each calendar year and may be submitted beginning November 1 of the previous year. CORRECTIVE ACTION: Immediately log into the CERS at <http://cers.calepa.ca.gov/>, review and submit/certify the current information.
Violation Division: San Joaquin County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 143500
Site Name: PG&E: Schulte Substation
Violation Date: 08-12-2021
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 08/13/2021. OBSERVATION: The business plan information has not been reviewed and resubmitted in the California Environmental Reporting System (CERS) annually by the due date, January 15. The facility, inventory, and plans section of the Hazardous Material Business Plan (HMBP) was last submitted on 1/15/2020. The facility, inventory, and plans sections of the HMBP have not been submitted for the year of 2021. REGULATION GUIDANCE: The hazardous materials inventory shall be submitted by January 15 of each calendar year and may be submitted beginning November 1 of the previous year. CORRECTIVE ACTION: Immediately log into the CERS at <http://cers.calepa.ca.gov/>, enter the correct or updated information, and submit to the EHD for approval.
Violation Division: San Joaquin County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-12-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Conducted a Hazardous Materials Business Plan (HMBP) inspection. There were no violations found during the inspection. The yard area and buildings were inspected. To minimize person to person contact EHD is

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

S121745105

choosing to write the name of person receiving the report instead of having them sign. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420.

Eval Division: San Joaquin County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-18-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No violations noted at time of inspection.
Eval Division: San Joaquin County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 143500
Facility Name: PG&E: Schulte Substation
Env Int Type Code: HMBP
Program ID: 10148249
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 37.711270
Longitude: -121.490400

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Joaquin Cnty Env Health
Entity Title: Not reported
Affiliation Address: 1868 East Hazelton Avenue
Affiliation City: Stockton
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95205-6232
Affiliation Phone: (209) 468-3420,

Affiliation Type Desc: Legal Owner
Entity Name: Pacific Gas and Electric Company
Entity Title: Not reported
Affiliation Address: c/o Environmental Services, 3401 Crow Canyon Road
Affiliation City: San Ramon
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 94583
Affiliation Phone: (415) 973-7000,

Affiliation Type Desc: Environmental Contact
Entity Name: Stephen Dioszegi
Entity Title: Not reported
Affiliation Address: 16182 Jasper Sears Road
Affiliation City: Santa Nella
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95322

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

S121745105

Affiliation Phone: ,

Affiliation Type Desc: Document Preparer
Entity Name: Steve Dioszegi
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: Pacific Gas and Electric Company
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: (209) 942-5002,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: PO Box 7640
Affiliation City: San Francisco
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94120
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Larry Jeffris
Entity Title: Hazardous Materials & Water Quality 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: PG&E
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: ,

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A2 **TRACY COMBINED CYCLE POWER PLANT**
Target **14950 W SCHULTE RD**
Property **TRACY, CA 95377**

RCRA NonGen / NLR **1024873575**
CAL000442227

Site 2 of 15 in cluster A

Actual:
175 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 20190104
Handler Name: TRACY COMBINED CYCLE POWER PLANT
Handler Address: 14950 W SCHULTE RD
Handler City,State,Zip: TRACY, CA 95377
EPA ID: CAL000442227
Contact Name: NEFTALI NEVAREZ
Contact Address: 14950 W SCHULTE RD
Contact City,State,Zip: TRACY, CA 95377
Contact Telephone: 925-597-2905
Contact Fax: 209-836-7119
Contact Email: NEFTALI.NEVAREZ@NAES.CA
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: 14950 W SCHULTE RD
Mailing City,State,Zip: TRACY, CA 95377
Owner Name: MRP SAN JOAQUIN ENERGY LLC
Owner Type: Other
Operator Name: NEFTALI NEVAREZ
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRACY COMBINED CYCLE POWER PLANT (Continued)

1024873575

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:	20190222
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: NEFTALI NEVAREZ	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	14950 W SCHULTE RD
Owner/Operator City,State,Zip:	TRACY, CA 95377
Owner/Operator Telephone:	925-597-2905
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: MRP SAN JOAQUIN ENERGY LLC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	14950 W SCHULTE RD
Owner/Operator City,State,Zip:	TRACY, CA 95377
Owner/Operator Telephone:	312-686-8716
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRACY COMBINED CYCLE POWER PLANT (Continued)

1024873575

Historic Generators:

Receive Date: 20190104
Handler Name: TRACY COMBINED CYCLE POWER PLANT
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: 221122
NAICS Description: ELECTRIC POWER DISTRIBUTION

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

A3
Target
Property

MRP SAN JOAQUIN ENERGY, LLC
14950 WEST SCHULTE ROAD
TRACY, CA 95377

HAULERS **S127805462**
N/A

Site 3 of 15 in cluster A

Actual:
175 ft.

HAULERS:

Name: MRP SAN JOAQUIN ENERGY, LLC
Address: 14950 WEST SCHULTE ROAD
City,State,Zip: TRACY, CA 95377
Facility ID: 1939549
Facility Phone: Not reported
Business Email Address: Neftali.Nevarez@naes.com
Contact Person: Neftali Navarrez
Mailing Address: 14950 West Schulte Road
Mailing City: Tracy
Mailing State: CA
Mailing Zip: 95377
Mailing County: San Joaquin
Mailing Phone: (209) 248-6843
Current Status: Active
Current Hauler Status: Not reported
Accepting Tires From Public: Not reported
Regulatory Status Last Changed: Not reported
Business Types: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A4
Target
Property

TRACY COMBINED CYCLE POWER PLANT
14950 W SCHULTE RD
TRACY, CA 95377

AST **A100425367**
N/A

Site 4 of 15 in cluster A

Actual:
175 ft.

AST:
Name: TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
City/Zip: TRACY,95377
Certified Unified Program Agencies: Not reported
Owner: AltaGas San Joaquin Energy Inc.
Total Gallons: Not reported
CERSID: 10184753
Facility ID: Not reported
Business Name: GWF ENERGY LLC
Phone: (209) 248 6841
Fax: Not reported
Mailing Address: 14950 W SCHULTE RD
Mailing Address City: TRACY
Mailing Address State: CA
Mailing Address Zip Code: 95377
Operator Name: AltaGas Tracy Operations Inc.
Operator Phone: 209 836 1605
Owner Phone: 209 248 6841
Owner Mail Address: 14950 W SCHULTE RD
Owner State: CA
Owner Zip Code: 95377
Owner Country: United States
Property Owner Name: AltaGas San Joaquin Energy Inc.
Property Owner Phone: Not reported
Property Owner Mailing Address: 14950 W. Schulte Rd.
Property Owner City: Tracy
Property Owner Stat : CA
Property Owner Zip Code: 95377
Property Owner Country: United States
EPAID: CAL000258560

A5
Target
Property

I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
14950 W SCHULTE RD
TRACY, CA 95377

HAZNET **S126107126**
HWTS **N/A**

Site 5 of 15 in cluster A

Actual:
175 ft.

HAZNET:
Name: I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
Address: 14950 W SCHULTE RD
Address 2: Not reported
City,State,Zip: TRACY, CA 95377
Contact: NATHAN R CHRISTMAN
Telephone: 5594105011
Mailing Name: Not reported
Mailing Address: PO BOX 7640

Year: 2019
Gepaid: CAP000301036
TSD EPA ID: CAD059494310
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Recovery (H010-H129) Or (H131-H135)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I) (Continued)

S126107126

Tons: 5.21250

HWTS:

Name: I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
Address: 14950 W SCHULTE RD
Address 2: Not reported
City,State,Zip: TRACY, CA 95377
EPA ID: CAP000301036
Inactive Date: 01/28/2020
Create Date: 10/29/2019
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 7640
Mailing Address 2: Not reported
Mailing City,State,Zip: SAN FRANCISCO, CA 941207640
Owner Name: PACIFIC GAS & ELECTRIC
Owner Address: PO BOX 7640
Owner Address 2: Not reported
Owner City,State,Zip: SAN FRANCISCO, CA 941207640
Contact Name: ANNA GIRON
Contact Address: 3401 CROW CANYON
Contact Address 2: Not reported
City,State,Zip: SAN RAMON, CA 94583
Facility Status: Inactive
Facility Type: TEMPORARY
Category: FEDERAL
Latitude: 37.7107
Longitude: -121.4902

**A6
Target
Property**

**I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
14950 W SCHULTE RD
TRACY, CA 95377**

**RCRA-LQG 1025882271
CAP000301036**

Site 6 of 15 in cluster A

**Actual:
175 ft.**

RCRA-LQG:
Date Form Received by Agency: 20200226
Handler Name: I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
Handler Address: 14950 W SCHULTE RD
Handler City,State,Zip: TRACY, CA 95377
EPA ID: CAP000301036
Contact Name: NATHAN R CHRISTMAN
Contact Address: BOEING WAY STE 1427B
Contact City,State,Zip: STOCKTON, CA 95206
Contact Telephone: 559-410-5011
Contact Fax: Not reported
Contact Email: NATHAN.CHRISTMAN@PGE.COM
Contact Title: SR ENV FIELD SPECIALIST
EPA Region: 09
Land Type: Private
Federal Waste Generator Description: Large Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: 2019
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I) (Continued)

1025882271

State District:	Not reported
Mailing Address:	PO BOX 7640
Mailing City,State,Zip:	TRACY, CA 95377
Owner Name:	PACIFIC GAS AND ELECTRIC COMPANY
Owner Type:	Private
Operator Name:	PACIFIC GAS AND ELECTRIC COMPANY
Operator Type:	Private
Short-Term Generator Activity:	Yes
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
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:	20201103
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I) (Continued)

1025882271

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:	D009
Waste Description:	MERCURY

Waste Code:	D018
Waste Description:	BENZENE

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	PACIFIC GAS AND ELECTRIC COMPANY
Legal Status:	Private
Date Became Current:	19050101
Date Ended Current:	Not reported
Owner/Operator Address:	77 BEALE ST
Owner/Operator City,State,Zip:	SAN FRANCISCO, CA 94105
Owner/Operator Telephone:	559-410-5011
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	NATHAN.CHRISTMAN@PGE.COM

Owner/Operator Indicator:	Owner
Owner/Operator Name:	PACIFIC GAS AND ELECTRIC COMPANY
Legal Status:	Private
Date Became Current:	19060101
Date Ended Current:	Not reported
Owner/Operator Address:	77 BEALE ST
Owner/Operator City,State,Zip:	SAN FRANCISCO, CA 94105
Owner/Operator Telephone:	559-410-5011
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	NATHAN.CHRISTMAN@PGE.COM

Owner/Operator Indicator:	Owner
Owner/Operator Name:	PACIFIC GAS AND ELECTRIC COMPANY
Legal Status:	Private
Date Became Current:	19050101
Date Ended Current:	Not reported
Owner/Operator Address:	77 BEALE ST
Owner/Operator City,State,Zip:	SAN FRANCISCO, CA 94105
Owner/Operator Telephone:	559-410-5011
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	NATHAN.CHRISTMAN@PGE.COM

Owner/Operator Indicator:	Operator
---------------------------	----------

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I) (Continued)

1025882271

Owner/Operator Name: PACIFIC GAS AND ELECTRIC COMPANY
Legal Status: Private
Date Became Current: 19060101
Date Ended Current: Not reported
Owner/Operator Address: 77 BEALE ST
Owner/Operator City,State,Zip: SAN FRANCISCO, CA 94105
Owner/Operator Telephone: 559-410-5011
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: NATHAN.CHRISTMAN@PGE.COM

Historic Generators:

Receive Date: 20200226
Handler Name: I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
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: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20191018
Handler Name: I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
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

List of NAICS Codes and Descriptions:

NAICS Code: 486210
NAICS Description: PIPELINE TRANSPORTATION OF NATURAL GAS

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

A7
Target
Property

MRP SAN JOAQUIN ENERGY, LLC
14950 W SCHULTE RD
TRACY, CA 95377

Site 7 of 15 in cluster A

Actual:
175 ft.

CERS HAZ WASTE
CERS TANKS
EMI
HAZNET
NPDES
CIWQS
CERS
HWTS

S106093824
N/A

CERS HAZ WASTE:

Name: TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Site ID: 404256
CERS ID: 10184753
CERS Description: Hazardous Waste Generator

Name: TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Site ID: 404256
CERS ID: 10184753
CERS Description: Hazardous Chemical Management

CERS TANKS:

Name: TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Site ID: 404256
CERS ID: 10184753
CERS Description: Aboveground Petroleum Storage

EMI:

Name: GWF ENERGY, LLC - TRACY PEAKER PROJECT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2006
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 8.145740713369261723
Reactive Organic Gases Tons/Yr: .744684396713984891
Carbon Monoxide Emissions Tons/Yr: .166450789492589184
NOX - Oxides of Nitrogen Tons/Yr: 1.4595082041064571
SOX - Oxides of Sulphur Tons/Yr: .028457091505041723
Particulate Matter Tons/Yr: 1.399305572634750683
Part. Matter 10 Micrometers and Smlr Tons/Yr: 1.390907282011565074

Name: GWF ENERGY, LLC - TRACY PEAKER PROJECT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2007
County Code: 39

Map ID
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MAP FINDINGS

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 6.995603817719103037
Reactive Organic Gases Tons/Yr: .639971493573195289
Carbon Monoxide Emissions Tons/Yr: .27439259780882943
NOX - Oxides of Nitrogen Tons/Yr: 1.3439610191172806
SOX - Oxides of Sulphur Tons/Yr: .05331146910041571
Particulate Matter Tons/Yr: 1.187330187747218384
Part. Matter 10 Micrometers and Smllr Tons/Yr: 1.180197600905822177

Name: GWF ENERGY, LLC - TRACY PEAKER POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA
Year: 2008
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 5.508543076318410385
Reactive Organic Gases Tons/Yr: .503928962910928467
Carbon Monoxide Emissions Tons/Yr: .23250541043255414
NOX - Oxides of Nitrogen Tons/Yr: 1.1027229324404473
SOX - Oxides of Sulphur Tons/Yr: .04387036506414404
Particulate Matter Tons/Yr: .9797068034840659016
Part. Matter 10 Micrometers and Smllr Tons/Yr: .973821835973548823

Name: GWF ENERGY, LLC - TRACY PEAKER POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2009
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.49262856165989399
Reactive Organic Gases Tons/Yr: 4.5270683959745803E-2
Carbon Monoxide Emissions Tons/Yr: 0.161704546070744
NOX - Oxides of Nitrogen Tons/Yr: 0.71762898838882805
SOX - Oxides of Sulphur Tons/Yr: 8.4902384155953206E-2
Particulate Matter Tons/Yr: 0.209874942088388
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0.20861202333260701

Name: GWF ENERGY, LLC - TRACY PEAKER POWER PLANT
Address: 14950 W SCHULTE RD

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Database(s)

EDR ID Number
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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

City,State,Zip: TRACY, CA 95377
Year: 2010
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0.249350344520609
Reactive Organic Gases Tons/Yr: 2.4344999999999999E-2
Carbon Monoxide Emissions Tons/Yr: 0.24340456299999999
NOX - Oxides of Nitrogen Tons/Yr: 0.90018589199999999
SOX - Oxides of Sulphur Tons/Yr: 2.9651899999999998E-2
Particulate Matter Tons/Yr: 7.3467150047827903E-2
Part. Matter 10 Micrometers and Smlr Tons/Yr: 7.3003091000000006E-2

Name: GWF ENERGY, LLC - TRACY PEAKER POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2011
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.0602413701
Reactive Organic Gases Tons/Yr: 0.097007315918
Carbon Monoxide Emissions Tons/Yr: 0.35496385625
NOX - Oxides of Nitrogen Tons/Yr: 1.4963589191
SOX - Oxides of Sulphur Tons/Yr: 0.037925304245
Particulate Matter Tons/Yr: 0.19658291735
Part. Matter 10 Micrometers and Smlr Tons/Yr: 0.19540189994

Name: GWF ENERGY, LLC - TRACY PEAKER POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2012
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 12.533065057
Reactive Organic Gases Tons/Yr: 1.1479060359
Carbon Monoxide Emissions Tons/Yr: 2.5306903531
NOX - Oxides of Nitrogen Tons/Yr: 23.407652047
SOX - Oxides of Sulphur Tons/Yr: 0.52436086367
Particulate Matter Tons/Yr: 1.5170593654
Part. Matter 10 Micrometers and Smlr Tons/Yr: 1.5079763146

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Name: GWF ENERGY, LLC - TRACY PEAKER POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2013
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 14.922882406
Reactive Organic Gases Tons/Yr: 1.403711965
Carbon Monoxide Emissions Tons/Yr: 3.361704369
NOX - Oxides of Nitrogen Tons/Yr: 20.82955483
SOX - Oxides of Sulphur Tons/Yr: 0.19190373
Particulate Matter Tons/Yr: 2.3147766217
Part. Matter 10 Micrometers and Smlr Tons/Yr: 2.301038213

Name: GWF ENERGY, LLC - TRACY PEAKER POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2014
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 11.769226847
Reactive Organic Gases Tons/Yr: 1.1144318217
Carbon Monoxide Emissions Tons/Yr: 2.6372925466
NOX - Oxides of Nitrogen Tons/Yr: 25.346202747
SOX - Oxides of Sulphur Tons/Yr: 1.424585428
Particulate Matter Tons/Yr: 2.5238915318
Part. Matter 10 Micrometers and Smlr Tons/Yr: 2.5089446204

Name: ALTAGAS SAN JOAQUIN ENERGY, INC
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2015
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 2.8570767977
Reactive Organic Gases Tons/Yr: 0.312576156
Carbon Monoxide Emissions Tons/Yr: 2.703601898
NOX - Oxides of Nitrogen Tons/Yr: 28.5341934
SOX - Oxides of Sulphur Tons/Yr: 1.728071172

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Particulate Matter Tons/Yr: 4.1617515641
Part. Matter 10 Micrometers and Smllr Tons/Yr: 4.137273849

Name: ALTAGAS SAN JOAQUIN ENERGY, INC
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2016
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1.5456310147
Reactive Organic Gases Tons/Yr: 0.1898451
Carbon Monoxide Emissions Tons/Yr: 2.030770852
NOX - Oxides of Nitrogen Tons/Yr: 18.00152124
SOX - Oxides of Sulphur Tons/Yr: 0.78680412
Particulate Matter Tons/Yr: 2.6980143844
Part. Matter 10 Micrometers and Smllr Tons/Yr: 2.682309551

Name: ALTAGAS SAN JOAQUIN ENERGY, INC
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2017
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 4.5034024339
Reactive Organic Gases Tons/Yr: 0.451041501
Carbon Monoxide Emissions Tons/Yr: 5.473481773
NOX - Oxides of Nitrogen Tons/Yr: 34.11570542
SOX - Oxides of Sulphur Tons/Yr: 0.789188384
Particulate Matter Tons/Yr: 6.5603002255
Part. Matter 10 Micrometers and Smllr Tons/Yr: 6.521265975

Name: MRP SAN JOAQUIN ENERGY, LLC
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2018
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 6.341318028
Reactive Organic Gases Tons/Yr: 0.648011261

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Carbon Monoxide Emissions Tons/Yr: 6.306966507
NOX - Oxides of Nitrogen Tons/Yr: 32.187676618
SOX - Oxides of Sulphur Tons/Yr: 2.201320028
Particulate Matter Tons/Yr: 5.5250436173
Part. Matter 10 Micrometers and Smllr Tons/Yr:5.49250276

Name: MRP SAN JOAQUIN ENERGY, LLC
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Year: 2019
County Code: 39
Air Basin: SJV
Facility ID: 4597
Air District Name: SJU
SIC Code: 4931
Air District Name: SAN JOAQUIN VALLEY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 5.9024021839
Reactive Organic Gases Tons/Yr: 0.607936605
Carbon Monoxide Emissions Tons/Yr: 5.00516943
NOX - Oxides of Nitrogen Tons/Yr: 39.134945187
SOX - Oxides of Sulphur Tons/Yr: 2.190557015
Particulate Matter Tons/Yr: 5.3049591831
Part. Matter 10 Micrometers and Smllr Tons/Yr:5.273748349

HAZNET:

Name: TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
Address 2: Not reported
City,State,Zip: TRACY, CA 95377
Contact: NEFTALI NEVAREZ
Telephone: 9255972905
Mailing Name: Not reported
Mailing Address: 14950 W SCHULTE RD

Year: 2019
Gepaid: CAL000442227
TSD EPA ID: AZR000515924
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: 0.01150

Year: 2019
Gepaid: CAL000442227
TSD EPA ID: AZR000515924
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: 0.20600

Year: 2018
Gepaid: CAL000414217
TSD EPA ID: NVD980895338
CA Waste Code: 352 - Other organic solids
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Tons:	Treatment/Reovery (H010-H129) Or (H131-H135) 0.08750
Year:	2018
Gepaid:	CAL000414217
TSD EPA ID:	NVD980895338
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.23750
Year:	2018
Gepaid:	CAL000414217
TSD EPA ID:	NVD980895338
CA Waste Code:	135 - Unspecified aqueous solution
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.12500
Year:	2017
Gepaid:	CAL000414217
TSD EPA ID:	NVD980895338
CA Waste Code:	135 - Unspecified aqueous solution
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.15
Year:	2017
Gepaid:	CAL000414217
TSD EPA ID:	NVD980895338
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.25
Year:	2017
Gepaid:	CAL000414217
TSD EPA ID:	NVD980895338
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:	0.2
Year:	2016
Gepaid:	CAL000414217
TSD EPA ID:	NVD980895338
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.7375
Year:	2016
Gepaid:	CAL000414217
TSD EPA ID:	NMD002208627
CA Waste Code:	291 - Latex waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Tons: 0.2185

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

Additional Info:

Year:	2017
Gen EPA ID:	CAL000414217
Shipment Date:	20170522
Creation Date:	7/16/2018 18:30:53
Receipt Date:	20170602
Manifest ID:	000178237DAT
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDf EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MAN 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/Recovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.15
Waste Quantity:	300
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:	20170522
Creation Date:	7/16/2018 18:30:53
Receipt Date:	20170602
Manifest ID:	000178237DAT
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDf EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MAN MANAGEMENT OF NEVADA 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/Recovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20170522
Creation Date:	7/16/2018 18:30:53
Receipt Date:	20170602
Manifest ID:	000178237DAT
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	NED986382133
Trans 2 Name:	SMITH SYSTEMS
TSDf EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MAN MANAGEMENT OF NEVADA LLC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	135 - Unspecified aqueous solution
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.15
Waste Quantity:	300
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:	20170216
Creation Date:	5/9/2018 18:31:21
Receipt Date:	20170227
Manifest ID:	000163232DAT
Trans EPA ID:	MNS000110924
Trans Name:	STERICYCLE SPECIALTY WASTE SOLUTIONS INC
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
TSDf EPA ID:	NVD980895338
Trans Name:	21ST CENTURY ENVIRONMENTAL MAN 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:	0.1
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

NPDES:

Name:	ALTAGAS SAN JOAQUIN ENERGY TRACY COMBINED CYCLE POWER PLANT
Address:	14950 W SCHULTE RD
City,State,Zip:	TRACY, CA 94509

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

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:	5S39I026437
Regulatory Measure Type:	Industrial
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:	Terminated
Status Date:	03/20/2019
Operator Name:	AltaGas San Joquin Energy
Operator Address:	1717 McKinney Ave
Operator City:	Dallas
Operator State:	Texas
Operator Zip:	75202
NPDES as of 03/2018:	
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	468606
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S39I026437
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	01/27/2016
Processed Date:	02/08/2016
Status:	Active
Status Date:	02/08/2016
Place Size:	16.4
Place Size Unit:	Acres
Contact:	Neftali Nevarez
Contact Title:	EHS Manager
Contact Phone:	209-248-6841
Contact Phone Ext:	Not reported
Contact Email:	neftali.nevarez@altagas.ca

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Operator Name:	AltaGas San Joquin Energy
Operator Address:	1717 McKinney Ave
Operator City:	Dallas
Operator State:	Texas
Operator Zip:	75202
Operator Contact:	Neftali Nevarez
Operator Contact Title:	Not reported
Operator Contact Phone:	925-597-2905
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	nnevarez@starwestgen.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	N
Receiving Water Name:	San Joaquin River
Certifier:	John Archibald
Certifier Title:	Plant Manager
Certification Date:	27-JAN-16
Primary Sic:	4911-Electric Services
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	468606
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S39I026437
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported

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EDR ID Number
EPA ID Number

MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Effective Date Of Regulatory Measure: 02/08/2016
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: AltaGas San Joquin Energy
Discharge Address: 1717 McKinney Ave
Discharge City: Dallas
Discharge State: Texas
Discharge Zip: 75202
Received Date: Not reported
Processed Date: Not reported
Status: Not reported
Status Date: Not reported
Place Size: Not reported
Place Size Unit: Not reported
Contact: Not reported
Contact Title: Not reported
Contact Phone: Not reported
Contact Phone Ext: Not reported
Contact Email: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported
Operator Contact: Not reported
Operator Contact Title: Not reported
Operator Contact Phone: Not reported
Operator Contact Phone Ext: Not reported
Operator Contact Email: Not reported
Operator Type: Not reported
Developer: Not reported
Developer Address: Not reported
Developer City: Not reported
Developer State: Not reported
Developer Zip: Not reported
Developer Contact: Not reported
Developer Contact Title: Not reported
Constype Linear Utility Ind: Not reported
Emergency Phone: Not reported
Emergency Phone Ext: Not reported
Constype Above Ground Ind: Not reported
Constype Below Ground Ind: Not reported
Constype Cable Line Ind: Not reported
Constype Comm Line Ind: Not reported
Constype Commercial Ind: Not reported
Constype Electrical Line Ind: Not reported
Constype Gas Line Ind: Not reported
Constype Industrial Ind: Not reported
Constype Other Description: Not reported
Constype Other Ind: Not reported
Constype Recons Ind: Not reported
Constype Residential Ind: Not reported
Constype Transport Ind: Not reported
Constype Utility Description: Not reported
Constype Utility Ind: Not reported
Constype Water Sewer Ind: Not reported
Dir Discharge Uswater Ind: Not reported

Map ID
Direction
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Elevation

MAP FINDINGS

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Database(s)

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Receiving Water Name: Not reported
Certifier: Not reported
Certifier Title: Not reported
Certification Date: Not reported
Primary Sic: Not reported
Secondary Sic: Not reported
Tertiary Sic: Not reported

CIWQS:

Name: GWF ENERGY LLC TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE ROAD
City,State,Zip: TRACY, CA 95377
Agency: GWF Energy LLC
Agency Address: 14950 W Schulte Road, Tracy, CA 95377
Place/Project Type: Industrial - Electric Services
SIC/NAICS: 4911
Region: 5S
Program: INDSTW
Regulatory Measure Status: Terminated
Regulatory Measure Type: Storm water industrial
Order Number: 2014-0057-DWQ
WDID: 5S39I025707
NPDES Number: CAS000001
Adoption Date: Not reported
Effective Date: 07/02/2015
Termination Date: 02/09/2016
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 37.71498
Longitude: -121.49369

Name: GWF TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE ROAD
City,State,Zip: TRACY, CA 95377
Agency: GWF Energy LLC
Agency Address: 4300 Railroad Avenue, Pittsburg, CA 94565
Place/Project Type: Construction - Industrial
SIC/NAICS: Not reported
Region: 5S
Program: CONSTW
Regulatory Measure Status: Terminated
Regulatory Measure Type: Storm water construction
Order Number: 2009-0009-DWQ
WDID: 5S39C359774
NPDES Number: CAS000002
Adoption Date: Not reported
Effective Date: 10/26/2010
Termination Date: 11/13/2012
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported

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Database(s)

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EPA ID Number

MRP SAN JOAQUIN ENERGY, LLC (Continued)

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Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 37.7118
Longitude: -121.49497

Name: ALTAGAS SAN JOAQUIN ENERGY TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 94509
Agency: AltaGas San Joquin Energy
Agency Address: 1717 McKinney Ave Suite 1040, Dallas, TX 75202
Place/Project Type: Industrial - Electric Services
SIC/NAICS: 4911
Region: 5S
Program: INDSTW
Regulatory Measure Status: Terminated
Regulatory Measure Type: Storm water industrial
Order Number: 2014-0057-DWQ
WDID: 5S39I026437
NPDES Number: CAS000001
Adoption Date: Not reported
Effective Date: 02/08/2016
Termination Date: 03/14/2019
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 37.71498
Longitude: -121.49369

CERS:

Name: TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377
Site ID: 404256
CERS ID: 10184753
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 404256
Site Name: Tracy Combined Cycle Power Plant
Violation Date: 07-20-2020
Citation: 22 CCR 12 66262.11 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.11
Violation Description: Failure to determine if wastes generated are hazardous waste by using generator knowledge or applying testing method.
Violation Notes: Returned to compliance on 08/12/2020. OBSERVATIONS: The facility had a one-time generation event of 1,040 pounds of "steel shot blast media" hauled away on a non-hazardous waste manifest (dated 3/6/2019) by Advanced Chemical Transport Inc. No hazardous waste determination was observed for the waste. REGULATION GUIDANCE: Any person who generates a waste shall determine if the waste is a hazardous waste as specified in Title 22 California Code of Regulations (CCR). There are wastes

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

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that are listed as hazardous wastes. There are wastes that exhibit one or more of the hazardous waste characteristics: toxic, corrosive, reactive or ignitable. **CORRECTIVE ACTION:** Immediately begin to make hazardous waste determinations for each waste, and manage them according to Title 22 CCR. Use Safety Data Sheets (SDS), waste sampling and test results or other knowledge to support your hazardous waste determination. Waste testing must be done using methods specified in Title 22 CCR including sections 66261.20-24. Submit a state

Violation Division: San Joaquin County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 404256
Site Name: Tracy Combined Cycle Power Plant
Violation Date: 07-20-2020
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 08/19/2020. The emergency response procedures were not submitted with all the updated information. Rick Vogler, operation supervisor stopped working for this facility on March 2020 and the business plan has not been updated within 30 days of these changes. Rick is listed as the alternative emergency coordinator in the contingency plan. A business plan shall include the following emergency response procedures for a release or threatened release of hazardous materials, including, but not limited to, the following: - immediate notification of local emergency personnel and the Environmental Health Department (EHD) - procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment - evacuation plans and procedures, including immediate notice, for the site Immediately log into the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov/>, upload the correct or updated information

Violation Division: San Joaquin County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 404256
Site Name: Tracy Combined Cycle Power Plant
Violation Date: 07-20-2020
Citation: 19 CCR 4.5 2735.5(d)(3) - California Code of Regulations, Title 19, Chapter 4.5, Section(s) 2735.5(d)(3)

Violation Description: Failure to ensure that response actions have been coordinated with local emergency planning and response agencies

Violation Notes: Returned to compliance on 08/18/2020. The owner/operator of the stationary source, with a process eligible for Program 1, failed to ensure that response actions have been coordinated with response agencies. A stationary source with a Program 1 process must ensure that response actions have been coordinated with local emergency planning and response agencies. Emergency Response (ER) coordinations shall be documented. There were no documentation of ER coordination during the inspection. Submit documentation to our department demonstrating that response actions have been / will be coordinated

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

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with local emergency planning and response agencies (e.g., site visits by first responders, mailing certified letter, etc..).

Violation Division: San Joaquin County Environmental Health
Violation Program: CalARP
Violation Source: CERS,

Site ID: 404256
Site Name: Tracy Combined Cycle Power Plant
Violation Date: 07-20-2020
Citation: 40 CFR 1 262.34(d)(5)(ii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(ii)

Violation Description: Failure to post the following information next to the telephone: (A) The name and telephone number of the emergency coordinator; (B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and (C) The telephone number of the fire department, unless the facility has a direct alarm.

Violation Notes: Returned to compliance on 07/20/2020. OBSERVATION: A complete modified contingency plan was not posted at the facility. The contingency had the incorrect alternate emergency coordinator information. REGULATION GUIDANCE: The business operator must post the following information next to telephones or in areas directly involved in the generation and accumulation of hazardous waste: the name and emergency telephone number of the emergency coordinator, the location of fire extinguishers and spill control material, and the telephone number of the fire department unless the facility has a direct alarm. CORRECTIVE ACTION: The plan was updated by compliance manager Neftali Nevarez during the inspection. The violation was corrected during the inspection. No further action is required to correct this violation.

Violation Division: San Joaquin County Environmental Health
Violation Program: HW
Violation Source: CERS,

Site ID: 404256
Site Name: Tracy Combined Cycle Power Plant
Violation Date: 07-20-2020
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: Returned to compliance on 08/19/2020. Employees training records for items A, B, and C below were not available during the inspection . The business plan shall include provisions for ensuring that appropriate personnel receive initial and annual refresher training. All employees shall be trained in safety procedures in the event of a release or threatened release of a hazardous material, including, but not limited to, familiarity with the following plans and procedures: (A) Immediate notification contacts to the appropriate local emergency response personnel and to the unified program agency. (B) Procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment. (C) Evacuation plans and procedures, including immediate notice, for the business site. This training shall be documented electronically or by hard copy and shall be made available for a minimum of three years. Immediately provide employee training for appropriate personnel

Violation Division: San Joaquin County Environmental Health

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

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Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	404256
Site Name:	Tracy Combined Cycle Power Plant
Violation Date:	07-20-2020
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 the Business Activities Page and/or Business Owner Operator Identification Page.
Violation Notes:	Returned to compliance on 08/19/2020. The Business Owner/Operator Identification form was not electronically submitted with all the accurate information. Rick Vogler, operation supervisor stopped working for this facility on March 2020 and the business plan has not been updated within 30 days of these changes. Rick is listed as the primary emergency contact. This information must be current and submitted as part of the business plan. Immediately log into the California Environmental Reporting System (CERS) at http://cers.calepa.ca.gov/ , enter the correct or updated information, and submit to the EHD for approval.
Violation Division:	San Joaquin County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	404256
Site Name:	Tracy Combined Cycle Power Plant
Violation Date:	05-25-2017
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 a site map with all required content.
Violation Notes:	Returned to compliance on 06/29/2017. Some of the required elements listed on the site map in CERS are not readable . A site map shall contain a north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, evacuation staging areas, hazardous material handling and storage areas, and emergency response equipment. Immediately log into the California Environmental Reporting System (CERS) at http://cers.calepa.ca.gov/ , upload a site map (s) to CERS that contain all the required elements , and submit to the EHD for approval.
Violation Division:	San Joaquin County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	404256
Site Name:	Tracy Combined Cycle Power Plant
Violation Date:	07-20-2020
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 07/20/2020. The business plan information has not been reviewed and resubmitted in the California Environmental Reporting System (CERS) annually by the due date. The business plan was submitted late on January 31,2020 for calendar year 2020. The hazardous materials inventory shall be submitted by January 15 of each

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

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calendar year and may be submitted beginning November 1 of the previous year. No corrections needed. Violation was corrected on 1/31/2020. Continue to submit the annual business plan by January 15, 2020.

Violation Division: San Joaquin County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-25-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: No violations were noted at the time of the inspection. The routine inspection was also part of the evaluation review for the RMP submittal. Comments were not received from the formal public review period. Notes: The facility changed ownership on January 1, 2016 from GWF to Altagas. The RMP registration must be updated and resubmitted to our department within 30 days of the change per the CCR, Section 2745.10(f). This facility has two covered processes. The 18.9% Aqueous Ammonia is used for water treatment and the 29% Aqueous Ammonia is used for selective catalytic reduction for air emission control. The 18.9% process has (3) 330 gallon totes of aqueous ammonia which only one is used at a time. It has polyethylene balls placed in the secondary containment that must be inspected and replaced per the manufacturer's instructions. A temporary scaffold is in place to reach the top of the totes in order to change the hose to another tote. A permanent structure will be [Truncated]

Eval Division: San Joaquin County Environmental Health
Eval Program: CalARP
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 05-25-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Conducted a billable routine inspection. See service code 001 for details.

Eval Division: San Joaquin County Environmental Health
Eval Program: CalARP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-20-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct a Hazardous Materials Business Plan(HMBP) inspection. There were four violations during the inspection. One violation has been already corrected. For the other three open violations, complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by 08/19/2020. To minimize person to person contact EHD is choosing to write the name of person receiving the report instead of having them sign.

Eval Division: San Joaquin County Environmental Health
Eval Program: HMRRP

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

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Eval Source: CERS,

Eval General Type: Occupational Safety and Health Administration Inspection
Eval Date: 03-23-2012
Violations Found: No
Eval Type: Cal/OSHA Inspection
Eval Notes: Not reported
Eval Division: Cal/OSHA
Eval Program: OSHA
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-25-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by 06/24/2017 . Please be aware as of January 1, 2013, all businesses are required to submit all hazardous materials information online to the California Environmental Reporting System (CERS) at <http://cers.calepa.ca.gov>. Be sure to include your hazardous material activity in the Businesses Activities section in CERS in addition to any other relevant activities and required fields.

Eval Division: San Joaquin County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-20-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by August 19, 2020. To minimize person to person contact EHD is choosing to write the name of person receiving the report instead of having them sign. The report was emailed to the compliance manager Neftali Nevarez, at <neftali.nevarez@naes.com> and operations manager Randy Shepard, at <randy.shepard@naes.com>. Starting September 1, 2018, all in-office CERS help will be provided at EHD hourly rate (\$152). To schedule an appointment, please call (209) 468-3420. Documents provided during inspection: List of free training classes
Waste streams found: used oil, oil filters, oily debris, ammonia chips, cation exchange polymer resin cartridges

Eval Division: San Joaquin County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-20-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On-site to conduct a CalARP inspection. This inspection include a walk-through of the process and evaluations review of the CalARP program elements. The RMP/CalARP 5-years update received on August 20, 2018. Comments were not received during the 45 days public review

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

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period. There was one violation during the inspection. Complete and submit a copy of the Return to Compliance Certification form to the EHD with a statement documenting the corrective actions that have been or will be taken for each violation, and any supporting paperwork, by 08/19/2020. Notes: This facility is regulated under CalARP program level 1. The facility has two Ammonia processes . The first process uses a maximum of 57,000 pounds of 29% Ammonium Hydroxide mixture for Selective catalytic reduction (SCR) to reduce Nitrogen Oxide emissions from the turbine(s). The second process uses 7,660 pounds of 19% Ammonium Hydroxide mixture to control the pH level inside the boilers and prevent corrosion. Acc

Eval Division: San Joaquin County Environmental Health
Eval Program: CalARP
Eval Source: CERS,

Enforcement Action:

Site ID: 404256
Site Name: Tracy Combined Cycle Power Plant
Site Address: 14950 W SCHULTE RD
Site City: TRACY
Site Zip: 95377
Enf Action Date: 05-25-2017
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: San Joaquin County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Affiliation:

Affiliation Type Desc: Property Owner
Entity Name: MRP San Joaquin Energy, LLC
Entity Title: Not reported
Affiliation Address: 14950 W SCHULTE RD
Affiliation City: TRACY
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95377
Affiliation Phone: (925) 597-2905,

Affiliation Type Desc: Identification Signer
Entity Name: Taylor Leach
Entity Title: EHS 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: Parent Corporation
Entity Name: MRP San Joaquin Energy Inc.
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported

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MRP SAN JOAQUIN ENERGY, LLC (Continued)

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Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: San Joaquin Cnty Env Health
Entity Title: Not reported
Affiliation Address: 1868 East Hazelton Avenue
Affiliation City: Stockton
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95205-6232
Affiliation Phone: (209) 468-3420,

Affiliation Type Desc: Environmental Contact
Entity Name: Taylor Leach
Entity Title: Not reported
Affiliation Address: 14950 W SCHULTE RD
Affiliation City: TRACY
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95377
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 14950 W SCHULTE RD
Affiliation City: TRACY
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95377
Affiliation Phone: ,

Affiliation Type Desc: Document Preparer
Entity Name: Taylor Leach
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: MRP San Joaquin Energy, LLC
Entity Title: Not reported
Affiliation Address: 14950 W SCHULTE RD
Affiliation City: TRACY
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95377
Affiliation Phone: (209) 248-6841,

Affiliation Type Desc: Operator
Entity Name: MRP San Joaquin Energy, LLC
Entity Title: Not reported

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Database(s)

EDR ID Number
EPA ID Number

MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (209) 836-1605,

HWTS:

Name: TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
Address 2: Not reported
City,State,Zip: TRACY, CA 95377
EPA ID: CAL000414217
Inactive Date: 01/03/2019
Create Date: 02/10/2016
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 14950 W. SHCULTE RD.
Mailing Address 2: Not reported
Mailing City,State,Zip: TRACY, CA 95377
Owner Name: SAN JOAQUIN ENERGY
Owner Address: 14950 W. SCHULTE ROAD
Owner Address 2: Not reported
Owner City,State,Zip: TRACY, CA 953770000
Contact Name: NEFTALI NEVAREZ
Contact Address: 14950 W. SHCULTE RD.
Contact Address 2: Not reported
City,State,Zip: TRACY, CA 95377
Facility Status: Inactive
Facility Type: PERMANENT
Category: STATE
Latitude: 37.71117
Longitude: -121.490892

NAICS:

EPA ID: CAL000414217
Create Date: 2016-02-10 10:56:02.260
NAICS Code: 221122
NAICS Description: Electric Power Distribution
Issued EPA ID Date: 2016-02-10 10:56:02.25700
Inactive Date: 2019-01-03 00:00:00
Facility Name: TRACY COMBINED CYCLE POWER PLANT
Facility Address: 14950 W SCHULTE RD
Facility Address 2: Not reported
Facility City: TRACY
Facility County: Not reported
Facility State: CA
Facility Zip: 95377

Name: TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
Address 2: Not reported
City,State,Zip: TRACY, CA 95377
EPA ID: CAL000442227
Inactive Date: Not reported

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Database(s)

EDR ID Number
EPA ID Number

MRP SAN JOAQUIN ENERGY, LLC (Continued)

S106093824

Create Date: 01/04/2019
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 14950 W SCHULTE RD
Mailing Address 2: Not reported
Mailing City,State,Zip: TRACY, CA 95377
Owner Name: MRP SAN JOAQUIN ENERGY LLC
Owner Address: 14950 W SCHULTE RD
Owner Address 2: Not reported
Owner City,State,Zip: TRACY, CA 95377
Contact Name: TAYLOR LEACH
Contact Address: 14950 W SCHULTE RD
Contact Address 2: Not reported
City,State,Zip: TRACY, CA 95377
Facility Status: Active
Facility Type: PERMANENT
Category: STATE
Latitude: 37.71117
Longitude: -121.490892

NAICS:
EPA ID: CAL000442227
Create Date: 2019-01-04 10:50:27.620
NAICS Code: 221122
NAICS Description: Electric Power Distribution
Issued EPA ID Date: 2019-01-04 10:50:27.62000
Inactive Date: Not reported
Facility Name: TRACY COMBINED CYCLE POWER PLANT
Facility Address: 14950 W SCHULTE RD
Facility Address 2: Not reported
Facility City: TRACY
Facility County: Not reported
Facility State: CA
Facility Zip: 95377

A8 PG&E: SCHULTE SUBSTATION
Target 14950 W SCHULTE RD
Property TRACY, CA 95377

ICIS 1007729329
US AIRS N/A
FINDS

Site 8 of 15 in cluster A

Actual: ICIS:
175 ft. Enforcement Action ID: CASJVA3000000000000003150
FRS ID: 110018862337
Action Name: Not reported
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565
Enforcement Action Type: Administrative Order
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908

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EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA3000000000000003129
FRS ID: 110018862337
Action Name: Not reported
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565

Enforcement Action Type: Administrative Order
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA3000000000000003122
FRS ID: 110018862337
Action Name: Not reported
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565

Enforcement Action Type: Notice of Violation
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA3000000000000002744
FRS ID: 110018862337
Action Name: Not reported
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565

Enforcement Action Type: Administrative Order
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 4931

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA3000000000000002644
FRS ID: 110018862337
Action Name: Not reported
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565

Enforcement Action Type: Administrative Order
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA3000000000000002620
FRS ID: 110018862337
Action Name: Not reported
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565

Enforcement Action Type: Administrative Order
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA3000000000000002595
FRS ID: 110018862337
Action Name: Not reported
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565

Enforcement Action Type: Notice of Violation
Facility County: SAN JOAQUIN
Program System Acronym: AIR

Map ID
Direction
Distance
Elevation

MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV

Facility SIC Code: 4931

Federal Facility ID: Not reported

Latitude in Decimal Degrees: 37.7108

Longitude in Decimal Degrees: -121.4908

Permit Type Desc: Not reported

Program System Acronym: CASJV00006077N4597

Facility NAICS Code: 221122

Tribal Land Code: Not reported

Enforcement Action ID: CASJVA3000000000000002455

FRS ID: 110018862337

Action Name: Not reported

Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT

Facility Address: 14950 W. SCHULTE ROAD

TRACY, CA 64565

Enforcement Action Type: Administrative Order

Facility County: SAN JOAQUIN

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO

Facility SIC Code: 4931

Federal Facility ID: Not reported

Latitude in Decimal Degrees: 37.7108

Longitude in Decimal Degrees: -121.4908

Permit Type Desc: Not reported

Program System Acronym: CASJV00006077N4597

Facility NAICS Code: 221122

Tribal Land Code: Not reported

Enforcement Action ID: CASJVA3000000000000002452

FRS ID: 110018862337

Action Name: Not reported

Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT

Facility Address: 14950 W. SCHULTE ROAD

TRACY, CA 64565

Enforcement Action Type: Notice of Violation

Facility County: SAN JOAQUIN

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV

Facility SIC Code: 4931

Federal Facility ID: Not reported

Latitude in Decimal Degrees: 37.7108

Longitude in Decimal Degrees: -121.4908

Permit Type Desc: Not reported

Program System Acronym: CASJV00006077N4597

Facility NAICS Code: 221122

Tribal Land Code: Not reported

Enforcement Action ID: CASJVA000006077N459700172

FRS ID: 110018862337

Action Name: GWF ENERGY, LLC-TRACY PEAKER PLANT 06077N459700172

Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT

Facility Address: 14950 W. SCHULTE ROAD

TRACY, CA 64565

Map ID
Direction
Distance
Elevation

MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Enforcement Action Type: Administrative Order
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA000006077N459700170
FRS ID: 110018862337
Action Name: GWF ENERGY, LLC-TRACY PEAKER PLANT 06077N459700170
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565

Enforcement Action Type: Notice of Violation
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA000006077N459700155
FRS ID: 110018862337
Action Name: GWF ENERGY, LLC-TRACY PEAKER PLANT 06077N459700155
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565

Enforcement Action Type: Administrative Order
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA000006077N459700153
FRS ID: 110018862337
Action Name: GWF ENERGY, LLC-TRACY PEAKER PLANT 06077N459700153

Map ID
Direction
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Elevation

MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565
Enforcement Action Type: Notice of Violation
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA000006077N459700128
FRS ID: 110018862337
Action Name: GWF ENERGY, LLC-TRACY PEAKER PLANT 06077N459700128
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565
Enforcement Action Type: Administrative Order
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Enforcement Action ID: CASJVA000006077N459700126
FRS ID: 110018862337
Action Name: GWF ENERGY, LLC-TRACY PEAKER PLANT 06077N459700126
Facility Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Facility Address: 14950 W. SCHULTE ROAD
TRACY, CA 64565
Enforcement Action Type: Notice of Violation
Facility County: SAN JOAQUIN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 4931
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 37.7108
Longitude in Decimal Degrees: -121.4908
Permit Type Desc: Not reported
Program System Acronym: CASJV00006077N4597
Facility NAICS Code: 221122
Tribal Land Code: Not reported

Map ID
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Elevation

MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

US AIRS (AFS):

Envid: 1007729329
Region Code: 09
County Code: CA077
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
D and B Number: Not reported
Facility Site Name: GWF ENERGY, LLC-TRACY PEAKER PLANT
Primary SIC Code: 4931
NAICS Code: 221122
Default Air Classification Code: MAJ
Facility Type of Ownership Code: POF
Air CMS Category Code: TVM
HPV Status: ADDRESSED HPV

US AIRS (AFS):

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2014-08-19 00:00:00
Activity Status Date: 2014-12-31 13:13:32
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-08-19 00:00:00
Activity Status Date: 2014-12-31 13:13:31
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-08-19 00:00:00
Activity Status Date: 2014-12-31 13:13:32
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-04-29 00:00:00
Activity Status Date: 2015-05-04 13:13:37
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-12-14 00:00:00
Activity Status Date: 2015-12-21 08:18:36
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2016-08-02 00:00:00
Activity Status Date: 2016-08-29 08:13:34
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-04-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-05-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-06-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-06-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-03-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-06-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-07-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Map ID
Direction
Distance
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-01-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-04-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-08-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-01-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-03-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-05-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-07-18 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-10-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-10-04 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Map ID
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Distance
Elevation

MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Date:	2012-10-17 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-10-29 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2012-11-09 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-01-14 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-01-30 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337

Map ID
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Elevation

MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-02-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-02-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-03-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-03-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-04-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-04-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-04-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-04-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-04-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-04-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-05-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-05-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-05-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-05-15 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Date:	2013-06-04 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-06-05 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-06-21 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-07-09 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	2013-07-17 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-08-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-09-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-09-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-11-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-12-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-01-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-02-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-04-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-11-01 00:00:00
Activity Status Date: Not reported
Activity Group: Case File
Activity Type: Case File
Activity Status: Addressed

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-12-09 00:00:00
Activity Status Date: Not reported
Activity Group: Case File

Map ID
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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Type: Case File
Activity Status: Addressed

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-08-04 00:00:00
Activity Status Date: Not reported
Activity Group: Case File
Activity Type: Case File
Activity Status: Addressed

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: Not reported
Activity Status Date: 2009-02-17 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: Not reported
Activity Status Date: 2011-08-23 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: Not reported
Activity Status Date: 2013-02-07 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

Map ID
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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Date: 2005-08-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Compliance Investigation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-09-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Compliance Investigation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-08-19 00:00:00
Activity Status Date: 2014-12-31 13:13:33
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-01-26 00:00:00
Activity Status Date: 2015-02-19 14:54:17
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-01-26 00:00:00
Activity Status Date: 2015-02-26 13:13:13
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337

Map ID
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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-03-17 00:00:00
Activity Status Date: 2015-03-20 13:13:14
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-04-29 00:00:00
Activity Status Date: 2015-05-04 13:13:37
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-04-29 00:00:00
Activity Status Date: 2015-05-05 11:13:14
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-12-14 00:00:00
Activity Status Date: 2015-12-21 08:18:36
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-01-29 00:00:00
Activity Status Date: 2016-02-11 08:13:12
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-02-22 00:00:00
Activity Status Date: 2016-02-26 11:13:07
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-08-02 00:00:00
Activity Status Date: 2016-08-29 08:13:34
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-08-09 00:00:00
Activity Status Date: 2016-08-29 14:35:33
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-04-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-06-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-02-23 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-05-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-06-07 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2005-06-21 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Date: 2005-07-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2005-09-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-03-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-06-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-08-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-09-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-01-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-05-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-06-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-08-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-08-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-11-20 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-11-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-11-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-03-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Map ID
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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2008-06-17 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2008-08-08 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2009-01-22 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2009-02-23 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Date: 2009-06-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-08-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-10-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-10-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-11-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-11-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-11-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-12-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-01-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-01-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-02-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-02-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-03-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-07-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

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Database(s)

EDR ID Number
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PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-01-25 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-04-03 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2011-08-11 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2012-01-24 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Date: 2012-03-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-05-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-07-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-10-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-10-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337

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Database(s)

EDR ID Number
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PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-10-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-10-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-11-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-01-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-01-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-02-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-02-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-03-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-03-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-04-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Map ID
Direction
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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-04-18 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-04-22 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-04-23 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2013-04-24 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits

Map ID
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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Date: 2013-04-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-05-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-05-07 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-05-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-05-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-06-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-06-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-06-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-07-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-07-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-08-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-09-04 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-09-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-11-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-12-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Map ID
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Database(s)

EDR ID Number
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PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-01-24 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-02-18 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2014-04-02 00:00:00
Activity Status Date:	Not reported
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Not reported
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits
Activity Date:	2009-01-29 00:00:00
Activity Status Date:	2009-01-29 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Formal
Activity Status:	Final Order Issued
Region Code:	09
Programmatic ID:	AIR CASJV00006077N4597
Facility Registry ID:	110018862337
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	Title V Permits

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Database(s)

EDR ID Number
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PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Activity Date: 2011-08-02 00:00:00
Activity Status Date: 2011-08-02 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-12-05 00:00:00
Activity Status Date: 2012-12-05 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-12-14 00:00:00
Activity Status Date: 2015-12-14 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-03-07 00:00:00
Activity Status Date: 2016-03-07 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-09-23 00:00:00
Activity Status Date: 2016-09-23 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337

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EDR ID Number
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PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-02-29 00:00:00
Activity Status Date: 2016-02-29 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-03-30 00:00:00
Activity Status Date: 2016-03-30 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-12-12 00:00:00
Activity Status Date: 2008-12-12 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-06-08 00:00:00
Activity Status Date: 2011-06-08 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-11-08 00:00:00
Activity Status Date: 2012-11-08 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PG&E: SCHULTE SUBSTATION (Continued)

1007729329

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-11-09 00:00:00
Activity Status Date: 2015-11-09 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-12-16 00:00:00
Activity Status Date: 2015-12-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CASJV00006077N4597
Facility Registry ID: 110018862337
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-08-16 00:00:00
Activity Status Date: 2016-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

FINDS:

Registry ID: 110055817647

[Click Here for FRS Facility Detail Report:](#)

Environmental Interest/Information System:
STATE MASTER

[Click this hyperlink](#) while viewing on your computer to access
additional FINDS: detail in the EDR Site Report.

A9
Target
Property
GWF ENERGY, LLC-TRACY PEAKER PLANT
14950 W. SCHULTE ROAD
TRACY, CA 95377

FINDS **1016111169**
ECHO **N/A**

Site 9 of 15 in cluster A

Actual:
175 ft.

FINDS:
Registry ID: 110018862337

[Click Here for FRS Facility Detail Report:](#)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GWF ENERGY, LLC-TRACY PEAKER PLANT (Continued)

1016111169

Environmental Interest/Information System:

CAMDBS (Clean Air Markets Division Business System) is a national information system that supports the implementation of market-based air pollution control programs administered by the Clean Air Markets Division, within the Office of Air and Radiation. These programs include the Acid Rain Program, established by Title IV of the Clean Air Act Amendments of 1990, and regional programs designed reduce the transport of ozone. These emissions trading programs allows regulated facilities (primarily electric utilities) to adopt the most cost-effective strategies to reduce emissions at their units. Units that reduce their emissions below the number of allowances they hold -- each allowance is equivalent to one ton of sulfur dioxide or nitrogen oxides -- may trade allowances with other units in their system, sell them to other utilities on the open market or through EPA auctions, or bank them to cover emissions in future years. CAMDBS functions include registering responsible officials, establishing allowance accounts, reporting hourly emissions data, and transferring allowances between accounts.

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR EMISSIONS CLASSIFICATION UNKNOWN

AIR PROGRAM

US Emissions & Generation Resource Database (EGRID) contains data on emissions and resource mix for virtually every power plant and company that generates electricity in the United States.

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.

ELECTRIC GENERATOR

AIR MAJOR

STATE MASTER

GREENHOUSE GAS REPORTER

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1016111169
Registry ID:	110018862337
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110018862337
Name:	GWF ENERGY, LLC-TRACY PEAKER PLANT
Address:	14950 W. SCHULTE ROAD
City,State,Zip:	TRACY, CA 95377

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

A10
Target
Property

G W F ENERGY LLC
14950 W SCHULTE RD
TRACY, CA 95377

HAZNET
CERS
HWTS

S113121836
N/A

Site 10 of 15 in cluster A

Actual:
175 ft.

HAZNET:

Name: G W F ENERGY LLC
Address: 14950 W SCHULTE RD
Address 2: Not reported
City,State,Zip: TRACY, CA 95377
Contact: RICK VOGLER
Telephone: 9257667492
Mailing Name: Not reported
Mailing Address: 14950 W SCHULTE RD

Year: 2015
Gepaid: CAL000258560
TSD EPA ID: NVD980895338
CA Waste Code: 792 - Liquids with pH <= 2 with metals
Disposal Method: H121 - Neutralization Only
Tons: 0.03

Year: 2015
Gepaid: CAL000258560
TSD EPA ID: NVD980895338
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.175

Year: 2014
Gepaid: CAL000258560
TSD EPA ID: CAD044429835
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: 3.96

Year: 2014
Gepaid: CAL000258560
TSD EPA ID: NVD980895338
CA Waste Code: 792 - Liquids with pH <= 2 with metals
Disposal Method: H121 - Neutralization Only
Tons: 0.05

Year: 2014
Gepaid: CAL000258560
TSD EPA ID: NVD980895338
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: 0.675

Year: 2014
Gepaid: CAL000258560
TSD EPA ID: NVD980895338
CA Waste Code: 135 - Unspecified aqueous solution
Disposal Method: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Tons:	Treatment/Reovery (H010-H129) Or (H131-H135) 0.1
Year:	2014
Gepaid:	CAL000258560
TSD EPA ID:	NVD980895338
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.115
Year:	2013
Gepaid:	CAL000258560
TSD EPA ID:	NVD980895338
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:	0.374
Year:	2013
Gepaid:	CAL000258560
TSD EPA ID:	NVD980895338
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:	0.0685
Year:	2013
Gepaid:	CAL000258560
TSD EPA ID:	NVD980895338
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.095

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

Additional Info:

Year:	2007
Gen EPA ID:	CAL000258560
Shipment Date:	20070628
Creation Date:	11/5/2007 18:30:36
Receipt Date:	20070703
Manifest ID:	000304820GBF
Trans EPA ID:	CAD983649880
Trans Name:	GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980884183
Trans Name:	GEM RANCHO CORDOVA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No
Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons: 0.1625
Waste Quantity: 325
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: 20070628
Creation Date: 11/5/2007 18:30:36
Receipt Date: 20070703
Manifest ID: 000304820GBF
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA 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: 0.125
Waste Quantity: 250
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: 20070412
Creation Date: 8/28/2007 18:30:05
Receipt Date: 20070501
Manifest ID: 002100534JJK
Trans EPA ID: CAD028277036
Trans Name: ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD097030993
Trans Name: SIEMENS WATER TECHNOLOGIES CORP
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: 0.025
Waste Quantity: 50
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

Additional Info:

Year: 2014
Gen EPA ID: CAL000258560

Shipment Date: 20141224
Creation Date: 6/25/2015 22:16:11
Receipt Date: 20150106
Manifest ID: 000111430DAT
Trans EPA ID: CAR000210617
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSD EPA ID: NVD980895338
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSD EPA ID: Not reported
TSD 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/Recovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.4
Waste Quantity: 800
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: 20141209
Creation Date: 5/7/2015 22:15:07
Receipt Date: 20141215
Manifest ID: 000111195DAT
Trans EPA ID: CAR000210617
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSD EPA ID: NVD980895338
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
TSD EPA ID: Not reported
TSD Name: Not reported
Waste Code Description: 135 - Unspecified aqueous solution
RCRA Code: Not reported
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Recovery (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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Shipment Date: 20141209
Creation Date: 5/7/2015 22:15:07
Receipt Date: 20141215
Manifest ID: 000111195DAT
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: 792 - Not reported
RCRA Code: D002
Meth Code: H121 - Neutralization Only
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: 20141209
Creation Date: 5/7/2015 22:15:07
Receipt Date: 20141215
Manifest ID: 000111195DAT
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: 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: 0.075
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: 20141110
Creation Date: 1/15/2015 22:14:55
Receipt Date: 20141114
Manifest ID: 007131921FLE
Trans EPA ID: CAT000624247
Trans Name: MP ENVIRONMENTAL SERVICES
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

TSDF EPA ID:	CAD044429835
Trans Name:	CLEAN HARBORS WILMINGTON 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:	3.96
Waste Quantity:	1200
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:	20140407
Creation Date:	9/9/2014 22:15:03
Receipt Date:	20140411
Manifest ID:	000079087DAT
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:	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:	0.375
Waste Quantity:	750
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:	20140217
Creation Date:	4/1/2014 22:15:03
Receipt Date:	20140226
Manifest ID:	000090815DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVR000087361
Trans 2 Name:	SJC LIMITED
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:	343 - Unspecified organic liquid mixture
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Quantity Tons:	Treatment/Reovery (H010-H129) Or (H131-H135) 0.3
Waste Quantity:	600
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:	20140206
Creation Date:	6/24/2014 22:15:06
Receipt Date:	20140213
Manifest ID:	000090558DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVR000087361
Trans 2 Name:	SJC LIMITED
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:	0.04
Waste Quantity:	80
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:	20140206
Creation Date:	6/24/2014 22:15:06
Receipt Date:	20140213
Manifest ID:	000090558DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	NVR000087361
Trans 2 Name:	SJC LIMITED
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:	792 - Not reported
RCRA Code:	D002
Meth Code:	H121 - Neutralization Only
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Additional Code 5: Not reported

Additional Info:

Year: 2008
Gen EPA ID: CAL000258560

Shipment Date: 20080602
Creation Date: 8/8/2008 18:30:16
Receipt Date: 20080605
Manifest ID: 001377844JJK
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 221 - Waste oil and mixed oil
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: 20080602
Creation Date: 8/8/2008 18:30:16
Receipt Date: 20080605
Manifest ID: 001377844JJK
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA 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: 0.0675
Waste Quantity: 135
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: 20080602

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Creation Date: 8/8/2008 18:30:16
Receipt Date: 20080605
Manifest ID: 001377844JJK
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA 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: 0.0575
Waste Quantity: 115
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: 20080602
Creation Date: 8/8/2008 18:30:16
Receipt Date: 20080605
Manifest ID: 001377844JJK
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA 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: 0.155
Waste Quantity: 310
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: 20080306
Creation Date: 5/21/2008 18:30:28
Receipt Date: 20080317
Manifest ID: 000304755GBF
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID: NED986382133
Trans 2 Name: SMITH SYSTEMS TRANSPORTATION INC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA 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: 0.015
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

Additional Info:

Year: 2012
Gen EPA ID: CAL000258560

Shipment Date: 20121102
Creation Date: 1/6/2013 22:15:07
Receipt Date: 20121109
Manifest ID: 007270913JJJ
Trans EPA ID: CAL000362980
Trans Name: ICON ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID: CAL000274783
Trans 2 Name: KM INDUSTRIAL INC
TSDF EPA ID: CAD028409019
Trans Name: CROSBY & OVERTON
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: 20121102
Creation Date: 1/6/2013 22:15:07
Receipt Date: 20121109
Manifest ID: 007270913JJJ
Trans EPA ID: CAL000362980
Trans Name: ICON ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID: CAL000274783
Trans 2 Name: KM INDUSTRIAL INC
TSDF EPA ID: CAD028409019
Trans Name: CROSBY & OVERTON
TSDF Alt EPA ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

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:	20120927
Creation Date:	4/3/2013 22:15:15
Receipt Date:	20121027
Manifest ID:	000379570PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRON SERV
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:	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:	0.981
Waste Quantity:	1962
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:	20120927
Creation Date:	4/3/2013 22:15:15
Receipt Date:	20121027
Manifest ID:	000379570PSC
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRON SERV
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:	0.255
Waste Quantity:	510

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

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:	20120801
Creation Date:	10/10/2012 22:15:20
Receipt Date:	20120810
Manifest ID:	007270222JJK
Trans EPA ID:	CAL000362980
Trans Name:	ICON ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	CAL000274783
Trans 2 Name:	KM INDUSTRIAL INC
TSDf EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON
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:	0.2
Waste Quantity:	400
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:	20120801
Creation Date:	10/10/2012 22:15:20
Receipt Date:	20120810
Manifest ID:	007270222JJK
Trans EPA ID:	CAL000362980
Trans Name:	ICON ENVIRONMENTAL SERVICES INC
Trans 2 EPA ID:	CAL000274783
Trans 2 Name:	KM INDUSTRIAL INC
TSDf EPA ID:	CAD028409019
Trans Name:	CROSBY & OVERTON
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:	0.15
Waste Quantity:	300
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

Map ID
Direction
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Shipment Date:	20120709
Creation Date:	5/31/2013 22:15:16
Receipt Date:	20120721
Manifest ID:	000053533DAT
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:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MGT LLC DBA PSC ENVIRONMENTAL SERVICES
TSDf Alt EPA ID:	NVD980895338
TSDf Alt Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
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:	0.6
Waste Quantity:	1200
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:	20120524
Creation Date:	8/1/2012 22:15:09
Receipt Date:	20120525
Manifest ID:	000052431DAT
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:	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:	0.2275
Waste Quantity:	455
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:	20120524
Creation Date:	8/1/2012 22:15:09
Receipt Date:	20120525
Manifest ID:	000052431DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	Not reported

Map ID
Direction
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

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: F005
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No
Treatment/Reovery (H010-H129) Or (H131-H135)

Quantity Tons: 0.17
Waste Quantity: 340
Quantity Unit: P
Additional Code 1: F003
Additional Code 2: D035
Additional Code 3: D001
Additional Code 4: Not reported
Additional Code 5: Not reported

Shipment Date: 20120326
Creation Date: 5/30/2012 20:30:16
Receipt Date: 20120327
Manifest ID: 000039939DAT
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: 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: 0.51
Waste Quantity: 1020
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: CAL000258560

Shipment Date: 20130726
Creation Date: 1/24/2017 18:31:36
Receipt Date: 20130820
Manifest ID: 000077782DAT
Trans EPA ID: CAR000210617
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID: CAD982523433
Trans 2 Name: DILLARD ENVIRONMENTAL SERVICES
TSDF EPA ID: NVD980895338
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

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:	0.1575
Waste Quantity:	315
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:	20130726
Creation Date:	1/24/2017 18:31:36
Receipt Date:	20130820
Manifest ID:	000077782DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
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:	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:	0.184
Waste Quantity:	368
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:	20130726
Creation Date:	1/24/2017 18:31:36
Receipt Date:	20130820
Manifest ID:	000077782DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	CAD982523433
Trans 2 Name:	DILLARD ENVIRONMENTAL SERVICES
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:	792 - Not reported
RCRA Code:	D002
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.0195

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MAP FINDINGS

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Database(s)

EDR ID Number
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G W F ENERGY LLC (Continued)

S113121836

Waste Quantity:	39
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:	20130118
Creation Date:	6/29/2013 22:15:06
Receipt Date:	20130208
Manifest ID:	000069296DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERV
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:	343 - Unspecified organic liquid mixture
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Recovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.374
Waste Quantity:	110
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:	20130118
Creation Date:	6/29/2013 22:15:06
Receipt Date:	20130208
Manifest ID:	000069296DAT
Trans EPA ID:	CAR000210617
Trans Name:	21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID:	TXR000025072
Trans 2 Name:	ROCKETLINE CARRIER SERV
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/Recovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.095
Waste Quantity:	190
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

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Shipment Date: 20130118
Creation Date: 6/29/2013 22:15:06
Receipt Date: 20130208
Manifest ID: 000069296DAT
Trans EPA ID: CAR000210617
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF CALIFORNIA LP
Trans 2 EPA ID: TXR000025072
Trans 2 Name: ROCKETLINE CARRIER SERV
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: 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: 0.0685
Waste Quantity: 137
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: 2004
Gen EPA ID: CAL000258560

Shipment Date: 20040526
Creation Date: 10/15/2004 15:16:06
Receipt Date: 20040526
Manifest ID: 22835977
Trans EPA ID: CAR000007013
Trans Name: CLEARWATER ENVIRONMENTAL
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAL000161743
Trans Name: ALVISO INDEPENDENT OIL
TSDF Alt EPA ID: CAL000161743
TSDF Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: Not reported
Meth Code: H01 - Transfer Station
Quantity Tons: 0.04
Waste Quantity: 80
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: 20040120
Creation Date: 8/20/2004 9:49:45
Receipt Date: 20040228
Manifest ID: 22019862

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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID: NED986382133
Trans 2 Name: SMITH SYSTEMS
TSDF EPA ID: CAD044429835
Trans Name: TERIS LLC
TSDF Alt EPA ID: CAD044429835
TSDF Alt Name: Not reported
Waste Code Description: 792 - Not reported
RCRA Code: D002
Meth Code: D99 - Disposal, Other
Quantity Tons: 0.02085
Waste Quantity: 5
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

Additional Info:

Year: 2011
Gen EPA ID: CAL000258560

Shipment Date: 20111226
Creation Date: 5/23/2012 13:29:01
Receipt Date: 20111227
Manifest ID: 009405041JJK
Trans EPA ID: CAD982523433
Trans Name: DILLARD ENVIRONMENTAL SERVICES
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: NVT330010000
Trans Name: US ECOLOGY CORP
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 162 - Other spent catalyst
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: 23
Waste Quantity: 23
Quantity Unit: T
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: 20111226
Creation Date: 5/23/2012 13:28:41
Receipt Date: 20111227
Manifest ID: 009405007JJK
Trans EPA ID: CAD982523433
Trans Name: DILLARD ENVIRONMENTAL SERVICES
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY CORP
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	162 - Other spent catalyst
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:	25
Waste Quantity:	25
Quantity Unit:	T
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:	20111222
Creation Date:	5/23/2012 13:26:20
Receipt Date:	20111227
Manifest ID:	009405043JJk
Trans EPA ID:	CAD982523433
Trans Name:	DILLARD ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY CORP
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	162 - Other spent catalyst
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:	25
Waste Quantity:	25
Quantity Unit:	T
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:	20111214
Creation Date:	5/23/2012 13:28:20
Receipt Date:	20111215
Manifest ID:	009405006JJk
Trans EPA ID:	CAD982523433
Trans Name:	DILLARD ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY CORP
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	162 - Other spent catalyst
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Quantity Tons:	Landfill(To Include On-Site Treatment And/Or Stabilization) 8
Waste Quantity:	8
Quantity Unit:	T
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:	20111213
Creation Date:	5/23/2012 13:28:01
Receipt Date:	20111215
Manifest ID:	009405005JJK
Trans EPA ID:	CAD982523433
Trans Name:	DILLARD ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY CORP
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	162 - Other spent catalyst
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:	12
Waste Quantity:	12
Quantity Unit:	T
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:	20111205
Creation Date:	8/30/2012 16:34:05
Receipt Date:	20111209
Manifest ID:	009405003JJK
Trans EPA ID:	CAD982523433
Trans Name:	DILLARD ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	NVT330010000
Trans Name:	US ECOLOGY CORP
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code Description:	162 - Other spent catalyst
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:	13
Waste Quantity:	13
Quantity Unit:	T
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20111205
Creation Date:	8/30/2012 16:35:17
Receipt Date:	20111212
Manifest ID:	009405002JJJ
Trans EPA ID:	CAD982523433
Trans Name:	DILLARD ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY CORP
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	162 - Other spent catalyst
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:	13
Waste Quantity:	13
Quantity Unit:	T
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:	20111130
Creation Date:	8/30/2012 16:34:49
Receipt Date:	20111208
Manifest ID:	008159053JJJ
Trans EPA ID:	CAD982523433
Trans Name:	DILLARD ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	NVT330010000
Trans Name:	US ECOLOGY CORP
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	162 - Other spent catalyst
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:	12
Waste Quantity:	12
Quantity Unit:	T
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:	20110824
Creation Date:	11/8/2011 18:30:28
Receipt Date:	20110909
Manifest ID:	000032947DAT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

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: 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: 1.85
Waste Quantity: 3700
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: 20110614
Creation Date: 7/25/2011 18:30:12
Receipt Date: 20110614
Manifest ID: 002043368FLE
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: 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: 0.125
Waste Quantity: 250
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: 2009
Gen EPA ID: CAL000258560

Shipment Date: 20091022
Creation Date: 12/8/2009 18:30:18
Receipt Date: 20091029
Manifest ID: 002042848FLE
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MANAGEMENT INC
Trans 2 EPA ID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA 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: 0.25
Waste Quantity: 500
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: CAL000258560

Shipment Date: 20150526
Creation Date: 11/9/2015 22:15:17
Receipt Date: 20150604
Manifest ID: 000106129DAT
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: 792 - Not reported
RCRA Code: D002
Meth Code: H121 - Neutralization Only
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: 20150526
Creation Date: 11/9/2015 22:15:17
Receipt Date: 20150604
Manifest ID: 000106129DAT
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

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: 0.175
Waste Quantity: 350
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: 2002
Gen EPA ID: CAL000258560

Shipment Date: 20021217
Creation Date: 4/2/2003 18:31:15
Receipt Date: 20021220
Manifest ID: 21803900
Trans EPA ID: TNR000009183
Trans Name: Not reported
Trans 2 EPA ID: CAD004778742
Trans 2 Name: Not reported
TSDf EPA ID: CAT000646117
Trans Name: Not reported
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: D80 - Disposal, Land Fill
Quantity Tons: 0.625
Waste Quantity: 1250
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: 20021015
Creation Date: 2/18/2003 18:31:24
Receipt Date: 20021018
Manifest ID: 21803670
Trans EPA ID: TNR000009183
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDf EPA ID: CAT000646117
Trans Name: Not reported
TSDf Alt EPA ID: Not reported
TSDf Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: Not reported
Meth Code: D80 - Disposal, Land Fill

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Quantity Tons: 0.25
Waste Quantity: 500
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: 2003
Gen EPA ID: CAL000258560

Shipment Date: 20030917
Creation Date: 8/9/2004 8:46:09
Receipt Date: 20031017
Manifest ID: 21530437
Trans EPA ID: CAR000007013
Trans Name: CLEARWATER ENVIRONMENTAL
Trans 2 EPA ID: CAR000101600
Trans 2 Name: DK RICHMOND
TSDF EPA ID: CAD008252405
Trans Name: PACIFIC RESOURCE RECOVERY SERVICES
TSDF Alt EPA ID: CAD008252405
TSDF Alt Name: Not reported
Waste Code Description: 513 - Empty containers less than 30 gallons
RCRA Code: D001
Meth Code: H01 - Transfer Station
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: 20030717
Creation Date: 7/23/2004 9:17:57
Receipt Date: 20030725
Manifest ID: 22534281
Trans EPA ID: CAD063547996
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAT000646117
Trans Name: Not reported
TSDF Alt EPA ID: CAT000646117
TSDF Alt Name: Not reported
Waste Code Description: 223 - Unspecified oil-containing waste
RCRA Code: Not reported
Meth Code: D80 - Disposal, Land Fill
Quantity Tons: 0.125
Waste Quantity: 250
Quantity Unit: P
Additional Code 1: Not reported
Additional Code 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20030717
Creation Date:	7/23/2004 13:22:40
Receipt Date:	20030730
Manifest ID:	22534284
Trans EPA ID:	CAD063547996
Trans Name:	Not reported
Trans 2 EPA ID:	CAD983649880
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD044429835
Trans Name:	Not reported
TSDf Alt EPA ID:	CAD044429835
TSDf Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	Not reported
Meth Code:	D99 - Disposal, Other
Quantity Tons:	0.748
Waste Quantity:	220
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:	20030421
Creation Date:	7/13/2003 18:31:11
Receipt Date:	20030424
Manifest ID:	21802502
Trans EPA ID:	CAD063547996
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAT000646117
Trans Name:	Not reported
TSDf Alt EPA ID:	CAT000646117
TSDf Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	3.3
Waste Quantity:	6600
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: 2005
Gen EPA ID: CAL000258560

Shipment Date: 20051123

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Creation Date: 1/2/2007 18:30:20
Receipt Date: 20051202
Manifest ID: 24415921
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MGMT INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA LLC
TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 221 - Waste oil and mixed oil
RCRA Code: Not reported
Meth Code: H01 - Transfer Station
Quantity Tons: 0.16
Waste Quantity: 320
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: 20051123
Creation Date: 1/2/2007 18:30:20
Receipt Date: 20051202
Manifest ID: 24415921
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MGMT INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA 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: H01 - Transfer Station
Quantity Tons: 0.0325
Waste Quantity: 65
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: 20051123
Creation Date: 1/2/2007 18:30:20
Receipt Date: 20051202
Manifest ID: 24415921
Trans EPA ID: CAD983649880
Trans Name: GENERAL ENVIRONMENTAL MGMT INC
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980884183
Trans Name: GEM RANCHO CORDOVA LLC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

TSDF Alt EPA ID: Not reported
TSDF Alt Name: Not reported
Waste Code Description: 512 - Other empty containers 30 gallons or more
RCRA Code: Not reported
Meth Code: H01 - Transfer Station
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: 20050525
Creation Date: 9/15/2005 18:32:02
Receipt Date: 20050527
Manifest ID: 24315199
Trans EPA ID: CAR000007013
Trans Name: CLEARWATER ENVIRONMENTAL
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAL000161743
Trans Name: ALVISO INDEPENDENT OIL
TSDF Alt EPA ID: CAL000161743
TSDF Alt Name: Not reported
Waste Code Description: 352 - Other organic solids
RCRA Code: Not reported
Meth Code: H01 - Transfer Station
Quantity Tons: 0.09
Waste Quantity: 180
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: 2010
Gen EPA ID: CAL000258560

Shipment Date: 20100601
Creation Date: 8/30/2010 18:30:22
Receipt Date: 20100609
Manifest ID: 007009724JJK
Trans EPA ID: CAR000164012
Trans Name: 21ST CENTURY ENVIRONMENTAL MANAGEMENT OF NEVADA LLC
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: 223 - Unspecified oil-containing waste
RCRA Code: Not reported
Meth Code: H141 - Storage, Bulking, And/Or Transfer Off Site--No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Quantity Tons:	Treatment/Reovery (H010-H129) Or (H131-H135)
Waste Quantity:	0.025
Quantity Unit:	50
Additional Code 1:	P
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	GWF ENERGY, LLC-TRACY PEAKER PLANT
Address:	14950 W. SCHULTE ROAD
City,State,Zip:	TRACY, CA 95377-8608
Site ID:	471268
CERS ID:	110018862337
CERS Description:	US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	NEFTALI NEVAREZ
Entity Title:	ENVIRONMENTAL HEALTH AND SAFETY MGR
Affiliation Address:	14950 W SCHULTE ROAD
Affiliation City:	TRACY
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	SEAN R GREGORY
Entity Title:	Not reported
Affiliation Address:	20 MONADNOCK STREET
Affiliation City:	GARDNER
Affiliation State:	MA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	BRIAN NORGAARD
Entity Title:	DIRECTOR SUSTAINABILITY
Affiliation Address:	1717 MCKINNEY AVENUESUITE 1040 PARK SEVENTEEN
Affiliation City:	DALLAS
Affiliation State:	TX
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	MARK KEHOE
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Affiliation Phone:

,

HWTS:

Name: G W F ENERGY LLC
Address: 14950 W SCHULTE RD
Address 2: Not reported
City,State,Zip: TRACY, CA 95377
EPA ID: CAL000258560
Inactive Date: 06/30/2018
Create Date: 09/03/2002
Last Act Date: Not reported
Mailing Name: Not reported
Mailing Address: 14950 W SCHULTE RD
Mailing Address 2: Not reported
Mailing City,State,Zip: TRACY, CA 95377
Owner Name: GWF ENERGY LLC
Owner Address: 14950 W SCHULTE RD
Owner Address 2: Not reported
Owner City,State,Zip: TRACY, CA 95377
Contact Name: RICK VOGLER
Contact Address: 14950 W. SCHULTE RD.
Contact Address 2: Not reported
City,State,Zip: TRACY, CA 953778608
Facility Status: Inactive
Facility Type: PERMANENT
Category: STATE
Latitude: 37.721651
Longitude: -121.506945

NAICS:

EPA ID: CAL000258560
Create Date: 2010-11-22 13:00:50.000
NAICS Code: 221111
NAICS Description: Hydroelectric Power Generation
Issued EPA ID Date: 2002-09-03 10:07:34.84300
Inactive Date: 2018-06-30 00:00:00
Facility Name: G W F ENERGY LLC
Facility Address: 14950 W SCHULTE RD
Facility Address 2: Not reported
Facility City: TRACY
Facility County: Not reported
Facility State: CA
Facility Zip: 95377

EPA ID: CAL000258560
Create Date: 2009-12-03 12:41:18.000
NAICS Code: 221122
NAICS Description: Electric Power Distribution
Issued EPA ID Date: 2002-09-03 10:07:34.84300
Inactive Date: 2018-06-30 00:00:00
Facility Name: G W F ENERGY LLC
Facility Address: 14950 W SCHULTE RD
Facility Address 2: Not reported
Facility City: TRACY
Facility County: Not reported
Facility State: CA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

S113121836

Facility Zip: 95377

A11
Target
Property
I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
14950 W SCHULTE RD
TRACY, CA 95377

ECHO **1026019968**
N/A

Site 11 of 15 in cluster A

Actual:
175 ft.

ECHO:
Envid: 1026019968
Registry ID: 110070633408
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110070633408>
Name: I-474 L-002 MP 122.14-158 ILI PIGGING (LOCATION I)
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377

A12
Target
Property
G W F ENERGY LLC
14950 W SCHULTE RD
TRACY, CA 95377

FINDS **1024663804**
ECHO **N/A**

Site 12 of 15 in cluster A

Actual:
175 ft.

FINDS:
Registry ID: 110070452198

[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: 1024663804
Registry ID: 110070452198
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110070452198>
Name: G W F ENERGY LLC
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 95377

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A13
Target
Property

ALTAGAS SAN JOAQUIN ENERGY TRACY COMBINED CYCLE PO
14950 W SCHULTE RD
TRACY, CA 94509

FINDS
ECHO

1023699056
N/A

Site 13 of 15 in cluster A

Actual:
175 ft.

FINDS:
Registry ID: 110070096155

[Click Here for FRS Facility Detail Report:](#)

Environmental Interest/Information System:

AIR PROGRAM
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Registry ID: 110070633408

[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.
HAZARDOUS WASTE BIENNIAL REPORTER

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1023699056
Registry ID: 110070096155
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110070096155>
Name: ALTAGAS SAN JOAQUIN ENERGY TRACY COMBINED CYCLE POWER PLANT
Address: 14950 W SCHULTE RD
City,State,Zip: TRACY, CA 94509

A14
Target
Property

TRACY COMBINED CYCLE POWER PLANT
14950 W SCHULTE RD
TRACY, CA 95377

RCRA NonGen / NLR
1024853913
CAL000414217

Site 14 of 15 in cluster A

Actual:
175 ft.

RCRA NonGen / NLR:
Date Form Received by Agency: 20160210
Handler Name: TRACY COMBINED CYCLE POWER PLANT
Handler Address: 14950 W SCHULTE RD
Handler City,State,Zip: TRACY, CA 95377
EPA ID: CAL000414217
Contact Name: NEFTALI NEVAREZ
Contact Address: 14950 W. SHCULTE RD.
Contact City,State,Zip: TRACY, CA 95377
Contact Telephone: 209-248-6843

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRACY COMBINED CYCLE POWER PLANT (Continued)

1024853913

Contact Fax:	Not reported
Contact Email:	NEFTALI.NEVAREZ@ALTAGAS.CA
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:	14950 W. SHCULTE RD.
Mailing City,State,Zip:	TRACY, CA 95377
Owner Name:	ALTAGAS SAN JOAQUIN ENERGY INC
Owner Type:	Other
Operator Name:	NEFTALI NEVAREZ
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
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRACY COMBINED CYCLE POWER PLANT (Continued)

1024853913

Groundwater Controls Indicator:	N/A
Operating TSD 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:	ALTAGAS SAN JOAQUIN ENERGY INC
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1717 MCKINNEY AVE STE 1040
Owner/Operator City,State,Zip:	DALLAS, TX 75202
Owner/Operator Telephone:	760-529-2730
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NEFTALI NEVAREZ
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	14950 W. SHCULTE RD.
Owner/Operator City,State,Zip:	TRACY, CA 95377
Owner/Operator Telephone:	209-248-6843
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20160210
Handler Name:	TRACY COMBINED CYCLE POWER PLANT
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TRACY COMBINED CYCLE POWER PLANT (Continued)

1024853913

List of NAICS Codes and Descriptions:

NAICS Code: 221122
NAICS Description: ELECTRIC POWER DISTRIBUTION

Facility Has Received Notices of Violations:

Violations: No Violations Found

Evaluation Action Summary:

Evaluations: No Evaluations Found

**A15
Target
Property**

**G W F ENERGY LLC
14950 W SCHULTE RD
TRACY, CA 95377**

RCRA NonGen / NLR

**1024804520
CAL000258560**

Site 15 of 15 in cluster A

**Actual:
175 ft.**

RCRA NonGen / NLR:
Date Form Received by Agency: 20020903
Handler Name: G W F ENERGY LLC
Handler Address: 14950 W SCHULTE RD
Handler City,State,Zip: TRACY, CA 95377
EPA ID: CAL000258560
Contact Name: RICK VOGLER
Contact Address: 14950 W. SCHULTE RD.
Contact City,State,Zip: TRACY, CA 95377-8608
Contact Telephone: 925-766-7492
Contact Fax: Not reported
Contact Email: RICHARD.VOGLER@ALTAGAS.CA
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: 14950 W SCHULTE RD
Mailing City,State,Zip: TRACY, CA 95377
Owner Name: GWF ENERGY LLC
Owner Type: Other
Operator Name: RICK VOGLER
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

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

1024804520

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
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:	RICK VOGLER
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	14950 W. SCHULTE RD.
Owner/Operator City,State,Zip:	TRACY, CA 95377-8608
Owner/Operator Telephone:	925-766-7492
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

G W F ENERGY LLC (Continued)

1024804520

Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name: GWF ENERGY LLC	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	14950 W SCHULTE RD
Owner/Operator City,State,Zip:	TRACY, CA 95377
Owner/Operator Telephone:	209-836-1605
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20020903
Handler Name:	G W F ENERGY LLC
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:	221111
NAICS Description:	HYDROELECTRIC POWER GENERATION
NAICS Code:	221122
NAICS Description:	ELECTRIC POWER DISTRIBUTION

Facility Has Received Notices of Violations:

Violations:	No Violations Found
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Evaluation Action Summary:

Evaluations:	No Evaluations Found
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Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
TRACY	S128200154	SOUTHERNCARLSON, INC (OA)	5849 W SCHULTE RD BLDG 23	95377	CERS HAZ WASTE, CERS

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: 04/27/2022	Source: EPA
Date Data Arrived at EDR: 05/05/2022	Telephone: N/A
Date Made Active in Reports: 05/31/2022	Last EDR Contact: 08/02/2022
Number of Days to Update: 26	Next Scheduled EDR Contact: 10/10/2022
	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 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

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: 04/27/2022	Source: EPA
Date Data Arrived at EDR: 05/05/2022	Telephone: N/A
Date Made Active in Reports: 05/31/2022	Last EDR Contact: 08/02/2022
Number of Days to Update: 26	Next Scheduled EDR Contact: 10/10/2022
	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 10/10/2022
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: 06/27/2022
Next Scheduled EDR Contact: 10/10/2022
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 known 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: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 04/27/2022	Source: EPA
Date Data Arrived at EDR: 05/05/2022	Telephone: 800-424-9346
Date Made Active in Reports: 05/31/2022	Last EDR Contact: 08/02/2022
Number of Days to Update: 26	Next Scheduled EDR Contact: 10/24/2022
	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	Source: EPA
Date Data Arrived at EDR: 06/21/2022	Telephone: 800-424-9346
Date Made Active in Reports: 06/28/2022	Last EDR Contact: 06/21/2022
Number of Days to Update: 7	Next Scheduled EDR Contact: 10/03/2022
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/21/2022	Telephone: (415) 495-8895
Date Made Active in Reports: 06/28/2022	Last EDR Contact: 06/21/2022
Number of Days to Update: 7	Next Scheduled EDR Contact: 10/03/2022
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/21/2022	Telephone: (415) 495-8895
Date Made Active in Reports: 06/28/2022	Last EDR Contact: 06/21/2022
Number of Days to Update: 7	Next Scheduled EDR Contact: 10/03/2022
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/21/2022	Telephone: (415) 495-8895
Date Made Active in Reports: 06/28/2022	Last EDR Contact: 06/21/2022
Number of Days to Update: 7	Next Scheduled EDR Contact: 10/03/2022
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/21/2022	Telephone: (415) 495-8895
Date Made Active in Reports: 06/28/2022	Last EDR Contact: 06/21/2022
Number of Days to Update: 7	Next Scheduled EDR Contact: 10/03/2022
	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: 05/16/2022	Source: Department of the Navy
Date Data Arrived at EDR: 05/19/2022	Telephone: 843-820-7326
Date Made Active in Reports: 07/29/2022	Last EDR Contact: 08/03/2022
Number of Days to Update: 71	Next Scheduled EDR Contact: 11/21/2022
	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: 05/16/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/24/2022	Telephone: 703-603-0695
Date Made Active in Reports: 07/29/2022	Last EDR Contact: 05/24/2022
Number of Days to Update: 66	Next Scheduled EDR Contact: 09/05/2022
	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: 05/16/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/24/2022	Telephone: 703-603-0695
Date Made Active in Reports: 07/29/2022	Last EDR Contact: 05/04/2022
Number of Days to Update: 66	Next Scheduled EDR Contact: 09/05/2022
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/15/2022

Next Scheduled EDR Contact: 10/03/2022

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: 04/25/2022

Date Data Arrived at EDR: 04/26/2022

Date Made Active in Reports: 07/15/2022

Number of Days to Update: 80

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 07/25/2022

Next Scheduled EDR Contact: 11/07/2022

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 identifies 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: 04/25/2022

Date Data Arrived at EDR: 04/26/2022

Date Made Active in Reports: 07/15/2022

Number of Days to Update: 80

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 07/25/2022

Next Scheduled EDR Contact: 11/07/2022

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 inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/09/2022

Date Data Arrived at EDR: 05/09/2022

Date Made Active in Reports: 07/29/2022

Number of Days to Update: 81

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 08/08/2022

Next Scheduled EDR Contact: 11/21/2022

Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 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

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: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
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 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: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
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: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/23/2022

Next Scheduled EDR Contact: 09/19/2022

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/29/2022
Next Scheduled EDR Contact: 10/17/2022
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: 03/07/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/08/2022	Telephone: 916-327-7844
Date Made Active in Reports: 06/03/2022	Last EDR Contact: 06/09/2022
Number of Days to Update: 87	Next Scheduled EDR Contact: 09/19/2022
	Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/07/2022	Source: SWRCB
Date Data Arrived at EDR: 03/08/2022	Telephone: 916-341-5851
Date Made Active in Reports: 06/02/2022	Last EDR Contact: 06/07/2022
Number of Days to Update: 86	Next Scheduled EDR Contact: 09/19/2022
	Data Release Frequency: Semi-Annually

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 05/23/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/23/2022	Telephone: 866-480-1028
Date Made Active in Reports: 06/02/2022	Last EDR Contact: 05/23/2022
Number of Days to Update: 10	Next Scheduled EDR Contact: 09/19/2022
	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	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 06/09/2022
Number of Days to Update: 69	Next Scheduled EDR Contact: 09/26/2022
	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: 05/28/2021	Source: EPA Region 4
Date Data Arrived at EDR: 06/22/2021	Telephone: 404-562-9424
Date Made Active in Reports: 09/20/2021	Last EDR Contact: 06/13/2022
Number of Days to Update: 90	Next Scheduled EDR Contact: 10/31/2022
	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: 04/06/2021	Source: EPA Region 5
Date Data Arrived at EDR: 06/11/2021	Telephone: 312-886-6136
Date Made Active in Reports: 09/07/2021	Last EDR Contact: 06/13/2022
Number of Days to Update: 88	Next Scheduled EDR Contact: 10/31/2022
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/14/2021	Source: EPA, Region 1
Date Data Arrived at EDR: 11/15/2021	Telephone: 617-918-1313
Date Made Active in Reports: 02/08/2022	Last EDR Contact: 06/13/2022
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/31/2022
	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: 10/12/2021	Source: EPA Region 10
Date Data Arrived at EDR: 11/15/2021	Telephone: 206-553-2857
Date Made Active in Reports: 02/08/2022	Last EDR Contact: 06/13/2022
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/31/2022
	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: 10/12/2021	Source: EPA Region 7
Date Data Arrived at EDR: 11/15/2021	Telephone: 913-551-7003
Date Made Active in Reports: 02/08/2022	Last EDR Contact: 06/13/2022
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/31/2022
	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: 10/12/2021	Source: EPA Region 8
Date Data Arrived at EDR: 11/15/2021	Telephone: 303-312-6137
Date Made Active in Reports: 02/08/2022	Last EDR Contact: 06/13/2022
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/31/2022
	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: 10/12/2021	Source: EPA Region 9
Date Data Arrived at EDR: 11/15/2021	Telephone: 415-972-3368
Date Made Active in Reports: 02/08/2022	Last EDR Contact: 06/13/2022
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/31/2022
	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: 10/12/2021	Source: EPA Region 6
Date Data Arrived at EDR: 11/15/2021	Telephone: 214-665-7591
Date Made Active in Reports: 02/08/2022	Last EDR Contact: 06/13/2022
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/31/2022
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Lists of state and tribal voluntary cleanup sites

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: 04/25/2022
Date Data Arrived at EDR: 04/26/2022
Date Made Active in Reports: 07/15/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Listing

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: 06/15/2022
Next Scheduled EDR Contact: 10/03/2022
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfields 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: 03/21/2022
Date Data Arrived at EDR: 03/21/2022
Date Made Active in Reports: 06/14/2022
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/21/2022
Next Scheduled EDR Contact: 10/03/2022
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: 08/08/2022
Next Scheduled EDR Contact: 09/26/2022
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 86

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 90

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 11/21/2022
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: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
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: 07/12/2022
Next Scheduled EDR Contact: 10/31/2022
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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 Services, Indian Health Service

Telephone: 301-443-1452

Last EDR Contact: 07/21/2022

Next Scheduled EDR Contact: 11/07/2022

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: 04/30/2022

Date Data Arrived at EDR: 05/24/2022

Date Made Active in Reports: 07/29/2022

Number of Days to Update: 66

Source: Drug Enforcement Administration

Telephone: 202-307-1000

Last EDR Contact: 05/24/2022

Next Scheduled EDR Contact: 09/05/2022

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: 04/25/2022

Date Data Arrived at EDR: 04/26/2022

Date Made Active in Reports: 07/15/2022

Number of Days to Update: 80

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 07/25/2022

Next Scheduled EDR Contact: 11/07/2022

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: 08/09/2022

Next Scheduled EDR Contact: 10/17/2022

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/18/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 84

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
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: 04/30/2022
Date Data Arrived at EDR: 05/24/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 66

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Quarterly

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: 02/20/2020
Date Data Arrived at EDR: 12/10/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 06/10/2022
Next Scheduled EDR Contact: 09/19/2022
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: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 86

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/21/2022
Number of Days to Update: 76

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

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: 04/18/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 84

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Quarterly

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

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: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
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: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 10/10/2022
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 02/28/2022	Source: DTSC and SWRCB
Date Data Arrived at EDR: 02/28/2022	Telephone: 916-323-3400
Date Made Active in Reports: 05/25/2022	Last EDR Contact: 05/31/2022
Number of Days to Update: 86	Next Scheduled EDR Contact: 09/12/2022
	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: 03/21/2022	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/21/2022	Telephone: 202-366-4555
Date Made Active in Reports: 06/14/2022	Last EDR Contact: 06/21/2022
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/03/2022
	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: 04/03/2022	Source: Office of Emergency Services
Date Data Arrived at EDR: 04/19/2022	Telephone: 916-845-8400
Date Made Active in Reports: 07/12/2022	Last EDR Contact: 07/18/2022
Number of Days to Update: 84	Next Scheduled EDR Contact: 10/31/2022
	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	Source: State Water Quality Control Board
Date Data Arrived at EDR: 05/23/2022	Telephone: 866-480-1028
Date Made Active in Reports: 05/24/2022	Last EDR Contact: 05/23/2022
Number of Days to Update: 1	Next Scheduled EDR Contact: 09/19/2022
	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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/23/2022	Telephone: 866-480-1028
Date Made Active in Reports: 05/24/2022	Last EDR Contact: 05/23/2022
Number of Days to Update: 1	Next Scheduled EDR Contact: 09/19/2022
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/21/2022
Next Scheduled EDR Contact: 10/03/2022
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: 05/11/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 73

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
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: 07/13/2022
Next Scheduled EDR Contact: 10/24/2022
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: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/03/2022
Next Scheduled EDR Contact: 11/21/2022
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: 03/21/2022
Date Data Arrived at EDR: 03/21/2022
Date Made Active in Reports: 06/14/2022
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/21/2022
Next Scheduled EDR Contact: 10/03/2022
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: 07/29/2022
Next Scheduled EDR Contact: 11/14/2022
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: 08/04/2022
Next Scheduled EDR Contact: 11/14/2022
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: 06/14/2022
Next Scheduled EDR Contact: 09/26/2022
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/11/2022
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: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
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: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 09/12/2022
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: 07/14/2022
Next Scheduled EDR Contact: 10/31/2022
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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 01/25/2022	Source: EPA
Date Data Arrived at EDR: 02/03/2022	Telephone: 202-564-6023
Date Made Active in Reports: 02/25/2022	Last EDR Contact: 08/02/2022
Number of Days to Update: 22	Next Scheduled EDR Contact: 11/14/2022
	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	Source: EPA
Date Data Arrived at EDR: 01/20/2022	Telephone: 202-566-0500
Date Made Active in Reports: 03/25/2022	Last EDR Contact: 07/08/2022
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/17/2022
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 06/28/2022
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/17/2022
	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	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	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	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	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: 03/11/2022	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 03/15/2022	Telephone: 301-415-7169
Date Made Active in Reports: 06/14/2022	Last EDR Contact: 07/13/2022
Number of Days to Update: 91	Next Scheduled EDR Contact: 10/31/2022
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: Department of Energy
Date Data Arrived at EDR: 11/30/2021	Telephone: 202-586-8719
Date Made Active in Reports: 02/22/2022	Last EDR Contact: 06/02/2022
Number of Days to Update: 84	Next Scheduled EDR Contact: 09/12/2022
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 05/25/2022
Number of Days to Update: 251	Next Scheduled EDR Contact: 09/12/2022
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 08/04/2022
Number of Days to Update: 96	Next Scheduled EDR Contact: 11/14/2022
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 06/23/2022
Number of Days to Update: 84	Next Scheduled EDR Contact: 10/10/2022
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 Transportation, 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 Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 11/07/2022
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: 03/31/2022
Date Data Arrived at EDR: 04/14/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 89

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/29/2022
Next Scheduled EDR Contact: 10/17/2022
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: 06/21/2022
Next Scheduled EDR Contact: 10/03/2022
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: 07/08/2022
Next Scheduled EDR Contact: 10/17/2022
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: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/10/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 08/01/2022
Next Scheduled EDR Contact: 10/10/2022
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 1931 and 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

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: 05/02/2022
Date Data Arrived at EDR: 05/25/2022
Date Made Active in Reports: 07/29/2022
Number of Days to Update: 65

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admin
Telephone: 202-693-9424
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Quarterly

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: 05/27/2022
Next Scheduled EDR Contact: 09/05/2022
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: 05/27/2022
Next Scheduled EDR Contact: 09/05/2022
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: 03/10/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 06/14/2022
Number of Days to Update: 96

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/14/2022
Next Scheduled EDR Contact: 09/19/2022
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: 05/13/2022
Date Data Arrived at EDR: 05/18/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 13

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/18/2022
Next Scheduled EDR Contact: 09/12/2022
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: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/07/2022

Next Scheduled EDR Contact: 10/24/2022

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: 04/02/2022

Date Data Arrived at EDR: 04/05/2022

Date Made Active in Reports: 06/28/2022

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 202-564-2280

Last EDR Contact: 07/01/2022

Next Scheduled EDR Contact: 10/17/2022

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: 05/16/2022

Date Data Arrived at EDR: 05/17/2022

Date Made Active in Reports: 07/29/2022

Number of Days to Update: 73

Source: EPA

Telephone: 800-385-6164

Last EDR Contact: 08/11/2022

Next Scheduled EDR Contact: 11/28/2022

Data Release Frequency: Quarterly

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: 03/21/2022

Date Data Arrived at EDR: 03/21/2022

Date Made Active in Reports: 06/14/2022

Number of Days to Update: 85

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400

Last EDR Contact: 06/21/2022

Next Scheduled EDR Contact: 10/03/2022

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: 08/11/2022

Next Scheduled EDR Contact: 11/21/2022

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
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: 06/01/2022
Next Scheduled EDR Contact: 09/12/2022
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: 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: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
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: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/13/2022
Next Scheduled EDR Contact: 09/26/2022
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: 04/12/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 42

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/19/2022
Date Data Arrived at EDR: 04/29/2022
Date Made Active in Reports: 07/15/2022
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/21/2022
Next Scheduled EDR Contact: 10/31/2022
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 83

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/02/2022
Next Scheduled EDR Contact: 11/21/2022
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: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/05/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/16/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
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: 05/16/2022
Date Data Arrived at EDR: 05/17/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/11/2022
Next Scheduled EDR Contact: 11/28/2022
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: 04/05/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 06/27/2022
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/05/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/07/2022

Date Data Arrived at EDR: 03/08/2022

Date Made Active in Reports: 06/01/2022

Number of Days to Update: 85

Source: Department of Conservation

Telephone: 916-322-1080

Last EDR Contact: 06/07/2022

Next Scheduled EDR Contact: 09/19/2022

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: 02/17/2022

Date Data Arrived at EDR: 02/28/2022

Date Made Active in Reports: 05/25/2022

Number of Days to Update: 86

Source: Department of Public Health

Telephone: 916-558-1784

Last EDR Contact: 05/31/2022

Next Scheduled EDR Contact: 09/12/2022

Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/09/2022

Date Data Arrived at EDR: 05/09/2022

Date Made Active in Reports: 07/29/2022

Number of Days to Update: 81

Source: State Water Resources Control Board

Telephone: 916-445-9379

Last EDR Contact: 08/08/2022

Next Scheduled EDR Contact: 11/21/2022

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: 02/28/2022

Date Data Arrived at EDR: 02/28/2022

Date Made Active in Reports: 05/25/2022

Number of Days to Update: 86

Source: Department of Pesticide Regulation

Telephone: 916-445-4038

Last EDR Contact: 05/31/2022

Next Scheduled EDR Contact: 09/12/2022

Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/07/2022

Date Data Arrived at EDR: 03/08/2022

Date Made Active in Reports: 06/02/2022

Number of Days to Update: 86

Source: Department of Conservation

Telephone: 916-323-3836

Last EDR Contact: 06/07/2022

Next Scheduled EDR Contact: 09/19/2022

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: 03/11/2022

Date Data Arrived at EDR: 03/15/2022

Date Made Active in Reports: 06/08/2022

Number of Days to Update: 85

Source: State Water Resources Control Board

Telephone: 916-445-3846

Last EDR Contact: 06/09/2022

Next Scheduled EDR Contact: 09/26/2022

Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/07/2022	Source: Department of Conservation
Date Data Arrived at EDR: 03/08/2022	Telephone: 916-445-2408
Date Made Active in Reports: 06/02/2022	Last EDR Contact: 06/07/2022
Number of Days to Update: 86	Next Scheduled EDR Contact: 09/19/2022
	Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 05/23/2022	Source: State Water Resource Control Board
Date Data Arrived at EDR: 05/23/2022	Telephone: 866-480-1028
Date Made Active in Reports: 06/02/2022	Last EDR Contact: 05/23/2022
Number of Days to Update: 10	Next Scheduled EDR Contact: 09/19/2022
	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	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 07/01/2021	Telephone: 559-445-5577
Date Made Active in Reports: 09/29/2021	Last EDR Contact: 07/08/2022
Number of Days to Update: 90	Next Scheduled EDR Contact: 10/17/2022
	Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 08/09/2022
Number of Days to Update: 9	Next Scheduled EDR Contact: 11/28/2022
	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	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 06/14/2022
Number of Days to Update: 13	Next Scheduled EDR Contact: 10/03/2022
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 05/23/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/23/2022	Telephone: 866-480-1028
Date Made Active in Reports: 06/02/2022	Last EDR Contact: 05/23/2022
Number of Days to Update: 10	Next Scheduled EDR Contact: 09/19/2022
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
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: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/03/2022
Number of Days to Update: 87

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
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: 02/28/2022
Date Data Arrived at EDR: 02/28/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 86

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 05/31/2022
Next Scheduled EDR Contact: 09/12/2022
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: 04/18/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 84

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
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: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
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: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
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: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
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: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
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: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

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: 07/06/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

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: 05/27/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Varies

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: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
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: 06/29/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
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: 06/28/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 03/17/2022
Date Data Arrived at EDR: 03/18/2022
Date Made Active in Reports: 06/08/2022
Number of Days to Update: 82

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/14/2022
Next Scheduled EDR Contact: 10/03/2022
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: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
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: 04/21/2022
Date Data Arrived at EDR: 04/22/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 81

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 02/16/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 82

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/20/2022
Next Scheduled EDR Contact: 11/07/2022
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: 07/01/2022
Next Scheduled EDR Contact: 10/10/2022
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: 07/12/2022
Next Scheduled EDR Contact: 10/31/2022
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: 08/09/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 04/18/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 84

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/31/2022
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: 08/09/2022
Next Scheduled EDR Contact: 11/28/2022
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: 08/09/2022
Next Scheduled EDR Contact: 11/14/2022
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: 08/09/2022
Next Scheduled EDR Contact: 11/14/2022
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: 08/09/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

LAKE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 02/10/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 82

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/07/2022
Next Scheduled EDR Contact: 10/24/2022
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: 07/12/2022
Next Scheduled EDR Contact: 10/31/2022
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: 06/09/2022
Next Scheduled EDR Contact: 09/26/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/04/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 8

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 06/29/2022
Next Scheduled EDR Contact: 10/17/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/11/2022
Date Data Arrived at EDR: 04/12/2022
Date Made Active in Reports: 07/05/2022
Number of Days to Update: 84

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/11/2022
Next Scheduled EDR Contact: 10/24/2022
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: 07/06/2022
Next Scheduled EDR Contact: 10/24/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 06/14/2022
Number of Days to Update: 58	Next Scheduled EDR Contact: 10/03/2022
	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	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 01/12/2022	Telephone: 626-458-6973
Date Made Active in Reports: 04/04/2022	Last EDR Contact: 07/06/2022
Number of Days to Update: 82	Next Scheduled EDR Contact: 10/24/2022
	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	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 03/21/2022	Telephone: 213-978-3800
Date Made Active in Reports: 06/15/2022	Last EDR Contact: 06/24/2022
Number of Days to Update: 86	Next Scheduled EDR Contact: 10/03/2022
	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: 01/13/2022	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 03/21/2022	Telephone: 213-978-3800
Date Made Active in Reports: 06/15/2022	Last EDR Contact: 06/24/2022
Number of Days to Update: 86	Next Scheduled EDR Contact: 10/03/2022
	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	Source: Community Health Services
Date Data Arrived at EDR: 07/09/2021	Telephone: 323-890-7806
Date Made Active in Reports: 09/29/2021	Last EDR Contact: 07/14/2022
Number of Days to Update: 82	Next Scheduled EDR Contact: 10/24/2022
	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	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 07/06/2022
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/24/2022
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 07/12/2022
Number of Days to Update: 65	Next Scheduled EDR Contact: 10/31/2022
	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: 04/20/2022	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 04/21/2022	Telephone: 310-618-2973
Date Made Active in Reports: 07/12/2022	Last EDR Contact: 07/13/2022
Number of Days to Update: 82	Next Scheduled EDR Contact: 10/31/2022
	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	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 08/09/2022
Number of Days to Update: 72	Next Scheduled EDR Contact: 11/28/2022
	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	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 06/22/2022
Number of Days to Update: 29	Next Scheduled EDR Contact: 10/10/2022
	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	Source: Department of Public Health
Date Data Arrived at EDR: 11/18/2021	Telephone: 707-463-4466
Date Made Active in Reports: 11/22/2021	Last EDR Contact: 05/19/2022
Number of Days to Update: 4	Next Scheduled EDR Contact: 09/05/2022
	Data Release Frequency: Annually

MERCED COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/09/2022
Next Scheduled EDR Contact: 11/28/2022
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: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
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: 08/02/2022
Next Scheduled EDR Contact: 10/10/2022
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: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
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: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/19/2022
Next Scheduled EDR Contact: 11/07/2022
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 05/09/2022
Date Made Active in Reports: 07/28/2022
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/29/2022
Next Scheduled EDR Contact: 11/14/2022
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: 07/29/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 05/03/2022
Date Made Active in Reports: 07/20/2022
Number of Days to Update: 78

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/01/2022
Next Scheduled EDR Contact: 11/14/2022
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: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
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: 07/12/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

RIVERSIDE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/31/2022

Date Data Arrived at EDR: 03/31/2022

Date Made Active in Reports: 04/08/2022

Number of Days to Update: 8

Source: Department of Environmental Health

Telephone: 951-358-5055

Last EDR Contact: 06/09/2022

Next Scheduled EDR Contact: 09/26/2022

Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 03/31/2022

Date Data Arrived at EDR: 03/31/2022

Date Made Active in Reports: 04/08/2022

Number of Days to Update: 8

Source: Department of Environmental Health

Telephone: 951-358-5055

Last EDR Contact: 06/09/2022

Next Scheduled EDR Contact: 09/26/2022

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: 06/30/2022

Next Scheduled EDR Contact: 10/10/2022

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: 06/30/2022

Next Scheduled EDR Contact: 10/10/2022

Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 04/29/2022

Date Data Arrived at EDR: 04/29/2022

Date Made Active in Reports: 05/05/2022

Number of Days to Update: 6

Source: San Benito County Environmental Health

Telephone: N/A

Last EDR Contact: 07/26/2022

Next Scheduled EDR Contact: 11/14/2022

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
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: 02/28/2022
Date Data Arrived at EDR: 02/28/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 86

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/31/2022
Next Scheduled EDR Contact: 09/12/2022
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: 07/12/2022
Next Scheduled EDR Contact: 10/31/2022
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: 07/13/2022
Next Scheduled EDR Contact: 10/31/2022
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: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/28/2022
Number of Days to Update: 83

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversight 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: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
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: 05/05/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/20/2022
Number of Days to Update: 75

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

SAN FRANCISCO 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: 07/05/2022
Next Scheduled EDR Contact: 10/31/2022
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: 06/09/2022
Next Scheduled EDR Contact: 09/26/2022
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 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: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/09/2022
Next Scheduled EDR Contact: 11/28/2022
Data Release Frequency: Varies

SAN MATEO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/10/2022

Next Scheduled EDR Contact: 09/19/2022

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: 06/02/2022

Next Scheduled EDR Contact: 09/19/2022

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: 08/09/2022

Next Scheduled EDR Contact: 11/28/2022

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: 08/09/2022

Next Scheduled EDR Contact: 11/28/2022

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: 05/19/2022

Next Scheduled EDR Contact: 09/05/2022

Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/26/2022

Next Scheduled EDR Contact: 11/14/2022

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: 08/09/2022

Next Scheduled EDR Contact: 11/28/2022

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: 08/09/2022

Next Scheduled EDR Contact: 11/28/2022

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: 05/25/2022

Next Scheduled EDR Contact: 09/12/2022

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: 05/25/2022

Next Scheduled EDR Contact: 09/12/2022

Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List

Cupa Facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/14/2022
Next Scheduled EDR Contact: 10/03/2022
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: 06/14/2022
Next Scheduled EDR Contact: 10/04/2021
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 Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/11/2022
Next Scheduled EDR Contact: 10/24/2022
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: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 07/26/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 04/18/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 07/12/2022
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/13/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Varies

TULARE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/12/2022
Next Scheduled EDR Contact: 11/14/2022
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: 07/12/2022
Next Scheduled EDR Contact: 10/31/2022
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: 03/28/2022
Date Data Arrived at EDR: 04/28/2022
Date Made Active in Reports: 07/15/2022
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
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: 06/22/2022
Next Scheduled EDR Contact: 10/10/2022
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: 08/02/2022
Next Scheduled EDR Contact: 11/21/2022
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: 03/28/2022
Date Data Arrived at EDR: 04/28/2022
Date Made Active in Reports: 07/15/2022
Number of Days to Update: 78

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/18/2022
Next Scheduled EDR Contact: 10/31/2022
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/28/2022

Date Data Arrived at EDR: 03/08/2022

Date Made Active in Reports: 06/02/2022

Number of Days to Update: 86

Source: Environmental Health Division

Telephone: 805-654-2813

Last EDR Contact: 06/07/2022

Next Scheduled EDR Contact: 09/19/2022

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: 03/24/2022

Date Data Arrived at EDR: 03/31/2022

Date Made Active in Reports: 06/27/2022

Number of Days to Update: 88

Source: Yolo County Department of Health

Telephone: 530-666-8646

Last EDR Contact: 06/22/2022

Next Scheduled EDR Contact: 10/10/2022

Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 05/03/2022

Date Data Arrived at EDR: 05/05/2022

Date Made Active in Reports: 07/28/2022

Number of Days to Update: 84

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523

Last EDR Contact: 08/02/2022

Next Scheduled EDR Contact: 11/07/2022

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: 05/08/2022

Date Data Arrived at EDR: 05/09/2022

Date Made Active in Reports: 07/28/2022

Number of Days to Update: 80

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375

Last EDR Contact: 08/08/2022

Next Scheduled EDR Contact: 11/21/2022

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: 06/28/2022

Next Scheduled EDR Contact: 10/17/2022

Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/29/2022
Next Scheduled EDR Contact: 11/07/2022
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: 07/06/2022
Next Scheduled EDR Contact: 10/24/2022
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: 08/10/2022
Next Scheduled EDR Contact: 11/28/2022
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: 06/03/2022
Next Scheduled EDR Contact: 09/19/2022
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 and 2010 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

TRACY COMBINED CYCLE POWER PLANT
14950 WEST SCHULTE ROAD
TRACY, CA 95377

TARGET PROPERTY COORDINATES

Latitude (North):	37.71134 - 37° 42' 40.82"
Longitude (West):	121.490623 - 121° 29' 26.24"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	633044.2
UTM Y (Meters):	4174655.5
Elevation:	175 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12008792 TRACY, CA
Version Date:	2018
Southwest Map:	12008740 MIDWAY, 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).

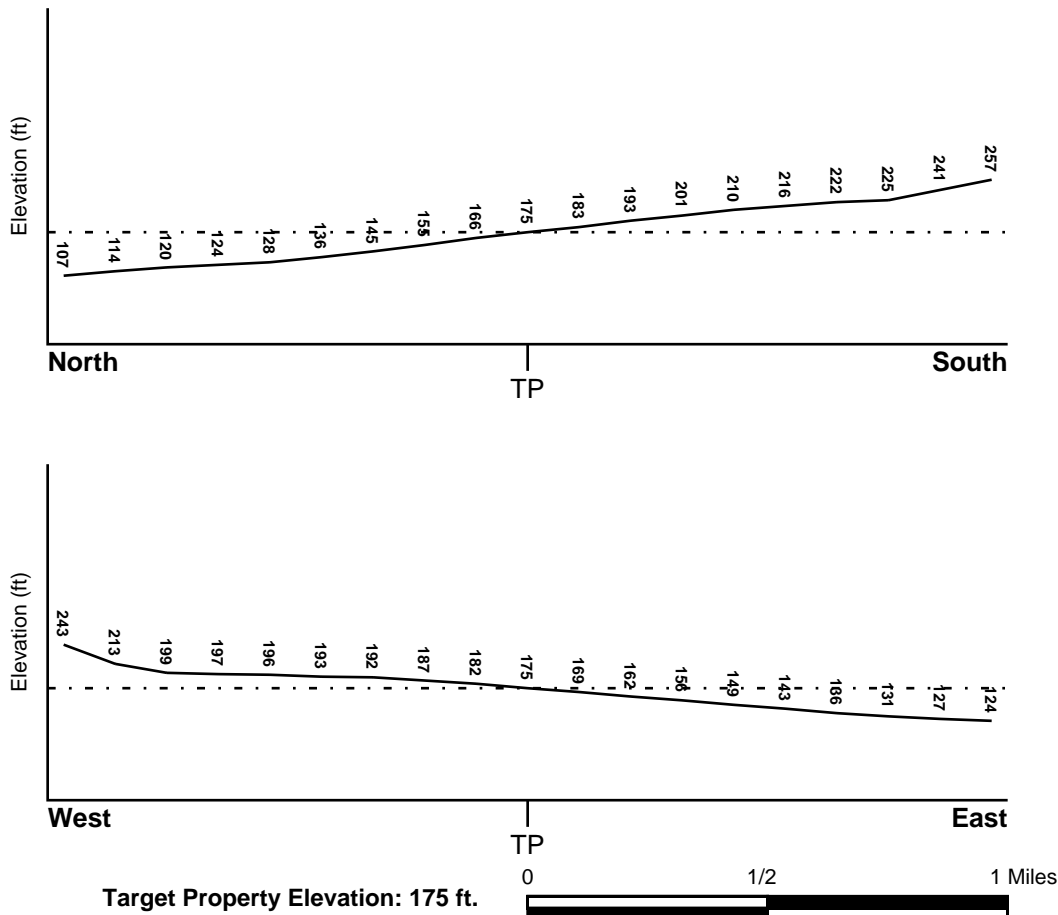
TOPOGRAPHIC INFORMATION

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 NNE

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

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
0602990705A	FEMA Q3 Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06001C0400G	FEMA FIRM Flood data
06077C0725F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
TRACY	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.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

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

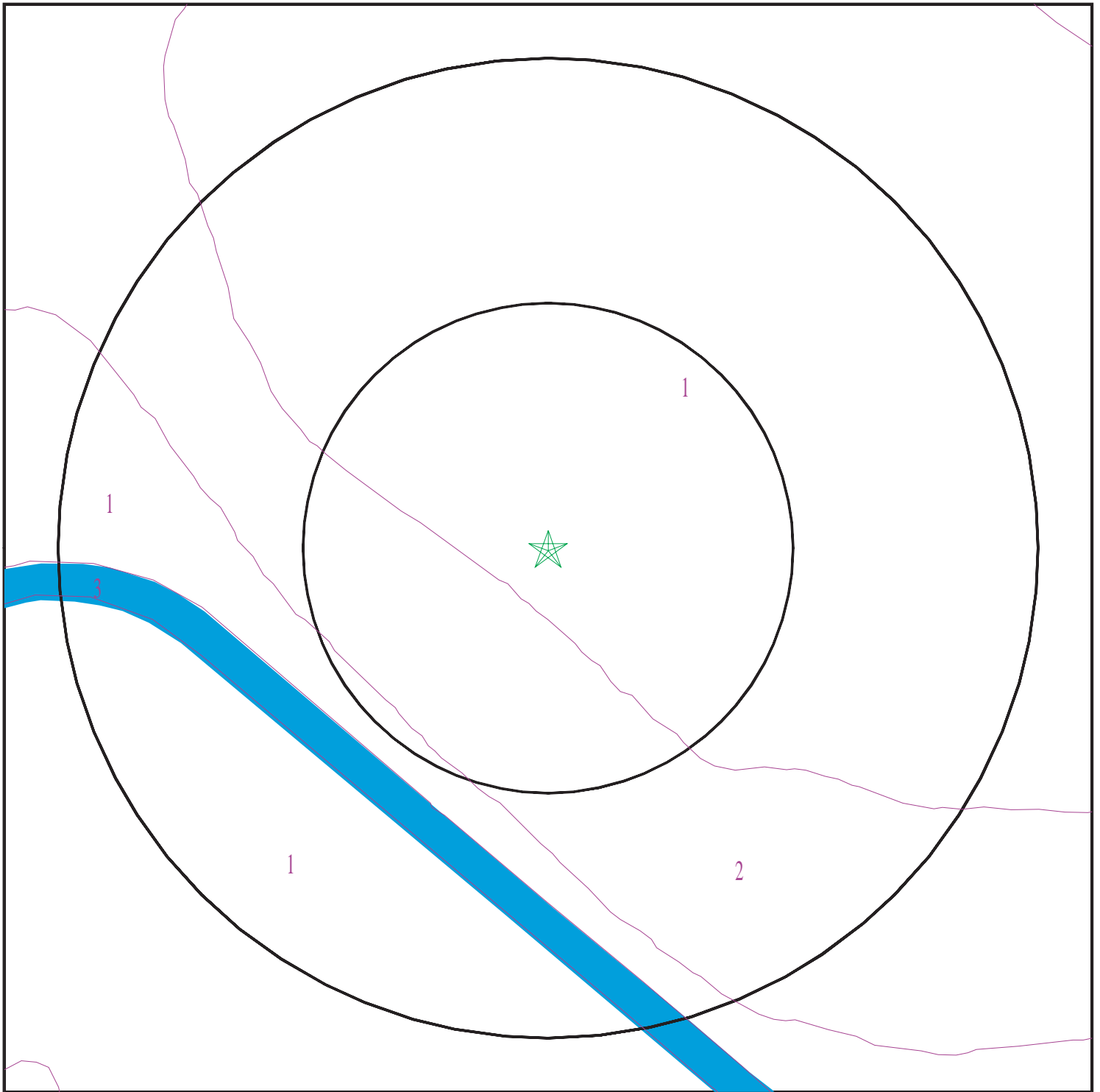
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified 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 - 7085835.2s



- ★ Target Property
- SSURGO Soil
- Water

0 1/16 1/8 1/4 Miles



SITE NAME: Tracy Combined Cycle Power Plant
ADDRESS: 14950 West Schulte Road
Tracy CA 95377
LAT/LONG: 37.71134 / 121.490623

CLIENT: AECOM
CONTACT: Sarah M Perhala
INQUIRY #: 7085835.2s
DATE: August 12, 2022 5:01 pm

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: Capay

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately 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							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
2	20 inches	59 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: STOMAR

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	16 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
2	16 inches	46 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4
3	46 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: Water

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
4	USGS40000185106	1/8 - 1/4 Mile ENE
A5	USGS40000185068	1/4 - 1/2 Mile SSE
B11	USGS40000185132	1/2 - 1 Mile NW
C15	USGS40000185087	1/2 - 1 Mile East
17	USGS40000185073	1/2 - 1 Mile ESE
18	USGS40000185119	1/2 - 1 Mile ENE
D19	USGS40000185093	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

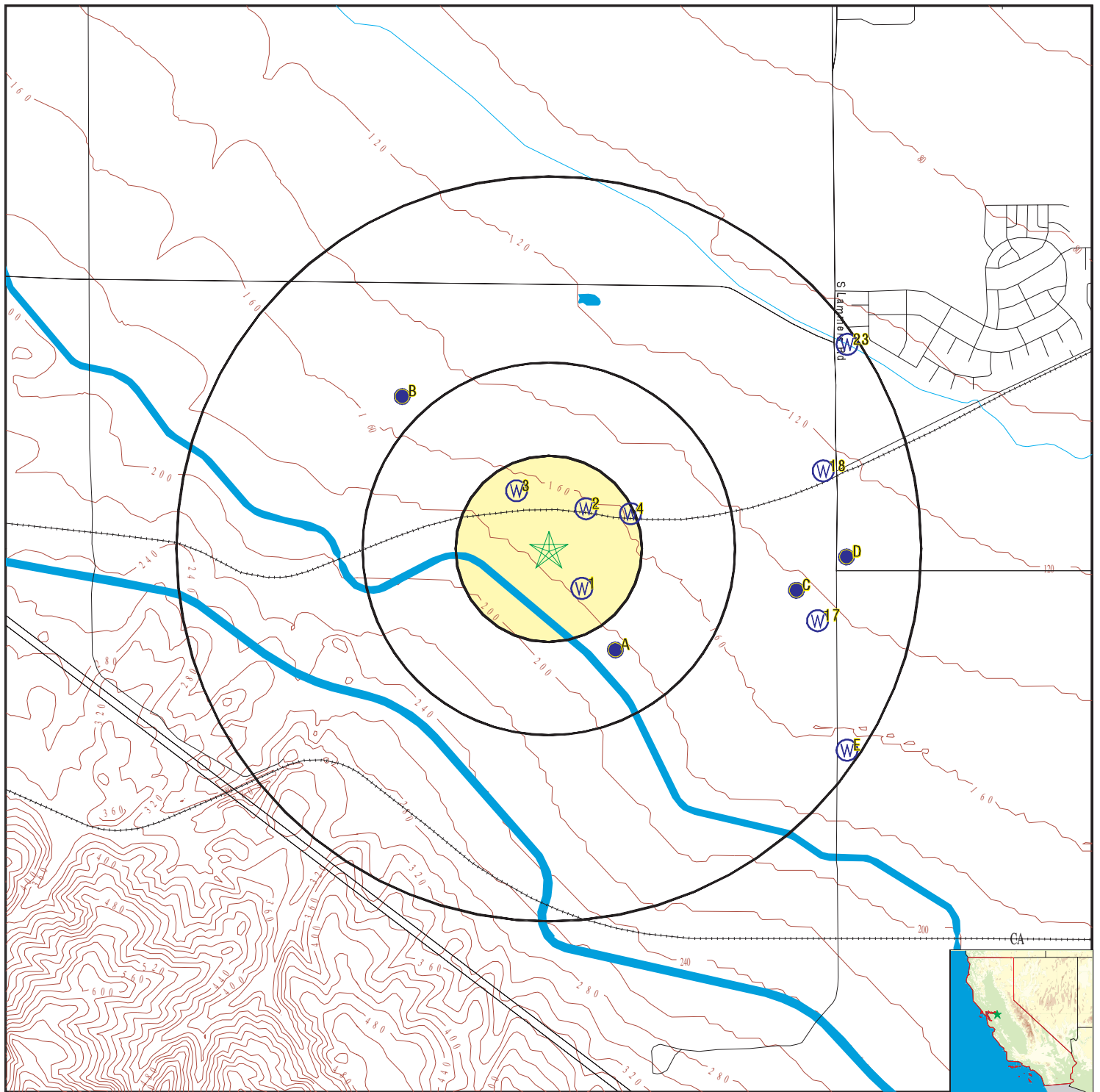
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CADWR0000022705	1/8 - 1/4 Mile SE
2	CADDW0000014782	1/8 - 1/4 Mile NE
3	CADDW0000003498	1/8 - 1/4 Mile NNW
A6	CAUSGSN00000330	1/4 - 1/2 Mile SSE
A7	CADWR9000037207	1/4 - 1/2 Mile SE
A8	CADWR0000014678	1/4 - 1/2 Mile SE
B9	CADWR0000026118	1/2 - 1 Mile NW
B10	CAUSGSN00010609	1/2 - 1 Mile NW
C12	CADWR0000031943	1/2 - 1 Mile East
C13	CADWR0000014941	1/2 - 1 Mile East
C14	CADWR0000009124	1/2 - 1 Mile East
C16	CAUSGSN00015167	1/2 - 1 Mile East
D20	CADWR9000037244	1/2 - 1 Mile East
E21	CADWR9000037189	1/2 - 1 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E22	CADWR0000019813	1/2 - 1 Mile SE
23	CADWR9000037297	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 7085835.2s



- 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
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Tracy Combined Cycle Power Plant
 ADDRESS: 14950 West Schulte Road
 Tracy CA 95377
 LAT/LONG: 37.71134 / 121.490623

CLIENT: AECOM
 CONTACT: Sarah M Perhala
 INQUIRY #: 7085835.2s
 DATE: August 12, 2022 5:01 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
SE
1/8 - 1/4 Mile
Higher

CA WELLS CADWR0000022705

Well ID:	02S04E36P080M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S04E36P080M	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=02S04E36P080M&store_num=		
GeoTracker Data:	Not Reported		

2
NE
1/8 - 1/4 Mile
Lower

CA WELLS CADDW0000014782

Well ID:	3900825-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL	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=3900825-001&store_num=		
GeoTracker Data:	Not Reported		

3
NNW
1/8 - 1/4 Mile
Lower

CA WELLS CADDW0000003498

Well ID:	3900825-009	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL #2	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=3900825-009&store_num=		
GeoTracker Data:	Not Reported		

4
ENE
1/8 - 1/4 Mile
Lower

FED USGS USGS40000185106

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S004E36L001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19610101	Well Depth:	600
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels,Number of Measurements:	1	Level reading date:	1967-05-01
Feet below surface:	180.00	Feet to sea level:	Not Reported
Note:	Not Reported		

A5
SSE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000185068**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S004E36P001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium of the Coast Range, Younger (Pleistocene-Holocene)		
Aquifer Type:	Not Reported	Construction Date:	19510101
Well Depth:	695	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:	1967-02-01
Feet below surface:	211.00	Feet to sea level:	Not Reported
Note:	Not Reported		

A6
SSE
1/4 - 1/2 Mile
Higher

CA WELLS **CAUSGSN00000330**

Well ID:	USGS-374227121291201	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-374227121291201	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-374227121291201&store_num=		
GeoTracker Data:	Not Reported		

A7
SE
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR9000037207**

State Well #:	02S04E36P001M	Station ID:	3013
Well Name:	Not Reported	Basin Name:	Tracy
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

A8
SE
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR0000014678**

Well ID:	02S04E36P001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S04E36P001M	GAMA PFAS Testing:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=02S04E36P001M&store_num=
GeoTracker Data: Not Reported

**B9
NW
1/2 - 1 Mile
Lower**

CA WELLS CADWR0000026118

Well ID: 02S04E35H001M Well Type: UNK
Source: Department of Water Resources
Other Name: 02S04E35H001M 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=02S04E35H001M&store_num=
GeoTracker Data: Not Reported

**B10
NW
1/2 - 1 Mile
Lower**

CA WELLS CAUSGSN00010609

Well ID: USGS-374303121294801 Well Type: UNK
Source: United States Geological Survey
Other Name: USGS-374303121294801 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-374303121294801&store_num=
GeoTracker Data: Not Reported

**B11
NW
1/2 - 1 Mile
Lower**

FED USGS USGS40000185132

Organization ID: USGS-CA
Organization Name: USGS California Water Science Center
Monitor Location: 002S004E35H001M Type: Well
Description: Not Reported HUC: 18040003
Drainage Area: Not Reported Drainage Area Units: Not Reported
Contrib Drainage Area: Not Reported Contrib Drainage Area Units: Not Reported
Aquifer: Central Valley aquifer system
Formation Type: Tulare Formation Aquifer Type: Not Reported
Construction Date: 19610101 Well Depth: 514
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: 1967-05-01
Feet below surface: 186.00 Feet to sea level: Not Reported
Note: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C12
East
1/2 - 1 Mile
Lower

CA WELLS CADWR0000031943

Well ID:	02S04E36R002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S04E36R002M	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=02S04E36R002M&store_num=		
GeoTracker Data:	Not Reported		

C13
East
1/2 - 1 Mile
Lower

CA WELLS CADWR0000014941

Well ID:	02S04E36R003M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S04E36R003M	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=02S04E36R003M&store_num=		
GeoTracker Data:	Not Reported		

C14
East
1/2 - 1 Mile
Lower

CA WELLS CADWR0000009124

Well ID:	02S04E36R001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	02S04E36R001M	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=02S04E36R001M&store_num=		
GeoTracker Data:	Not Reported		

C15
East
1/2 - 1 Mile
Lower

FED USGS USGS40000185087

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S004E36R004M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium of the Coast Range, Younger (Pleistocene-Holocene)		
Aquifer Type:	Not Reported	Construction Date:	19731012
Well Depth:	289	Well Depth Units:	ft
Well Hole Depth:	301	Well Hole Depth Units:	ft

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels,Number of Measurements:	1	Level reading date:	1973-10-12
Feet below surface:	175.00	Feet to sea level:	Not Reported
Note:	Not Reported		

C16
East
1/2 - 1 Mile
Lower

CA WELLS CAUSGSN00015167

Well ID:	USGS-374235121283601	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-374235121283601	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&sample_date=&global_id=&assigned_name=USGS-374235121283601&store_num=		
GeoTracker Data:	Not Reported		

17
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40000185073

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S004E36R003M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	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		

18
ENE
1/2 - 1 Mile
Lower

FED USGS USGS40000185119

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S004E36H001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19450101	Well Depth:	207
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:	1967-04-01
Feet below surface:	121.00	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

D19
East
1/2 - 1 Mile
Lower

FED USGS USGS40000185093

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	002S005E31N001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	200
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:	1967-06-01
Feet below surface:	150.00	Feet to sea level:	Not Reported
Note:	Not Reported		

D20
East
1/2 - 1 Mile
Lower

CA WELLS CADWR9000037244

State Well #:	02S05E31N001M	Station ID:	6740
Well Name:	Not Reported	Basin Name:	Tracy
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

E21
SE
1/2 - 1 Mile
Lower

CA WELLS CADWR9000037189

State Well #:	03S05E06E001M	Station ID:	26870
Well Name:	Not Reported	Basin Name:	Tracy
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

E22
SE
1/2 - 1 Mile
Lower

CA WELLS CADWR0000019813

Well ID:	03S05E06E001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	03S05E06E001M	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=03S05E06E001M&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database

EDR ID Number

23
NE
1/2 - 1 Mile
Lower

CA WELLS

CADWR9000037297

State Well #: 02S05E31E001M
Well Name: Not Reported
Well Use: Unknown
Well Depth: 0

Station ID: 27329
Basin Name: Tracy
Well Type: Unknown
Well Completion Rpt #: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95377	4	0

Federal EPA Radon Zone for SAN JOAQUIN County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level \geq 2 pCi/L and \leq 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN JOAQUIN COUNTY, CA

Number of sites tested: 20

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.530 pCi/L	90%	10%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.050 pCi/L	100%	0%	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 and 2010 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 California's 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 Health 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 States 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 IRRA 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 Qualifications of Environmental Professional

Kristen M. Galeckas

Environmental Geologist

Professional History

Education

BS, Environmental Geoscience,
Boston College

Registrations

Years of Experience

With AECOM 25
With other firms 0

Technical Specialties

Environmental Due Diligence
Environmental Impact Assessment
& Statements

Professional Affiliations

Training and Certifications

OSHA 29 CFR 1910.120 40-Hour
Safety Training
OSHA 29 CFR 1910.120 8-Hour
Refresher Training
Mold Awareness Trained
Asbestos Inspector Trained

Ms. Galeckas has over 25 years of experience in conducting and managing Phase I and Phase II Environmental Site Assessments (ESAs) per ASTM-00, ASTM-05, ASTM-13 and various client standards for commercial and industrial sites located in New England, New York and New Jersey. Some of these assessments including asbestos sampling. The assessments typically involved the generation of a complete site history, regulatory record review, site inspection, and preliminary environmental compliance inspection. Many of the assessments involved further site investigations under the Massachusetts Contingency Plan (MCP) on similar State Legislation. Site investigations have included oversight of the installation of soil borings, shallow overburden and bedrock monitoring wells; the development and implementation of environmental sampling plans for the investigation of soils and groundwater for the presence of hazardous materials; oversight and sampling during underground storage tank removals; determining groundwater flow direction; mapping contaminant plumes; and soil remediation. In addition, Ms. Galeckas has managed or participated in Phase I ESA and/or desktop review style portfolios ranging in size from a handful to approximately 450 properties.

In addition, Ms. Galeckas routinely conducts peer reviews of ESA reports for colleagues throughout the country as well as overseas. Ms. Galeckas has also managed or co-managed due diligence projects overseas in areas such as the Canada, United Kingdom, Germany, France, Spain and China.

Experience

Assessment and Risk Characterization, Massachusetts. Managed the project which involved a release from an underground storage tank (UST) within 50 feet of a Marina. The project included delineating the extent of the contamination to determine if the release had adversely impacted the surface water. After assessment activities were conducted, a Method 2 Risk Characterization and Class A-2 Response Action Outcome (RAO) were filed.

Confidential Bank Client, Phase I/Phase II, Massachusetts, Connecticut, New York, Virginia, New Jersey and Maryland. Managed a portfolio of 12 commercial facilities with Phase I ESAs being conducted by two different offices.

Continued management of the portfolio when Phase II subsurface investigations were conducted at three of the properties.

Confidential Client, Due Diligence Desktop Review, United States. AECOM has conducted desktop review style assessments for four portfolios of low risk use properties, ranging in size from 72 to 270 properties. The scope of work has included review of a database search, a previous report and in some cases a review of commercially obtained historical data sources. No site inspections were performed by AECOM. The deliverable was a summary table with cost estimates based on the concerns. AECOM completed these reviews within one-three weeks, providing an interim summary throughout the project.

Wellsford Capital Properties, LLC, Remedial Investigations-GMP, Salem, New Hampshire. Installation of Geoprobe temporary well points, overburden and bedrock monitoring wells, logging soil and bedrock cores, collecting soil and groundwater samples for laboratory analysis, data analysis, and report preparations for submittal to the New Hampshire Department of Environmental Services (NHDES). We have prepared overburden and bedrock groundwater contour maps, and construction of contaminant plume maps.

Confidential Client, Due Diligence/Groundwater Investigation, Newtown, Connecticut. AECOM was retained to prepare a due diligence environmental assessment in accordance with the Connecticut Transfer Act. Subsequent activities included the removal of a diesel fuel UST, installation of post monitoring wells, and installation of monitoring wells and soil borings to address additional areas of concerns identified through different phases of the investigations. All work was conducted in accordance with the CT Transfer Act and/or Remediation Standard Regulations.

Confidential, Phase II, Norwich, Connecticut. Managed project that included bi-annual groundwater monitoring and included the submission of annual reports to the state.

Aegon USA Realty Advisors, Due Diligence/Remedial Investigations, Keene, New Hampshire. AECOM was contacted to conduct a Ground Penetrating Radar (GPR) survey, soil remediation, install soil borings and monitoring wells to delineate the vertical and horizontal extent of a release of chlorinated solvents, and prepare a Groundwater Management Permit.

JE Robert Co., Limited Phase I ESA's, 5 Boroughs of New York City. AECOM assessed a total of 796 sites in New York City for J.E. Robert Cos. from 1998 through 2001. These projects consisted of 35 portfolios ranging in size from one to 71 sites which were assessed on a three to four week turnaround. The sites consisted of a mix of vacant, residential, commercial and light industrial properties located throughout the five boroughs of New York City. The work consisted of conducting due diligence on tax lien properties under consideration for foreclosure. A streamlined client-specific scope of work was

utilized which maximized research, and took into account a lack of site access for the assessments. Documents were produced and delivered electronically, for ease of client data management.

Archon Group, Real Estate Transaction Assessments, Eastern United States. Performed numerous Real Estate Transaction Assessments and asbestos surveys as part of real estate due diligence. Performed assessments and asbestos surveys in MA, CT, RI, and NH on residential, industrial and commercial properties. Provided quick turnaround for client in order to meet the due diligence deadlines.

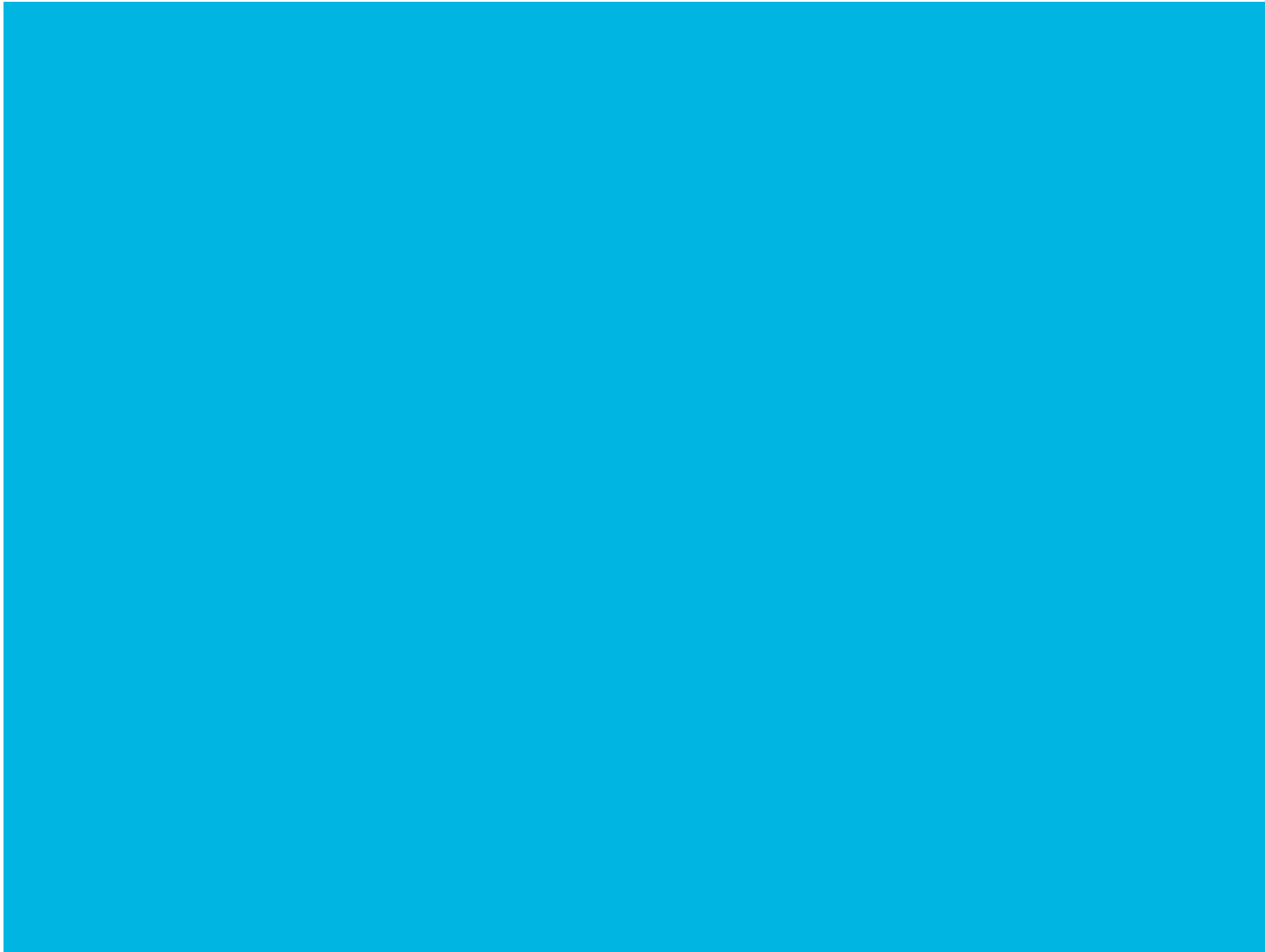
United States Navy, Subsurface Investigation, South Weymouth, Massachusetts. Participated in subsurface investigations conducted at a former naval air station. Remedial activities included monitoring well and soil boring installation, bedrock coring, and soil and groundwater sampling in accordance with the scope of work.

52-56 Roland Street, Charlestown, Massachusetts. Site investigation that culminated in a Method 3 Class B2 RAO supported by an activity and use limitation.

Holt & Bugbee Company, 1600 Shawsheen Street, Tewksbury, Massachusetts. Site investigation that culminated in a Method 1 & 2 Risk Characterization and a Class A-3 RAO supported by an activity and use limitation.

Various Clients, Property Transfers, Due Diligence, Phase II Investigations, Various Locations. Conducted and managed numerous property transfer site assessments with Phase I and Phase II investigations for commercial, industrial, retail and residential properties located throughout New England and New York. These typically involved the generation of a complete site history, regulatory record review, site inspections, and preliminary environmental compliance inspections. In addition, asbestos bulk sampling was conducted at many of the sites. Many of the assessments involved further investigations under the Massachusetts Contingency Plan and Connecticut Transfer Act, or similar state legislation. Some investigations have included installation of overburden and bedrock wells, the development and implementation of environmental sampling plans for the investigation of soil and groundwater, tank removals, and determining groundwater flow direction.

Northeast Petroleum Client, Phase I and Phase II investigations, Northeast. Conducted and managed property transfer site assessments with Phase I and Phase II investigations for commercial properties throughout the Northeast. These typically involved site inspections, site history and a regulatory record review. Many of the assessments included a subsurface investigation which included the advancement of soil borings or monitoring wells with soil and groundwater sampling. In some cases, soil vapor and indoor air surveys were conducted. In addition, bulk sampling for asbestos was conducted at some of these locations.



Appendix F

Noise and Vibration Technical Report



Tracy Long Duration Energy Storage Project

Noise and Vibration Technical Report

prepared for

Tracy BESS LLC

4350 Executive Drive, Suite 320
San Diego, California 92121

prepared by

Rincon Consultants, Inc.

7080 North Whitney Avenue, Suite 101
Fresno, California 93720

August 2024

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Appendix A Graphical Noise Measurement Data (Long-Term Monitoring Location)

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Appendix C Traffic Noise Modeling Results

Appendix D SoundPLAN Modeling Results

1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential noise and vibration impacts associated with the construction and operation of the Tracy Long Duration Energy Storage (LDES) Project (Project) in San Joaquin County, California. The purpose of this study is to analyze the noise and vibration levels related to both temporary construction activity and long-term operation of the Project. Table 1 provides a summary of Project impacts.

Table 1 Summary of Impacts

Issue	Proposed Project's Level of Significance	Applicable Recommendations
Would the project result in 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?	Less-than-significant impact (Construction) Less-than-significant impact (Operation)	None
Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Less-than-significant impact (Construction) Less-than-significant impact (Operation)	None
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	None

1.2 Project Summary

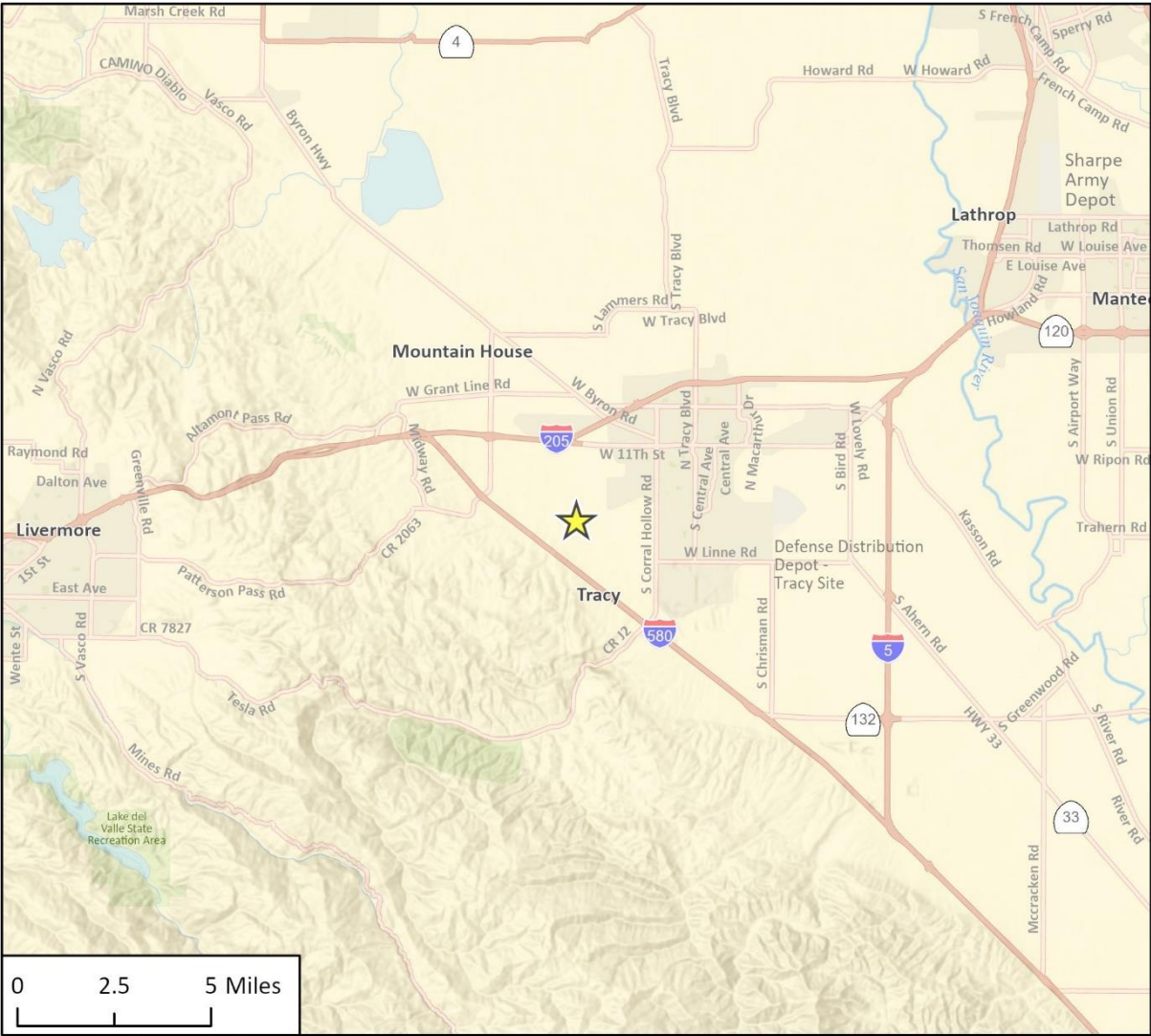
Project Location

The proposed Tracy LDES Project site is located in an unincorporated portion of southwestern San Joaquin County, California (Figure 1). The Project site encompasses approximately 12.8 acres within a larger, approximately 39-acre parcel (Assessor's Parcel Number 209-240-32) and would be located adjacent to and northeast of the existing Tracy Combined Cycle Power Plant (TCCPP) and Pacific Gas and Electric Company Schulte Substation (Figure 2). The Project site and the TCCPP are located on the same parcel. The Tracy LDES site is currently undeveloped and consists of ruderal non-native grassland. The Project site is surrounded by industrial land uses to the north and general agricultural land uses to the east, south, and west.

Project Description

The proposed Tracy LDES Project would include the development of a nominal 40-megawatt (MW) Battery Energy Storage System (BESS) of eight-hour duration storage (i.e., 320 MW hours) within an approximately 12.8-acre site area north of the existing TCCPP and would be constructed, owned, and operated by Tracy BESS LLC. Figure 3 shows a preliminary site plan for the proposed Project.

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2024.

24-15860 EPS
Fig 1 Regional Location

★ Project Location

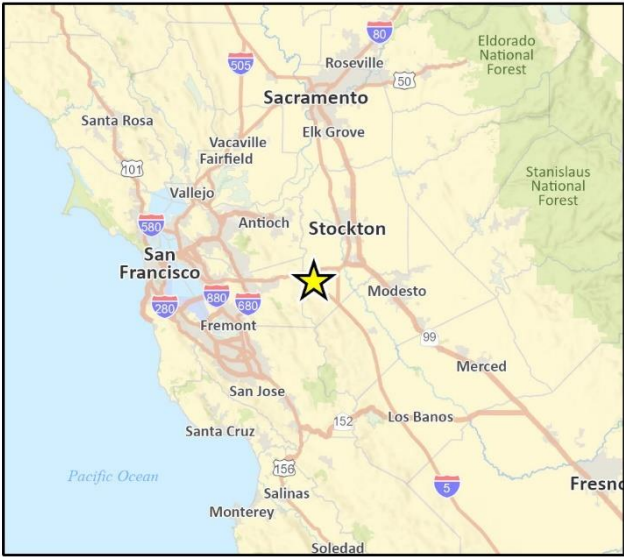


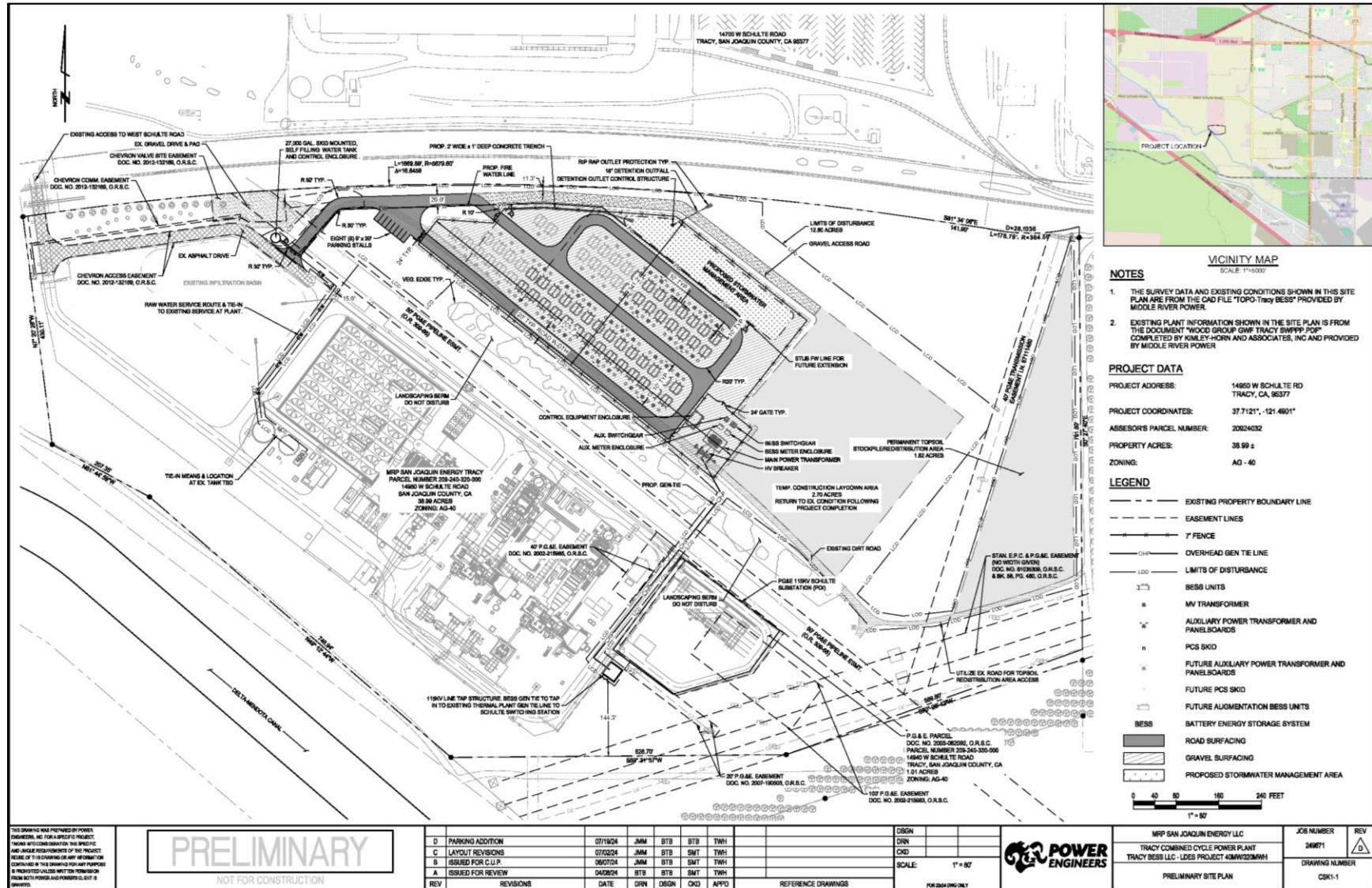
Figure 2 Project Location



Imagery provided by Microsoft Bing and its licensors © 2024.

24-15860 CR
Fig X Study Area

Figure 3 Proposed Site Plan



The proposed Project would be constructed to support California's current need for additional electrical energy supply capacity during high peak load demand time periods. The key components of the proposed Project are listed below.

- Nominal 40-MW BESS facility to include approximately 88 battery container enclosures (each with internal heating, ventilation, and air conditioning systems, internal fire detection and suppression systems, and battery management systems), 44 inverter/power conversion system (PCS) enclosures on skids, and 34 medium voltage (MV) transformers on skids located adjacent to the PCS enclosures
- Electrical switchyard for connection to the electrical grid via an existing 115-kilovolt (kV) generation tie line that connects the TCCPP to the nearby Pacific Gas and Electric Company Schulte Substation
- Extension of the existing access road on the Project site
- Addition of a stormwater detention basin

Construction

Construction of the proposed Project is currently anticipated to begin in the fourth quarter of 2025 and to begin commercial operation in the first quarter of 2027. Typical construction hours for the proposed Project are expected to be between 6:00 a.m. and 9:00 p.m. on Mondays through Fridays. Weekend and nighttime construction are not anticipated.

Construction activities would include extension of the existing access road to the Project site, site preparation and grading, installation of foundations and equipment, installation of wiring, and commissioning. Construction equipment to be used include the following: aerial lifts, backhoes, bore/drill rigs, cherry pickers, compactors, compressors, cranes, dozers, dumpers/tenders, excavators, forklifts, generators, graders, loaders (front-end, rubber-tired, and skid steer), off-highway trucks, pavers and paving equipment, pickup trucks, pumps, rough terrain forklifts, scrapers, sweepers/scrubbers, trenchers, and welders. A pile driver may also be used during construction at the BESS development area and BESS switchyard depending on results of the soil analysis and foundation design. Additionally, the type of pile driver (e.g., impact, vibratory, bore and drop, etc.) that will be used is unknown; therefore, this analysis assumes two different types to present a worst-case analysis of noise and vibration impacts. For the noise impact analysis, an impact pile driver was assumed as this type of pile driver typically generates higher noise levels. For the vibration impact analysis, a vibratory pile driver was assumed as this type of pile driver typically generates higher groundborne vibration levels.

During construction, a temporary laydown and staging area for equipment and material storage will be used and located adjacent to the eastern border of the BESS facility.

Operation

The proposed Project would operate seven days a week, 365 days per year. The BESS facility would be operated remotely with only occasional on-site maintenance needed for activities, such as replacement of BESS equipment, replacement of filters, and miscellaneous electrical repairs on an as-needed basis. Routine maintenance would be performed two times per week by operation, and maintenance staff and would include activities, such as equipment testing, monitoring, repair, routine procedures to ensure service continuity, and standard preventative maintenance. The facility would be expected to require regular maintenance visits by two workers up to twice per week on average.

Decommissioning

At the end of the proposed Project's operational life (anticipated to be approximately 40 years), the Project would be decommissioned in accordance with all applicable local, state, and federal requirements in effect at the time of decommissioning. Prior to actual decommissioning, a final decommissioning plan, based on then-current technology, site conditions, and regulations, would be prepared.

2 Background

2.1 Overview of Sound

Sound is a vibration that transmits through a medium (such as a gas, liquid, or solid) created by a moving or vibrating source, which is capable of being detected by the hearing organs. *Noise* is defined as sound that is loud, unpleasant, unexpected, or undesired, and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 hertz (Hz) and less sensitive to frequencies around and below 100 Hz (Kinsler et al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as the doubling of vehicle traffic volumes, results in a noise level increase of 3 dB, whereas dividing the energy in half results in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy (i.e., the perception of sound is not linear in terms of dBA or in terms of sound energy). Two sources, each containing the same sound energy, do not “sound twice as loud” as one source. It is widely accepted that the average healthy human ear can detect changes (either increases or decreases) of 3 dBA, which is recognized as being barely perceptible to most people. Similarly, a change of 5 dBA is readily perceptible and a change of 10 dBA sounds twice (or half) as loud (Crocker 2007).

The level and frequency content of sound change as it travels from the source to a receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner by which sound is reduced with distance depends on factors, such as the type of source (e.g., a point or line source), the path the sound travels, site conditions, and the presence of intervening structures or other obstacles. Noise from a point source (e.g., construction equipment, industrial machinery, ventilation units) typically is reduced at a rate of 6 dBA per each doubling of distance away from the source. Noise from a line source (e.g., roadway, pipeline, railroad) typically is reduced at a rate of 3 dBA per each doubling of distance away from the source (Caltrans 2013). The propagation of noise is also affected by the absorption characteristics of the ground: a hard site, such as a parking lot or smooth body of water, provides no absorption/attenuation and the changes in noise levels with distance result simply from the geometric spreading of the source (i.e., 3 or 6 dBA reduction per doubling of distance for a point source or line source, respectively). Conversely, a soft site, such as soft dirt, grass, or scattered bushes and trees, may provide additional absorption/attenuation, potentially reducing noise levels an additional 1.5 dBA per doubling of distance away from the source (Caltrans 2013). Noise levels may also be reduced by intervening structures. The amount of reduction provided by the “shielding” of these features depends on the size of the structure/s, the location of the structure/s relative to the noise source and receivers, and the frequency content of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight between a noise source and receiver will provide at

least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). The presence of building structures can substantially reduce noise levels from the exterior to the interior as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day at which noise occurs and the duration of the noise are also important factors when considering potential noise impacts. Most noise that lasts for more than a few seconds is variable in its amplitude (i.e., the noise level continuously fluctuates over time). Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent continuous sound level (L_{eq}), which considers both duration and the sound power level of the source. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time. The extent of sound level fluctuations over a period of time is characterized by the minimum (L_{min}) and maximum (L_{max}) sound pressure levels, which represent the lowest and highest sound pressure levels measured during a given period, respectively.

The sound level that is exceeded "n" percent of time during a given sample period in the percentile noise level is represented as L_n . For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum), and this is often known as the "intrusive sound level." The L_{90} is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

Noise that occurs at night tends to be more disturbing than noise that occurs during the day. Community noise is usually measured using the Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.) hours. It is also measured using the Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring during evening hours (7:00 p.m. to 10:00 p.m.) and a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.) (Caltrans 2013). Noise levels described by the L_{dn} and CNEL usually differ by about 1 dBA. The relationship between the peak-hour L_{eq} value and the L_{dn} /CNEL depends on the distribution of traffic during the day, evening, and night.

2.2 Overview of Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body ranges between less than 1 Hz to 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as that from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200

Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (Federal Transit Administration [FTA] 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern of vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV), or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). *PPV* is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

2.3 Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The San Joaquin County 2035 General Plan defines noise-sensitive land uses as residential development, lodging, hospitals, nursing homes, schools, and day care centers (San Joaquin County 2016).

Sensitive receptors near the Project site include single-family residences located approximately 0.15-mile south, 0.4-mile southwest, and 0.4-mile west of the nearest proposed Project boundaries.

2.4 Project Noise Setting

The Project site is located within an unincorporated portion of San Joaquin County that includes other agricultural and industrial land uses in the surrounding area. The major noise source near the site is general agricultural and industrial noise and trains passing on a portion of the Union Pacific Railroad, which runs east to west and along the northern Project site boundary. To characterize ambient noise levels at and near the Project site, one short-term, 15-minute sound level measurement was conducted on June 27, 2024, and one long-term, 24-hour measurement was conducted on June 27 through 28, 2024. Two SoftdB Piccolo-II, ANSI Type 2 integrating sound level meters were used to conduct the measurements. The sound level meters were field calibrated before and after the measurements. The Short-Term measurement (ST-1) was conducted off-site approximately 385-feet northwest of the TCCPP entrance. The Long-Term measurement (LT-1) was conducted on-site near the southeastern corner of the Project site. Figure 4 shows the approximate measurement locations, and Table 2 summarizes the results of the short-term noise measurements. Table 3 and Table 4 summarize the results of the long-term noise measurements, with Table 3 presenting the average noise levels measured during each hour of the measurement period and Table 4 presenting various noise metrics calculated from the 24-hour measurement period.

Figure 4 Approximate Noise Measurement Locations

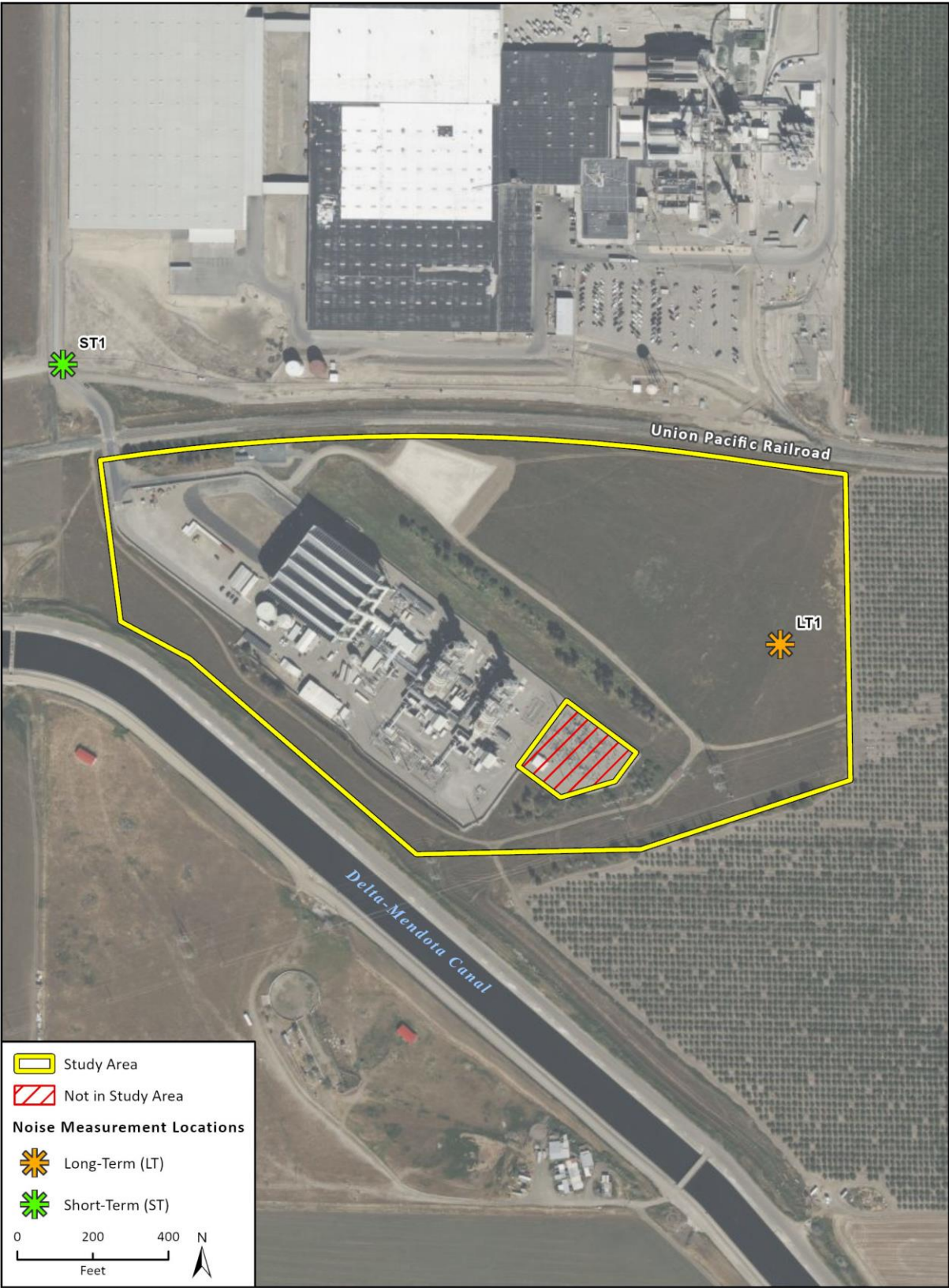


Table 2 Short-Term Noise Monitoring Results

Measurement Name	Measurement Location	Sample Times	Primary Noise Sources	L _{eq} (dBA)	L _{min} (dBA)	L _{max} (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₉₀ (dBA)
ST-1	Off-site, approximately 385-feet northwest of Tracy Combined-Cycle Power Plant entrance	10:37 – 10:52 a.m.	Vehicle traffic along West Schulte Road; trains passing along nearby portion of Union Pacific Railroad	48.5	40.9	60.9	51.5	44.6	42.2

Approximate measurement locations shown on Figure 4.

Table 3 Long-Term Noise Monitoring Results – Average Hourly Noise Levels

Sample Time	dBA L _{eq}	Sample Time	dBA L _{eq}
LT-1 – Southeastern Portion of Project Site, June 27–28, 2024			
10:00 a.m.	60	10:00 p.m.	60
11:00 a.m.	58	11:00 p.m.	53
12:00 p.m.	57	12:00 a.m.	55
1:00 p.m.	58	1:00 a.m.	53
2:00 p.m.	57	2:00 a.m.	51
3:00 p.m.	55	3:00 a.m.	52
4:00 p.m.	56	4:00 a.m.	52
5:00 p.m.	56	5:00 a.m.	53
6:00 p.m.	58	6:00 a.m.	54
7:00 p.m.	56	7:00 a.m.	52
8:00 p.m.	54	8:00 a.m.	51
9:00 p.m.	53	9:00 a.m.	52

Source: Rincon Consultants, Inc. field measurements conducted on June 27–28, 2024, using ANSI Type II Integrating sound level meter. Approximate noise measurement locations shown on Figure 4. See Appendix A for graphical measurement data.

Table 4 Long-Term Noise Monitoring Results – 24-Hour Noise Metrics

Noise Metric ¹	Measured Noise Level (dBA)
CNEL	60.0
L _{eq}	55.2
L _{min}	43.9
L _{max}	77.7
L ₁₀	57.5
L ₅₀	53.1
L ₉₀	51.2

¹ Refer to Section 2.1 for description of noise metrics.

Source: Rincon Consultants, Inc. field measurements conducted on June 27–28, 2024, using ANSI Type II Integrating sound level meter. Approximate noise measurement locations shown on Figure 4. See Appendix A for graphical measurement data.

2.5 Regulatory Setting

Federal

There are no specific federal noise standards that would be applicable to the proposed Project other than federal noise limits for medium and heavy trucks (more than 4.5 tons, gross vehicle weight rating) under 40 Code of Federal Regulations, Part 205, Subpart B. The federal truck pass by noise standard is 80 dBA at 15 meters (approximately 50 feet) from the vehicle pathway centerline. These controls are implemented through regulatory controls on truck manufacturers.

State

California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires each county and city to adopt a General Plan that includes a Noise Element prepared per guidelines adopted by the Governor’s Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. CEQA requires all known environmental effects of a project be analyzed, including environmental noise and vibration impacts.

Local

The Project site is located in an unincorporated portion of San Joaquin County. Applicable noise standards are codified in the following County regulations.

San Joaquin County 2035 General Plan Public Health and Safety Element

The San Joaquin County 2035 General Plan Public Health and Safety Element provides “noise level standards that have been developed in order to quantify noise impacts in the County and address ways to reduce or eliminate existing and future conflicts between land uses and annoying or unhealthy noise” (San Joaquin County 2016). These noise level standards are presented below in Table 5.

Table 5 Non-transportation Noise Level Performance Standards for Noise-Sensitive Uses at Outdoor Activity Areas

Noise Level Descriptor	Daytime ² (7:00 a.m. to 10:00 p.m.)	Nighttime ² (10:00 p.m. to 7:00 a.m.)
Hourly L_{eq} (dB)	50	45
Maximum Level (dB)	70	65

¹ These standards apply to new or existing residential areas affected by new or existing non-transportation sources.

² Each of the noise level standards specified shall be reduced by 5 dB for impulsive noise, single tone noise, or noise consisting primarily of speech or music.

Source: Table PHS-1 of San Joaquin County 2035 General Plan Public Health and Safety Element (San Joaquin County 2016).

The Public Health and Safety Element also includes policies designed to meet Goal PHS-9: “[t]o protect county residents from the harmful and nuisance effects or exposure to excessive noise” (San Joaquin County 2016). These policies address ways to reduce or eliminate existing and future conflicts between land uses and noise. The following policies are applicable to the proposed Project.

Policy PHS-9.1: Noise Standards for New Land Uses

The County shall require new development to comply with the noise standards shown in [Table 5] through proper site and building design, such as building orientation, setbacks, barriers and building construction practices.

Policy PHS-9.4: Acceptable Vibration Levels

The County shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby vibration-sensitive uses based on FTA criteria.

Policy PHS-9.6: Enforcement of State and Federal Noise Regulations

The County shall continue to enforce State and Federal noise law regarding vehicle operation, equipment, and building insulation.

3 Methodology

3.1 Construction Noise

Construction activity would result in temporary noise in the overall Project site vicinity, exposing surrounding nearby receivers to increased noise levels. Construction noise associated with the proposed Project would be generated by heavy-duty diesel construction equipment used for access road extension, site preparation and grading, installation of foundations and equipment, installation of wiring, and commissioning. Each phase of construction consists of a specific equipment mix depending on the work to be carried out during that phase. Construction noise would typically be higher during the more equipment-intensive phases of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., installation of wiring, commissioning). During construction, equipment undergoes varying load cycles and is operated intermittently to allow for non-equipment tasks such as measurement. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation (FTA 2018).

Construction noise that would result from the proposed Project was estimated using the FHWA Roadway Construction Noise Model (RCNM; FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise-sensitive receptors near the Project site based on the equipment list per construction phase provided by the applicant. For a conservative estimate of potential Project noise impacts, all equipment in each phase of construction was assumed to be operating simultaneously.

Construction equipment would continually move around the Project site over the course of a typical workday. Due to the complex and mobile nature of construction activity within a project site, the FTA *Transit Noise and Vibration Impact Assessment Manual* document recommends evaluating construction noise impacts from the center of the construction site, stating that the distance variable in its recommended construction noise calculation “assumes that all equipment operates at the center of the project” (FTA 2018). Therefore, construction noise impacts were evaluated from the approximate center of the Project site, which was assumed to be approximately 1,600 feet from the nearest single-family residence to the south.

3.2 Groundborne Vibration

The proposed Project does not include any substantial vibration sources associated with operation. Thus, the most substantial sources of vibration associated with the Project would be use of heavy-duty equipment during construction of the proposed Project, especially during the site preparation and grading phases. The greatest vibratory source during construction near the Project site would be a vibratory pile driver used at the BESS development area and at the BESS switchyard. Vibration estimates are based on vibration levels reported by the FTA in the *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). Table 6 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Table 6 Typical Vibration Levels Measured during Construction Activities

Equipment	PPV at 25 feet (in/sec)
Vibratory Pile Driver	1.518
Vibratory Roller	0.21
Large Bulldozer	0.089
Loaded Trucks	0.076

PPV = peak particle velocity, in/sec = inches per second
Source: Federal Transit Administration 2018

Vibration limits used in this analysis to determine a potential impact to nearby sensitive structures resulting from construction activities are based on vibration thresholds established in the *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018), which are shown in Table 7.

Table 7 Criteria for Vibration Damage Potential

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Nonengineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

PPV = peak particle velocity; in/sec = inches per second
Source: Federal Transit Administration 2018

Based on FTA recommendations, limiting vibration levels to below 0.2 in/sec PPV at residential structures would prevent structural damage regardless of building construction type. These limits are applicable regardless of the frequency of the source.

3.3 Operational Noise

Under normal operation, the Project site would be remotely monitored with no personnel on-site except for periodic maintenance activities provided by up to two workers, two times per week. Maintenance activities are not expected to generate substantial noise, therefore the primary source of noise generated by the proposed Project would be the following onsite stationary outdoor equipment: BESS enclosures, PCS units/inverters, MV transformers, and the high voltage transformer.

Noise generated by future operation of the proposed Project was calculated using SoundPLAN noise modeling software, Version 9.0. SoundPLAN is a three-dimensional noise modeling program that incorporates noise propagation algorithms and reference sound levels published by various government agencies and the scientific community.

On-site stationary noise sources were modeled based on information provided by the Project applicant as follows.

- BESS enclosures (CATL units or similar), which generate a sound pressure level of 75 dBA at 3.3 feet (1 meter) away.
- PCS units/inverters (Power Electronics units or similar), which generate a sound pressure level of 79 dBA at 3.3 feet (1 meter) away.

- MV transformers, which generate a sound pressure level of 79 dBA at 3.3 feet (1 meter) away.
- High voltage transformer, modeled with a sound power level of 100 dBA based on info used for prior similar projects.

Note that all operational noise sources were assumed to operate at full power continuously for 24 hours a day to present a conservative analysis. In addition to the above noise sources, surrounding buildings, structures, and topography near the Project site were modeled to account for the way these features affect noise propagation and the shielding they may provide. Existing topography surrounding the Project site was taken from San Joaquin County's GIS Interactive Map and Parcel Information portal (San Joaquin County 2019), and future Project site topography was taken from CAD files provided by the Project applicant. All receivers were modeled at the average height of the human ear, which is 5 feet above ground elevation.

3.4 Decommissioning

At the end of the proposed Project's useful life, the energy storage system facility and associated on-site support facilities would be decommissioned in accordance with then-current decommissioning practices. It is not possible to quantitatively evaluate noise that might result from Project decommissioning in the future, as the technology and construction practices that will be available at that time are uncertain. Therefore, based on current decommissioning practices, as a reasonable-worst case, this analysis assumes that noise impacts generated during future decommissioning would be similar to noise impacts generated during construction of the proposed Project.

3.5 Traffic Noise

Traffic noise increases associated with the proposed Project would result from worker trips to and from the site during construction and operation. Construction and maintenance workers would access the site via West Schulte Road, which carries an average daily traffic (ADT) volume of 8,065 vehicles (San Joaquin County Department of Public Works 2017). Existing traffic volumes are compared with expected vehicle trips along this roadway to estimate the potential Project-related traffic noise increases during construction and operation.

All roadway vehicle trips generated by construction activities and operation of the proposed Project are based on default estimates provided by the California Emissions Estimator Model (Rincon 2024). During construction of the proposed Project, it is estimated that up to 201 worker vehicle trips would occur per day during the peak construction period (Site Preparation and Grading and Foundation Installation phases). A *vehicle trip* is defined as a one-direction vehicle movement. The total number of trips generated by the proposed Project would include both inbound and outbound trips. Therefore, Project construction would generate a maximum of 402 one-way trips per day. During operation, the proposed Project would generate four trips per weekday due to maintenance workers visiting the site. Therefore, Project operation would generate a maximum of four additional daily trips. Table 8 summarizes the existing ADT volume on West Schulte Road and daily vehicle trips associated with construction and operation.

Table 8 Existing ADT and Project Construction and Operational Vehicle Trips

Roadway Segment	Existing Average Daily Traffic Volume ¹	Project Daily Vehicle Trips (Construction)	Project Daily Vehicle Trips (Operation)
West Schulte Road (at Lammers Road)	8,065	402	4

¹ Existing average daily traffic volume obtained from San Joaquin County Department of Public Works for the year 2017.

² All Project trips are based on maximum number of one-way trips expected per day.

To assess the increase in ambient noise levels at receptors along this roadway, a version of the FHWA traffic noise prediction model (FHWA-RD-77-108) was used.

3.6 Significance Thresholds

To determine whether a project would have a significant noise impact, Appendix G of the *State CEQA Guidelines* requires consideration of whether a project would result in:

1. 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;
2. Generation of excessive groundborne vibration or groundborne noise levels; or,
3. 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, expose people residing or working in the project area to excessive noise levels.

Construction Noise

San Joaquin County does not have quantitative noise standards for construction noise. In absence of applicable local construction noise level thresholds, construction noise was evaluated to the noise limits outlined in the *FTA Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). Based on FTA recommendations, the average daytime construction noise level over an eight-hour period should be limited to 80 dBA L_{eq} at a noise-sensitive receptor. Therefore, if noise levels from construction activity associated with the project exceed 80 dBA L_{eq} (eight-hour) at the property line of a nearby residential receptor, a significant noise impact would occur.

Onsite Operational Noise

Noise level standards established in the County's Public Health and Safety Element are shown in Table 5, which apply to new or existing residential areas affected by new or existing non-transportation noise sources. Based on the standards shown in this table, the noise limit at the property line of a nearby sensitive receptor is 50 dBA L_{eq} during daytime hours (7:00 a.m. to 10:00 p.m.) and 45 dBA L_{eq} during nighttime hours (10:00 p.m. to 7:00 a.m.). Therefore, a significant impact would occur if the proposed Project's operational noise sources generate noise levels in excess of these limits at the property line of any nearby sensitive receptors.

Off-Site Traffic Noise

A project will normally have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA are detectable under quiet, controlled conditions. Changes of less than 1 dBA are usually

indiscernible. A change of 5 dBA is readily discernible to most people in an exterior environment. Based on this, the following thresholds of significance similar to those recommended by the Federal Aviation Administration are used to assess traffic noise impacts at sensitive receptor locations (Federal Aviation Administration 2020). A significant impact would occur if Project-related traffic noise increases the existing noise environment by the following.

- Greater than 1.5 dBA CNEL for ambient noise environments of 65 dBA CNEL and higher;
- Greater than 3 dBA CNEL for ambient noise environments of 60 to 64 dBA CNEL; or
- Greater than 5 dBA CNEL for ambient noise environments of less than 60 dBA CNEL.

Vibration

San Joaquin County has not adopted standards to assess vibration impacts during construction and operation, however Policy PHS-9.4 of the San Joaquin County 2035 General Plan requires construction vibration be evaluated using FTA vibration criteria. Therefore, vibration limits used in this analysis are based on those outlined in the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) to evaluate potential construction vibration impacts related to potential building damage. Based on the FTA criteria shown above in Table 7, construction vibration impacts would be significant if vibration levels exceed 0.2 in/sec PPV for residential structures, which are the limits where minor cosmetic (i.e., non-structural, damage may occur to these buildings).

4 Impact Analysis

4.1 Issue 1

Issue: Would the Project result in 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?
LESS THAN SIGNIFICANT

Construction

Construction Equipment

As described in Section 3.1, construction equipment would be moving around the Project site over the course of a workday. Therefore, due to the complex nature of construction activity within the Project site throughout a typical workday, construction noise was evaluated at the approximate center of the Project site. Table 9 shows estimated construction noise levels at sensitive receptors by phase of construction. Note that noise levels in Table 9 conservatively do not account for shielding from any intervening buildings, terrain, or other nearby structures or site features.

As shown in Table 9, construction noise levels at the nearest noise-sensitive receptors would not exceed the FTA's construction noise threshold of 80 dBA L_{eq} (eight-hour). Therefore, temporary noise impacts associated with Project construction would be less than significant.

This analysis assumes that decommissioning noise impacts would be similar to construction noise impacts. Therefore, noise impacts to adjacent sensitive receptors during decommissioning of the proposed Project would also be less than significant.

Construction Vehicle Trips

During construction, the proposed Project would generate new, temporary vehicle trips that would increase noise levels on nearby roadways (primarily West Schulte Road). The proposed Project is anticipated to generate a maximum of 402 daily one-way vehicle trips (201 roundtrips) between worker trips, haul trips, and equipment delivery trips during the peak phases of construction. The proposed Project would not make alterations to roadway alignments or substantially change the vehicle classifications mix on the surrounding roadways (i.e., West Schulte Road). Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes primarily on West Schulte Road, which carries an ADT volume of 8,065 vehicles. A temporary increase of 402 daily vehicle trips on this roadway (increasing daily trips from 8,065 to 8,467 vehicles) would result in a daily traffic noise level increase of approximately 0.2 dBA CNEL, which is below the 5 dBA CNEL threshold for an ambient noise environment below 60 dBA CNEL (as presented in Section 2.4, the on-site noise measurement survey determined the ambient noise level at the site was 59.8 dBA CNEL). Additionally, a noise increase of 0.2 dBA CNEL would not be perceptible to the average human ear, which can only detect changes of 3 dBA or more (Crocker 2007). Therefore, impacts would be less than significant.

Table 9 Estimated Construction Noise Levels at Sensitive Receptors

Construction Phase	dBA L _{eq} (8-hour)			
	RCNM Reference Noise Level	Single-Family Residence to the South	Single-Family Residence to the West	Single-Family Residence to the Southwest
Distance (feet)	50	1,600	2,815	3,080
Access Road Construction ¹	86	56	51	50
Site Preparation and Grading ²	88	57	52	52
Foundation Installation ³	91	61	56	56
Set Modules, Inverters, and Switchgear ⁴	86	55	51	50
Electrical Wire Installation/Finish Grading ⁵	86	56	51	51
Commission/Testing ⁶	78	48	43	43

RCNM = Roadway Construction Noise Model

¹ Access Road Construction phase was evaluated assuming simultaneous operation of a backhoe, compactor, dozer, dump truck, and grader.

² Site Preparation and Grading phase was evaluated assuming simultaneous operation of a backhoe, compactor, dozer, dump truck, two graders, and a pump.

³ Foundation Installation phase was evaluated assuming simultaneous operation of a backhoe, auger drill rig, two concrete mixer trucks, two compactors, compressor, crane, dozer, front end loader, and impact pile driver.

⁴ Set Modules, Inverters, and Switchgear phase was evaluated assuming simultaneous operation of a backhoe, forklift, compressor, two cranes, generator, and a front-end loader.

⁵ Electrical Wire Installation/Finish Grading phase was evaluated assuming simultaneous operation of a backhoe, forklift, compactor, compressor, dump truck, and grader.

⁶ Commission/Testing phase was evaluated assuming simultaneous operation of a front-end loader, compactor, compressor, pickup truck, and welder torch.

Source: Roadway Construction Noise Model. See Appendix B for modeling outputs.

This analysis assumes that decommissioning noise impacts would be similar to construction noise impacts and would be completed with up to 402 daily vehicle trips. Therefore, temporary off-site traffic noise impacts during Project decommissioning would also be less than significant.

Operation

Operational Noise

Following the methodology discussed in Section 3.3, noise levels generated by operation of the proposed Project were modeled and noise contours were calculated throughout the Project site and surroundings. Operational noise contours for the proposed Project are shown on Figure 5, and noise levels are summarized in Table 10.

Table 10 Operational Noise Levels

Receiver Name	Receiver Description	Modeled Noise Level (dBA L_{eq})	Exceeds Daytime Noise Threshold? ¹	Exceeds Nighttime Noise Threshold? ¹
R1	Single-family residence along West Schulte Road, 0.5-mile west of Project site	39.8	No	No
R2	Single-family residence along Hansen Road, 0.6-mile southwest of Project site	38.8	No	No
R3	Single-family residence Hansen Road, directly west of California Aqueduct, 0.3-mile south of Project site	45.0	No	No

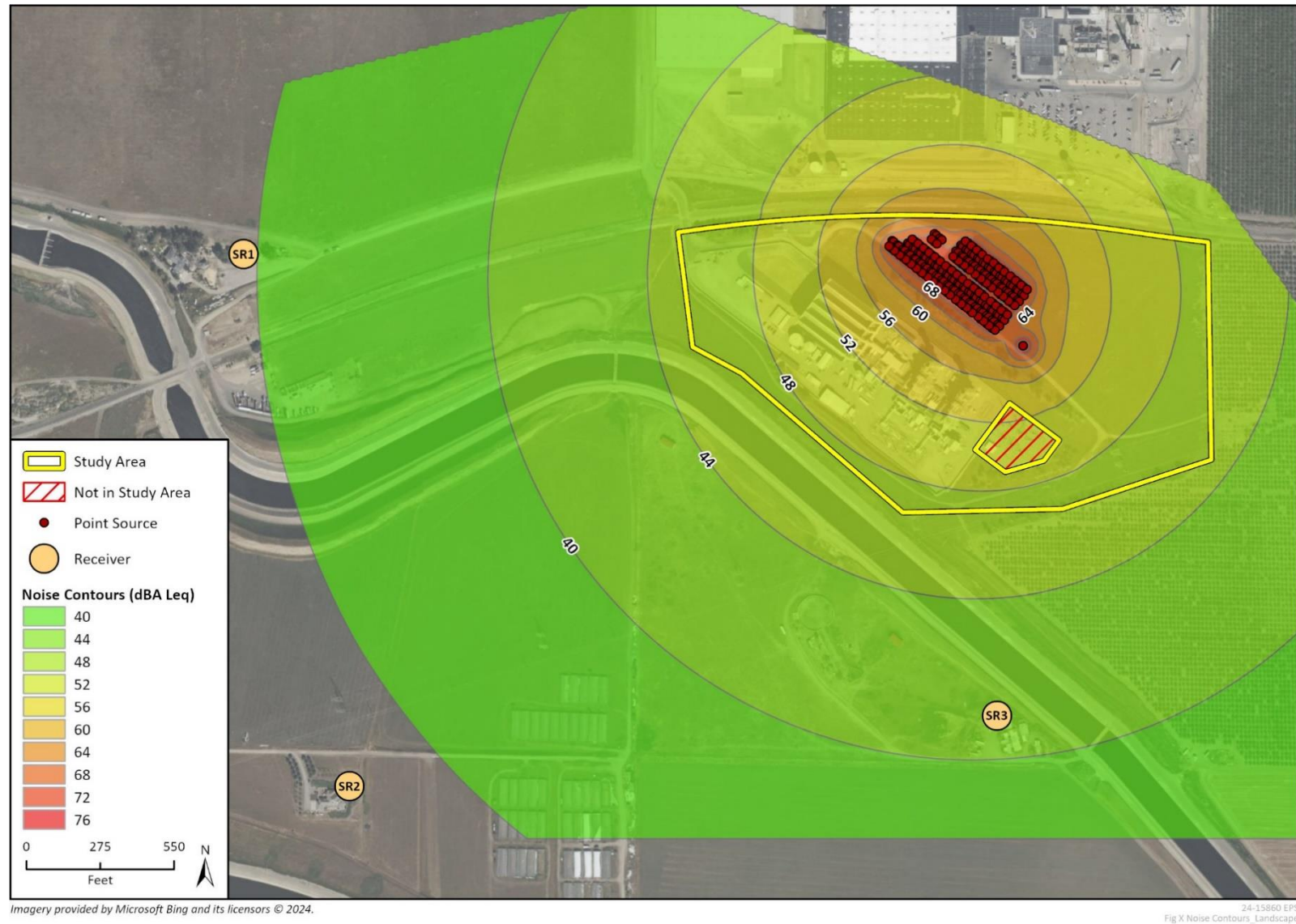
¹ Pursuant to the San Joaquin 2035 General Plan Public Health and Safety Element, the applicable daytime (7:00 a.m. to 10:00 p.m.) noise threshold is 50 dBA at residential properties, while the applicable nighttime (10:00 p.m. to 7:00 a.m.) noise threshold is 45 dBA at residential properties.

As shown on Figure 5 and Table 10, noise levels at the nearest sensitive receptor located approximately 0.3-mile south of the Project site (represented as R3) would be 45 dBA L_{eq} , while noise levels at the next nearest sensitive receptors would be even lower (39.8 dBA L_{eq} at the single-family residence located 0.5-mile west, represented as R1, and 38.8 dBA L_{eq} at the single-family residence located 0.6-mile southwest, represented as R2). Therefore, noise generated by operation of the proposed Project would be maintained at or below the County's daytime and nighttime thresholds of 50 and 45 dBA L_{eq} , respectively. Long-term operational noise impacts would be less than significant.

Off-Site Traffic Noise

During operation, the proposed Project would generate new vehicle trips that would increase noise levels on nearby roadways (primarily West Schulte Road). New vehicle trips would be from regular maintenance visits, generating an additional four trips per weekday. However, when compared with the existing ADT volume of 8,065 vehicles on West Schulte Road, these four additional daily maintenance worker trips would result in a negligible traffic noise increase (much less than 0.1 dBA CNEL) on this roadway. Therefore, impacts would be below the impact threshold (5 dBA CNEL increase for ambient noise environments below 60 dBA CNEL) and off-site traffic noise impacts would be less than significant.

Figure 5 Operational Noise Contours



4.2 Issue 2

Issue: Would the Project result in generation of excessive ground-borne vibration or ground-borne noise levels?
LESS THAN SIGNIFICANT

Construction

Construction Equipment

Construction activities known to generate excessive ground-borne vibration, such as pile driving, may be conducted during construction. Pile driving construction equipment would be used at the BESS development area and BESS switchyard, as close as approximately 1,280 feet of the nearest off-site structures (i.e., the single-family residence located south of the Project site). Vibratory pile driving generates a vibration level of approximately 1.518 in/sec PPV at a distance of 25 feet (FTA 2018). At a distance of 1,280 feet, this vibration level would attenuate to approximately 0.004 in/sec PPV and would therefore not exceed the threshold of 0.2 in/sec PPV at this vibration-sensitive receptor. Therefore, temporary vibration impacts associated with construction would be less than significant.

Operation

Operational Vibration

Operation of the proposed Project would not include any substantial vibration sources; therefore, operational vibration impacts would be less than significant.

4.3 Issue 3

Issue: 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 closest major airport to the Project site is the Tracy Municipal Airport, located approximately 3 miles to the southeast. The Project site is located well outside of the year 2028 55 dBA CNEL noise contour of the airport, according to Exhibit 2TM-3 of the Airport Land Use Compatibility Plan Update for San Joaquin County's Aviation System (Coffman Associates, Inc. 2009). In addition, the proposed Project is a utility-use and does not include any noise-sensitive outdoor use areas (e.g., courtyards, outdoor recreation areas) or interior spaces. Therefore, no substantial noise exposure from airport noise would occur to workers at the proposed Project, and there would be no impact.

5 Conclusion

The proposed Project would generate both temporary construction-related noise and long-term noise associated with operation. Construction noise would not exceed noise standards at the nearest sensitive receptors and temporary noise impacts due to construction would be less than significant. Similarly, operational noise generated by on-site stationary noise sources associated with the proposed Project would not exceed the County's daytime and nighttime noise limits at the nearest sensitive receptors. Therefore, long-term operational noise impacts would also be less than significant.

Project-generated traffic during construction and operation would introduce additional vehicle trips on West Schulte Road; however, the number of trips associated with the proposed Project would be much lower than the existing ADT volume on this roadway and would not increase noise levels perceptibly or above the threshold of 5 dBA CNEL. Therefore, the off-site traffic noise impacts associated with the Project would be less than significant.

The proposed Project would generate groundborne vibration during construction; however, vibration levels would not exceed applicable thresholds at the nearest sensitive structures to the Project site. Therefore, construction-related vibration impacts would be less than significant.

Due to the distance between the Project site and nearest airport and its associated noise contours, no substantial exposure to aviation-related noise would occur to workers of the proposed Project, and there would be no impact.

6 References

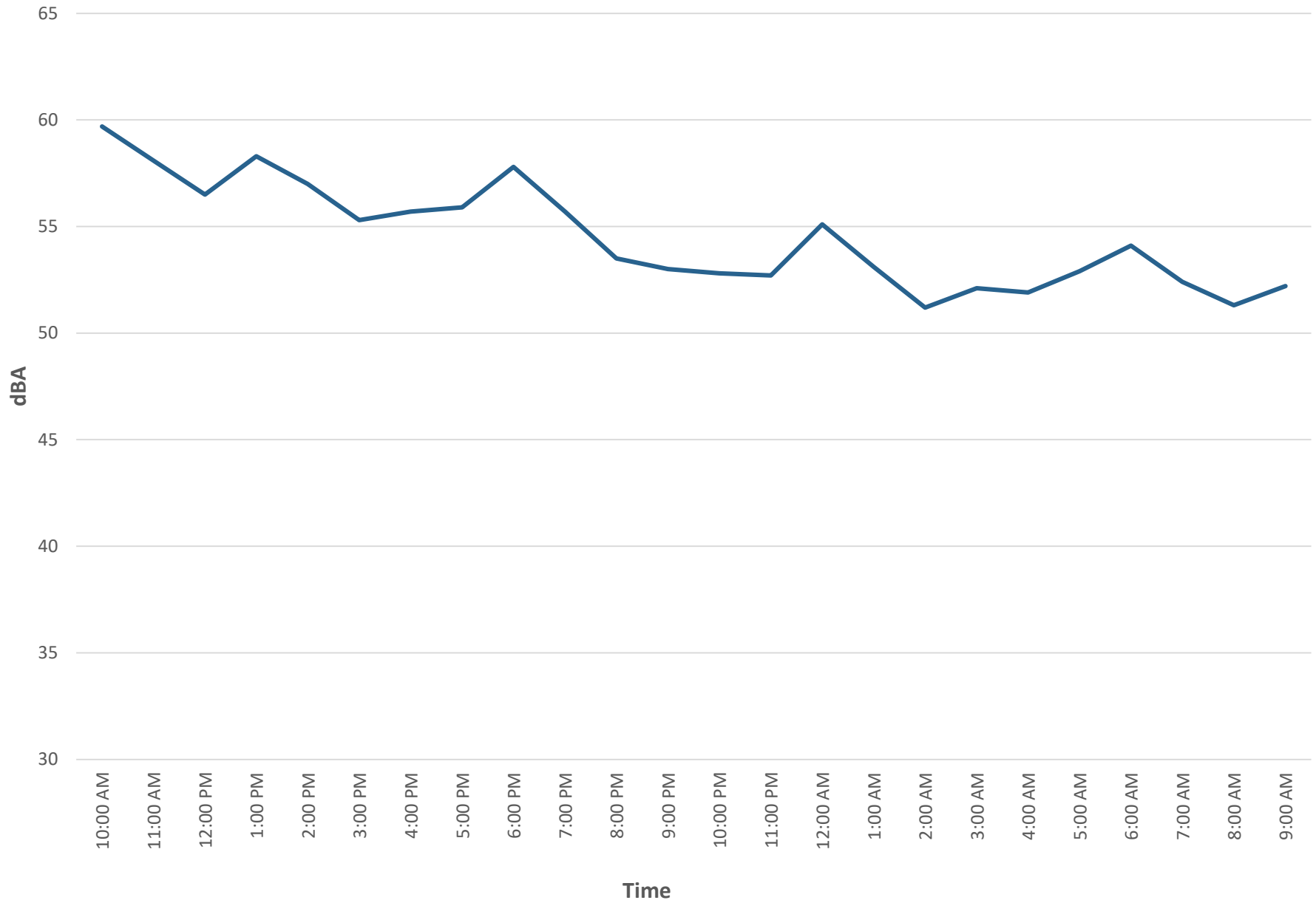
- California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. (CT-HWANP-RT-13-069.25.2) September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf.
- _____. 2020. *Transportation and Construction Vibration Guidance Manual*. Available at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>.
- California Energy Commission. 2009. *GWF Tracy Combined Cycle Power Plant Project Final Staff Assessment*. October.
- _____. 2010. *GWF Tracy Combined Cycle Power Plant Project Final Commission Decision*. March.
- Coffman Associates, Inc. 2009. *Airport Land Use Compatibility Plan Update, San Joaquin County Aviation System*. July.
- Crocker, Malcom J. (Editor). 2007. *Handbook of Noise and Vibration Control Book*, ISBN: 978-0-471-39599-7, Wiley-VCH. October.
- Federal Aviation Administration. 2020. *1050.1F Desk Reference*. February.
- Federal Highway Administration (FHWA). 2006. *FHWA Highway Construction Noise Handbook*. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). Available at: http://www.fhwa.dot.gov/environment/construction_noise/handbook. Accessed July 2024.
- _____. 2011. *Highway Traffic Noise Analysis and Abatement Policy and Guidance*. (FHWA-HEP-10-025). December.
- Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*. November. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.
- Kinsler, Lawrence E. and R. Frey, Austin and B. Coppens, Alan and V. Sanders, James. 1999. *Fundamentals of Acoustics*, 4th Edition. ISBN 0-471-84789-5. Wiley-VCH, December 1999.
- Rincon Consultants, Inc. 2024. *Air Quality and Greenhouse Gas Emissions Technical Report*. August.
- San Joaquin, County of. 2016. *San Joaquin County 2035 General Plan*. December.
- _____. (Department of Public Works). 2017. *Average Daily Traffic Volumes*. Available at: <https://www.sjgov.org/departments/pwk/traffic-engineering>. Accessed July 2024.
- _____. 2019. *San Joaquin County Geographic Information Systems (GIS) Data Download*. Available at: <https://sjmap.org/GISDataDownload.htm>. Accessed July 2024.

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Appendix A

Graphical Noise Measurement Data (Long-Term Monitoring Location)

LT-1 - June 27 - 28, 2024



Appendix B

Construction Noise Modeling Results

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/12/2024
Case Description: Tracy BESS

**** Receptor #1 ****

Description	Land Use	Daytime	Baselines (dBA)	
			Evening	Night
-----	-----	-----	-----	-----
Access Road	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40	80.0		50.0	0.0
Compactor (ground)	No	20	80.0		50.0	0.0
Dozer	No	40	85.0		50.0	0.0
Dump Truck	No	40	84.0		50.0	0.0
Grader	No	40	85.0		50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Noise Level Data									
Night		Day	Calculated (dBA)		Day		Evening		Lmax
			Evening	Night	Night	Evening			
Equipment	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Lmax
Backhoe	N/A	N/A	N/A	80.0	76.0	N/A	N/A	N/A	N/A
Compactor (ground)	N/A	N/A	N/A	80.0	73.0	N/A	N/A	N/A	N/A
Dozer	N/A	N/A	N/A	85.0	81.0	N/A	N/A	N/A	N/A
Dump Truck	N/A	N/A	N/A	84.0	80.0	N/A	N/A	N/A	N/A
Grader	N/A	N/A	N/A	85.0	81.0	N/A	N/A	N/A	N/A

	Total	85.0	86.2	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A			

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/12/2024
Case Description: Tracy BESS

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Site Preparation and Grading	Residential	60.0	55.0	50.0

Description	Impact Device	Usage (%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Backhoe	No	40	80.0		50.0	0.0
Compactor (ground)	No	20	80.0		50.0	0.0
Dozer	No	40	85.0		50.0	0.0
Dump Truck	No	40	84.0		50.0	0.0
Grader	No	40	85.0		50.0	0.0
Grader	No	40	85.0		50.0	0.0
Pumps	No	50	77.0		50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Night			Day		Evening		Calculated (dBA)		
Night			Day		Evening		Calculated (dBA)		
Night			Day		Evening		Calculated (dBA)		
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Night			Day		Evening		Calculated (dBA)		
Night			Day		Evening		Calculated (dBA)		
Night									

[illegible]

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/12/2024
Case Description: Tracy BESS

**** Receptor #1 ****

Description Night ----- -----	Baselines (dBA)		
	Land Use	Daytime	Evening
Set Modules, Inverters, and Switchgear 50.0	Residential	60.0	55.0

Description -----	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40	80.0		50.0	0.0
Man Lift	No	20	85.0		50.0	0.0
Compressor (air)	No	40	80.0		50.0	0.0
Crane	No	16	85.0		50.0	0.0
Crane	No	16	85.0		50.0	0.0
Generator	No	50	82.0		50.0	0.0
Front End Loader	No	40	80.0		50.0	0.0

Results

Noise Limit Exceedance (dBA)					Noise Limits (dBA)				

Night	Calculated (dBA)				Day		Evening		
	Day	Evening			Night				

Equipment	Lmax		Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq			Lmax

Backhoe			80.0	76.0	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift			85.0	78.0	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)			80.0	76.0	N/A	N/A	N/A	N/A	N/A

[illegible]

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/30/2024
Case Description: Tracy BESS

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Foundation Installation	Residential	60.0	55.0	50.0

Description	Equipment		Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
	Impact Device	Usage (%)				
Backhoe	No	40	80.0		50.0	0.0
Auger Drill Rig	No	20	85.0		50.0	0.0
Concrete Mixer Truck	No	40	85.0		50.0	0.0
Concrete Mixer Truck	No	40	85.0		50.0	0.0
Compactor (ground)	No	20	80.0		50.0	0.0
Compactor (ground)	No	20	80.0		50.0	0.0
Compressor (air)	No	40	80.0		50.0	0.0
Crane	No	16	85.0		50.0	0.0
Dozer	No	40	85.0		50.0	0.0
Front End Loader	No	40	80.0		50.0	0.0
Jackhammer	Yes	20		88.9	50.0	0.0

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Night	Calculated (dBA)				Day		Evening		
	Day		Evening		Night				
Equipment									
	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Lmax
Backhoe	N/A	N/A	80.0	76.0	N/A	N/A	N/A	N/A	N/A
Auger Drill Rig	N/A	N/A	85.0	78.0	N/A	N/A	N/A	N/A	N/A

[illegible]

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/12/2024
Case Description: Tracy BESS

**** Receptor #1 ****

Description	Baselines (dBA)		
	Land Use	Daytime	Evening
Night			
-----	-----	-----	-----

Elec. Wire Installation/Finish Grading	Residential	60.0	55.0
50.0			

Description	Equipment					
	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
-----	-----	-----	-----	-----	-----	-----
Backhoe	No	40	80.0		50.0	0.0
Man Lift	No	20	85.0		50.0	0.0
Compactor (ground)	No	20	80.0		50.0	0.0
Compressor (air)	No	40	80.0		50.0	0.0
Dump Truck	No	40	84.0		50.0	0.0
Grader	No	40	85.0		50.0	0.0
Front End Loader	No	40	80.0		50.0	0.0

Results

Noise Limit Exceedance (dBA)					Noise Limits (dBA)				

Night	Calculated (dBA)				Day		Evening		
	Day	Evening			Day	Night			

Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Leq									

Backhoe			80.0	76.0	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Man Lift			85.0	78.0	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Compactor (ground)			80.0	73.0	N/A	N/A	N/A	N/A	N/A

[illegible]

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 07/12/2024
Case Description: Tracy BESS

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Commission/Testing	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compactor (ground)	No	20	80.0		50.0	0.0
Compressor (air)	No	40	80.0		50.0	0.0
Pickup Truck	No	40	55.0		50.0	0.0
Welder / Torch	No	40	73.0		50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Night		Day	Calculated (dBA)		Day Night	Evening		Lmax
			Evening			Lmax	Leq	
Equipment	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Compactor (ground)	N/A	N/A	N/A	80.0	73.0	N/A	N/A	N/A
Compressor (air)	N/A	N/A	N/A	80.0	76.0	N/A	N/A	N/A
Pickup Truck	N/A	N/A	N/A	55.0	51.0	N/A	N/A	N/A
Welder / Torch	N/A	N/A	N/A	73.0	69.0	N/A	N/A	N/A
Total	N/A	N/A	N/A	80.0	78.3	N/A	N/A	N/A

Appendix C

Traffic Noise Modeling Results

Traffic Noise Calculator: FHWA 77-108							Project Title: Tracy LDES Project															
	Output						Inputs														Auto Inputs	
	dBA at 50 feet			Distance to CNEL Contour																		
ID	L _{eq-24hr}	L _{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Receiver	Ground Absorption	Lane Distance
1	65.6	68.4	69.082	40	128	405	W Schulte Rd (Existing)	at Lammers Rd	8,065	50	0.0%	95.0%	3.0%	2.0%	75.0%	15.0%	10.0%	2	Hard	50	0	20
2	65.8	68.6	69.29	42	134	425	W Schulte Rd (Ex + Fut Construction Trips)	at Lammers Rd	8,467	50	0.0%	95.0%	3.0%	2.0%	75.0%	15.0%	10.0%	2	Hard	50	0	20
3	65.6	68.4	69.084	40	128	405	W Schulte Rd (Ex + Fut Operation Trips)	at Lammers Rd	8,069	50	0.0%	95.0%	3.0%	2.0%	75.0%	15.0%	10.0%	2	Hard	50	0	20

Appendix D

SoundPLAN Modeling Results

Tracy Long Duration Energy Storage (LDES)

Run info

Operational Noise_Single Points

Project info

Project title: Tracy Long Duration Energy Storage (LDES)
Project No.: 24-15680
Project engineer: Kyle Pritchard
Customer:

Description:
Operational noise modeling for the Tracy BESS project in San Joaquin County.

Run description

Calculation type: Single Point Sound
Title: Operational Noise_Single Points
Calculation group
Run file: RunFile.runx
Result number: 5
Local calculation (ThreadCount=12)
Calculation start: 7/31/2024 2:37:24 PM
Calculation end: 7/31/2024 2:37:41 PM
Calculation time: 00:00:877 [m:s:ms]
No. of points: 3
No. of calculated points: 3
Kernel version: SoundPLANnoise 9.0 (4/18/2024) - 64 bit

Run parameters

Reflection order: 3
Maximum reflection distance to receiver 200 m
Maximum reflection distance to source 50 m
Search radius 5000 m
Weighting: dB(A)
Allowed tolerance (per individual source): 0.100 dB
Create ground effect areas from road surfaces: Yes
Treat roads as terrain following: No

Standards:

Industry: ISO 9613-2: 1996
Air absorption: ISO 9613-1
regular ground effect (chapter 7.3.1), for sources without a spectrum automatically alternative ground effect
Limitation of screening loss:
single/multiple 20.0 dB /25.0 dB
Side diffraction: ISO/TR 17534-3:2015 compliant: no side diffraction if terrain blocks line of sight
Use Eqn (Abar=Dz-Max(Agr,0)) instead of Eqn (12) (Abar=Dz-Agr) for insertion loss
Environment:
Air pressure 1013.3 mbar
rel. humidity 70.0 %
Temperature 10.0 °C
Meteo. corr. C0(7-22h)[dB]=0.0; C0(22-7h)[dB]=0.0;
Ignore Cmet for Lmax industry calculation: No
Parameter for screening: C2=20.0

Rincon Consultants 9320 Chesapeake Drive, Suite 218 San Diego, CA
92123 USA

Tracy Long Duration Energy Storage (LDES)

Run info

Operational Noise_Single Points

Dissection parameters:

Distance to diameter factor	8
Minimal distance	1 m
Max. difference ground effect + diffraction	1.0 dB
Max. number of iterations	4

Attenuation

Foliage:	ISO 9613-2
Built-up area:	ISO 9613-2
Industrial site:	ISO 9613-2

Assessment: Leq
Reflection of "own" facade is suppressed

Geometry data

Operational Noise.sit	7/31/2024 2:37:00 PM
- contains:	
Aqueduct.geo	7/23/2024 12:20:02 PM
BESS Units.geo	7/31/2024 2:37:00 PM
Calculation Area.geo	7/2/2024 10:02:06 AM
Geo-File1.geo	7/2/2024 9:16:42 AM
Ground Absorption.geo	7/23/2024 1:27:06 PM
LOD.geo	7/2/2024 9:19:46 AM
MV Transformers.geo	7/31/2024 2:37:00 PM
PCS Skids.geo	7/31/2024 2:37:00 PM
Project Components.geo	7/23/2024 3:08:22 PM
Property Line.geo	7/31/2024 2:30:22 PM
Railroad.geo	7/31/2024 2:30:22 PM
Road Edges.geo	7/2/2024 9:19:46 AM
Sensitive Receptors.geo	7/2/2024 10:02:06 AM
Substation Transformers.geo	7/31/2024 2:37:00 PM
Topo_Civil.geo	7/23/2024 1:43:04 PM
Topography_GIS.geo	7/23/2024 12:15:30 PM
RDGM0001.dgm	7/23/2024 12:17:48 PM

Tracy Long Duration Energy Storage (LDES)

Run info

Operational Noise_Grid Map

Project info

Project title: Tracy Long Duration Energy Storage (LDES)
Project No.: 24-15680
Project engineer: Kyle Pritchard
Customer:

Description:
Operational noise modeling for the Tracy BESS project in San Joaquin County.

Run description

Calculation type: Grid Map
Title: Operational Noise_Grid Map
Calculation group
Run file: RunFile.runx
Result number: 6
Local calculation (ThreadCount=12)
Calculation start: 7/31/2024 2:37:43 PM
Calculation end: 7/31/2024 2:38:41 PM
Calculation time: 00:39:078 [m:s:ms]
No. of points: 126243
No. of calculated points: 126243
Kernel version: SoundPLANnoise 9.0 (4/18/2024) - 64 bit

Run parameters

Reflection order: 3
Maximum reflection distance to receiver 200 m
Maximum reflection distance to source 50 m
Search radius 5000 m
Weighting: dB(A)
Allowed tolerance: 0.100 dB
Create ground effect areas from road surfaces: Yes
Treat roads as terrain following: No

Standards:
Industry: ISO 9613-2: 1996
Air absorption: ISO 9613-1
regular ground effect (chapter 7.3.1), for sources without a spectrum automatically alternative ground effect
Limitation of screening loss:
single/multiple 20.0 dB /25.0 dB
Side diffraction: ISO/TR 17534-3:2015 compliant: no side diffraction if terrain blocks line of sight
Use Eqn ($A_{bar}=D_z-Max(A_{gr},0)$) instead of Eqn (12) ($A_{bar}=D_z-A_{gr}$) for insertion loss
Environment:
Air pressure 1013.3 mbar
rel. humidity 70.0 %
Temperature 10.0 °C
Meteo. corr. $C_0(7-22h)[dB]=0.0$; $C_0(22-7h)[dB]=0.0$;
Ignore C_{met} for L_{max} industry calculation: No
Parameter for screening: $C_2=20.0$

Rincon Consultants 9320 Chesapeake Drive, Suite 218 San Diego, CA
92123 USA

Tracy Long Duration Energy Storage (LDES)

Run info

Operational Noise_Grid Map

Dissection parameters:

Distance to diameter factor	8
Minimal distance	1 m
Max. difference ground effect + diffraction	1.0 dB
Max. number of iterations	4

Attenuation

Foliage:	ISO 9613-2
Built-up area:	ISO 9613-2
Industrial site:	ISO 9613-2

Assessment: Leq

Grid Noise Map:

Grid space:	3.00 m
Height above ground:	1.500 m
Grid interpolation:	

Field size =	9x9
Min/Max =	10.0 dB
Difference =	0.2 dB
Limit level=	40.0 dB

Geometry data

Operational Noise.sit 7/31/2024 2:37:00 PM

- contains:

Aqueduct.geo	7/23/2024 12:20:02 PM
BESS Units.geo	7/31/2024 2:37:00 PM
Calculation Area.geo	7/2/2024 10:02:06 AM
Geo-File1.geo	7/2/2024 9:16:42 AM
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Topo_Civil.geo	7/23/2024 1:43:04 PM
Topography_GIS.geo	7/23/2024 12:15:30 PM
RDGM0001.dgm	7/23/2024 12:17:48 PM

Appendix G

Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

The Initial Study-Mitigated Negative Declaration identifies the applicable mitigation measures that will be implemented to reduce the impacts associated with the Tracy Long Duration Energy Storage Project. The California Environmental Quality Act (CEQA) requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed development. As stated in section 21081.6(a)(1) of the Public Resources Code:

...the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.

Section 21081.6 also provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined as part of adopting an Initial Study-Mitigated Negative Declaration.

To ensure that the mitigation measures are properly implemented, a monitoring program has been devised which identifies the timing and responsibility for monitoring each measure. The project Applicant will have the responsibility for implementing the measures that apply to development activity, and the various San Joaquin County departments will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
Air Quality					
AQ-1: Construction and Operation -Exempt from Off-site Fee					
Within 30 days of the end of construction, submit to the SJVAPCD a summary report of the construction start and end dates of each phase of construction.	Prepare and submit to the SJVAPCD a summary report of the construction start and end dates of each phase of construction	Verify report has been submitted	Within 30 days of the end of construction	San Joaquin County Department of Community Development; San Joaquin County Air Pollution Control District	
AQ-2: Construction and Operation Dates and Recordkeeping					
All records of construction start and end dates shall be maintained on site during construction and for a period of ten years following the end of construction. Records shall be made available for SJVAPCD inspection upon request.	Prepare and maintain records	Verify records, as necessary	As needed	San Joaquin County Department of Community Development; San Joaquin County Air Pollution Control District	
AQ-3: Minimize Personnel and Public Exposure to Valley Fever					
<p>Prior to site preparation, grading activities, or ground disturbance, the Applicant shall prepare a Fugitive Dust Control Plan for the proposed project. The Fugitive Dust Control Plan (FDCP) shall include the following at a minimum:</p> <ul style="list-style-type: none"> Equipment, vehicles, and other items shall be cleaned thoroughly of dust before they are moved off-site to other work locations. Wherever possible, grading, and trenching work shall be phased, so that earth-moving equipment works well ahead or down-wind of workers on the ground. 	<p>Prepare and submit a FDCP to the San Joaquin County Department of Community Development for review.</p> <p>Implement the requirements of the FDCP.</p>	<p>Verify FDCP is completed.</p> <p>Verify measures are implemented during construction as needed.</p>	<p>Prior to site preparation, grading activities, or ground disturbance.</p> <p>During site preparation, grading, and construction.</p>	San Joaquin County Department of Community Development	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
<ul style="list-style-type: none"> The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area. If a water truck runs out of water before dust is dampened sufficiently, ground workers exposed to dust are to leave the area until a full truck resumes water spraying. All heavy-duty earth-moving vehicles shall be closed-cab and equipped with a High Efficiency Particulate Arrestance-filtered air system, or High Efficiency masks that can be worn by the vehicle operators. N95 respirators shall be provided to on-site workers for the duration of the construction period. Workers shall receive training to recognize the symptoms of Valley Fever and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be kept on-site for review as required by regulatory agencies. <p>Valley Fever information shall be available on-site for all construction personnel. The information shall provide, at a minimum, a description of the symptoms, health effects, preventative measures, and treatment.</p>					
Biological Resources					
BIO-1: Crotch's Bumble Bee Avoidance					
<p>Prior to any vegetation removal, clearing, grading or grubbing, focused surveys for Crotch's bumble bee shall be conducted within the proposed Project footprint by a qualified biologist, with expertise in surveying for bumble bees. The focused surveys shall include: (1) a habitat assessment, (2) foraging surveys, and (3) nesting surveys, in accordance with the recommendations described in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species, released by the CDFW on June 6, 2023. If more than one year after the completion of focused Crotch's bumble bee surveys (i.e., date of last survey) has</p>	<p>Focused surveys for Crotch's bumble bee shall be conducted within the proposed Project footprint by a qualified biologist.</p> <p>If more than one year since the completion of focused surveys has passed before ground disturbance, the</p>	<p>Verify focused surveys have been completed less than one year prior to when ground disturbing activities will commence.</p>	<p>Prior to any vegetation removal, clearing, grading or grubbing.</p>	<p>San Joaquin County Department of Community Development</p>	

County of San Joaquin
Tracy Long Duration Energy Storage Project

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
<p>passed before ground disturbance has been initiated, the focused surveys shall be repeated.</p> <p>The habitat assessment will be conducted concurrently with the foraging and nesting surveys, and shall at a minimum, include historical and current species occurrences; document potential on-site habitat, including foraging, nesting, and/or overwintering resources; and identify which plant species are in bloom during the foraging and nesting surveys, as well as their percent cover.</p> <p>Nesting surveys shall occur during the Queen Flight Season through the Colony Active Period (February 1 through August 31 for Crotch's bumble bee). Potential nesting sites shall be surveyed for active Crotch's bumble bee colonies either through observations of queens searching for nesting sites or by looking for concentrated bumble bee activity entering and exiting a given area. Potential nesting sites investigated by colony founding queens shall be GPS marked if the queen exhibits signs of interest in the potential site (e.g., she does not emerge from the site within a few minutes and then continues to nest search). Potential nesting sites identified during the queen nest searching phase shall be evaluated later during the Colony Active Period to determine whether an active colony has been established. Potential nest sites in project areas shall be observed for up to five minutes during the Colony Active Period to monitor for Crotch's bumble bees entering or exiting. If a nest site is confirmed to be occupied by Crotch's bumble bees, the location GPS coordinates shall be recorded.</p> <p>A qualified biologist who is in possession of a valid Memorandum of Understanding with the CDFW (and valid Scientific Collecting Permit, if applicable) shall conduct capture foraging surveys and record non-lethal photo vouchers of all captured bumble bees in accordance with the CDFW Survey Considerations for CEQA Candidate Bumble Bee Species document (June 2023). Foraging surveys shall include at least three on-site surveys that are spaced two to four weeks apart. The timing of these surveys shall coincide with the Colony Active Period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between one hour after sunrise and two hours before sunset. Surveys shall not be</p>	<p>focused surveys shall be repeated.</p> <p>If Crotch's bumble bee is detected during the focused surveys, an Avoidance Plan to fully avoid impacts to Crotch's bumble bee shall be developed and implemented. If impacts to Crotch's bumble bee cannot be fully avoided, an Incidental Take Permit shall be obtained from CDFW.</p>	<p>Verify sufficient action is taken based on focused survey findings.</p>	<p>Prior to any vegetation removal, clearing, grading or grubbing.</p>	<p>San Joaquin County Department of Community Development</p>	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
<p>conducted during wet conditions (e.g., fog, rain, or drizzle), and surveyors shall wait at least one hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies, temperatures are between 65°F and 90°F, and winds are less than 8 miles per hour. Surveys may be conducted outside these weather parameters if other bees or butterflies are observed flying.</p> <p>If Crotch's bumble bee is detected during the focused surveys, an Avoidance Plan to fully avoid impacts to Crotch's bumble bee shall be developed. If impacts to Crotch's bumble bee cannot be fully avoided, an Incidental Take Permit shall be obtained from CDFW.</p> <p>If Crotch's bumble bee is not detected during the focused surveys, or if this species is no longer listed or a Candidate under CESA at the time of construction, no further action or mitigation would be required.</p>					
BIO-2: Swainson's Hawk Pre-construction Survey and Avoidance					
<p>One pre-construction survey shall be conducted to search for Swainson's hawk nests within 0.25 mile of the proposed Project, generally following guidance laid out by the <i>Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley</i> (Swainson's Hawk Technical Advisory Committee 2000).</p> <p>If active nests are found within 0.25 mile during the pre-construction survey and construction activities will occur during the Swainson's hawk nesting season (February 15 through September 15), a qualified biologist shall be present daily during any activities within the Project Area, including access routes, that are within 0.25 mile of the active nests to monitor the behavior of the potentially affected Swainson's hawks. The qualified biologist shall have the authority to order the cessation of all project activities if the bird(s) exhibits distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization [distress calls], agitation, failure to remain on nest, failure to deliver prey items for an extended time period, failure to maintain nest, etc.), which may cause reproductive failure (nest abandonment and loss of eggs and/or young).</p>	<p>Conduct a survey for Swainson's hawk nests within a 0.25 mile radius of the proposed Project.</p> <p>Should nests be found during the survey, a qualified biologist, with prerogative to order the cessation of all project activities, as necessary, shall be present daily during any activities within the Project Area throughout nesting season.</p>	<p>Verify survey is completed.</p> <p>Ensure presence of a qualified biologist, as necessary.</p>	<p>Prior to construction.</p> <p>During any activities within the Project Area through nesting season (construction phase).</p>	<p>San Joaquin County Department of Community Development</p> <p>San Joaquin County Department of Community Development</p>	

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Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
BIO-3: Pre-construction Nesting Bird Survey and Avoidance					
<p>A general pre-construction nesting bird survey shall be conducted by a qualified biologist within seven days prior to the initiation of construction activities. If construction is stopped for more than seven days during the nesting season, a pre-construction survey should be conducted prior to the re-start of construction activities. Surveys shall include the disturbance area plus a 100-foot buffer for passerine species and a 300-foot buffer for raptors.</p> <p>If active nests are located, an appropriate avoidance buffer shall be established within which no work activity would be allowed which would impact these nests. The avoidance buffer would be established by the qualified biologist on a case-by-case basis based on the species and site conditions. Larger buffers may be required depending upon the status of the nest and the construction activities occurring near the nest. The buffer area(s) shall be closed to all construction personnel and equipment until juveniles have fledged and/or the nest is inactive. A qualified biologist shall confirm that breeding/nesting is complete, and the nest is no longer active prior to removal of the buffer. If work within a buffer area cannot be avoided, then a qualified biologist shall be present to monitor all project activities that occur within the buffer. The biological monitor should evaluate the nesting avian species for signs of disturbance and should have the ability to stop work.</p>	<p>A nesting bird survey shall be conducted by a qualified biologist of the disturbance area plus a 100-foot buffer for passerine species and a 300-foot buffer for raptors.</p>	<p>Verify that surveying has occurred within an appropriate area and following the required timeline.</p>	<p>Prior to construction.</p>	<p>San Joaquin County Department of Community Development</p>	
	<p>If active nests are located, establish an appropriate avoidance buffer and assign a biological monitor, as necessary.</p>	<p>Enforce appropriate avoidance buffer and confirm biological monitor presence, as necessary.</p>	<p>Prior to construction, as necessary.</p>		
BIO-4: Construction Worker Environmental Awareness Training and Education Program					
<p>Prior to any activity on-site and for the duration of construction activities, all personnel at the Project area (including laydown areas and/or linear routes) shall attend a WEAP developed and presented by the Qualified Biologist or authorized designee. New personnel shall receive WEAP training on the first day of work and prior to commencing work on the site. Any employee responsible for the operations and maintenance or decommissioning of the Project facilities shall also attend an operations and maintenance-specific WEAP training.</p> <p>1. The program shall include information on the life history of Crotch’s bumble bee, Swainson’s hawk, burrowing owl, and</p>	<p>Conduct a WEAP developed and presented by the Qualified Biologist or authorized designee prior to commencing work on the site.</p>	<p>Verify WEAP has been conducted.</p>	<p>Prior to any activity on-site and for the duration of construction activities.</p>	<p>San Joaquin County Department of Community Development</p>	
	<p>A copy of the training as well as a list of the names of all personnel</p>	<p>Verify documentation</p>	<p>Prior to on-site activities and as requested.</p>		

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
<p>nesting birds, as well as other wildlife and plant species that may be encountered during construction activities.</p> <p>2. The program shall also discuss the legal protection status of each species, the definition of “take” under the federal Endangered Species Act and California Endangered Species Act, measures the Applicant is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the federal Endangered Species Act or California Endangered Species Act.</p> <p>3. The program shall include the contact information for the project biologist and on-site environmental compliance manager.</p> <p>4. The program shall provide information on how and where to bring injured animals for treatment in the case any animals are injured the Project area.</p> <p>5. An acknowledgement form signed by each worker indicating that WEAP training has been completed shall be kept on record.</p> <p>6. A sticker shall be placed on hard hats indicating that the worker has completed the WEAP training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the WEAP training and are wearing hard hats with the required sticker.</p> <p>A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms will be made available upon agency request.</p>	<p>who attended the WEAP training and copies of the signed acknowledgement forms will be made available upon agency request.</p>	<p>provided if requested.</p>		<p>Community Development</p>	
BIO-5: Conversion of Open Space Land					
<p>The Applicant shall confer with San Joaquin Council of Governments to confirm the areas of temporary and/or permanent project impacts falling outside the area that was previously mitigated through the SJMSCP for conversion of Agricultural Habitat Land from Open Space use to Non-Open Space. As applicable, the Applicant shall pay the mitigation fees for</p>	<p>Confirm with San Joaquin Council of Governments the areas of temporary and/or permanent project impacts falling outside</p>	<p>Verify coordination with San Joaquin Council of Governments has occurred.</p>	<p>Prior to the start of construction.</p>	<p>San Joaquin County Department of Community Development</p>	

County of San Joaquin
Tracy Long Duration Energy Storage Project

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
this acreage to San Joaquin Council of Governments at a 1:1 ratio prior to the start of construction.	the area that was previously mitigated.				
	Pay fees as required.	Verify payment of fees, as appropriate.			
Cultural Resources					
CUL-1: Cultural Resources Sensitivity Training					
Prior to the commencement of project-related, ground-disturbing activities, including, but not limited to, site clearing, grubbing, trenching, and excavation, a Qualified Archaeologist who meets or exceeds the Secretary of the Interior's Professional Qualifications Standards for Archaeology (National Park Service 1983) or their designee shall provide a Cultural Resources Sensitivity Training for the general contractor, subcontractors, and construction workers participating in ground-disturbing activity for Project development. The training shall describe the potential of exposing archaeological resources, types of cultural materials that may be encountered, and directions on the steps that shall be taken if such a find is encountered. The project Applicant shall provide a copy of the training materials to the County Planning Division for review. In addition, consulting Tribes shall be given an opportunity to review training materials and provide input. This training may be presented alongside other environmental training programs required prior to construction. A Cultural Resources Sensitivity Training acknowledgment form shall be signed by workers who receive the training.	Retain a Qualified Archaeologist and conduct a Cultural Resources Sensitivity Training for all workers participating in ground-disturbing activity for Project development.	Verify Cultural Resources Sensitivity Training has occurred.	Prior to ground-disturbing activities.	San Joaquin County Department of Community Development	
	Provide consulting Tribes an opportunity to review training materials and provide input.	Verify Consulting Tribes were given an opportunity for input.			
CUL-2: Unanticipated Discovery					
In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is	If archaeological resources are found, halt work with 50 feet of any find and contact an archeologist to evaluate the resource.	Verify an archaeologist is contracted if archaeological resources are found.	During ground-disturbing activities.	San Joaquin County Department of Community Development	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via Project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The County shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per CCR Section 15126.4(b)(3)(C).	<p>Contact a Native American representative if the resource is determined to be prehistoric.</p> <p>Complete archaeological testing for CRHR eligibility, as required.</p>	<p>Verify a Native American representative is contacted if required.</p> <p>Review and approve the treatment plan and archaeological testing as appropriate.</p>			
Geology and Soils					
GEO-1: Paleontological Resources Monitoring and Mitigation					
<p>The project Applicant shall implement the following measures prior to and during construction grading and excavation activities:</p> <ul style="list-style-type: none"> ▪ Qualified Professional Paleontologist. Prior to the start of construction, the project Applicant shall retain a Qualified Professional Paleontologist, as defined by the Society of Vertebrate Paleontology (SVP 2010). The Qualified Professional Paleontologist shall direct all mitigation measures related to paleontological resources. ▪ Paleontological Worker Environmental Awareness Program. Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological 	<p>Retain a Qualified Professional Paleontologist to conduct WEAP and provide resume and training to County.</p> <p>Conduct paleontological monitoring during all</p>	<p>Verify Professional Paleontologist has been retained and conducted WEAP training for construction personnel.</p> <p>Verify monitoring is occurring.</p>	<p>Prior to and during construction grading and excavation activities.</p> <p>During construction.</p>	San Joaquin County Department of Community Development	

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
<p>WEAP training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction personnel. The Applicant shall provide a resume of the Qualified Professional Paleontologist and a copy of this training to the County Planning Division for review.</p> <ul style="list-style-type: none"> ▪ Paleontological Monitoring and Salvage. Full-time paleontological monitoring shall be conducted during all excavating or grading that impacts sediments greater than two feet below the current ground surface. Paleontological monitoring shall be conducted by a paleontological monitor with experience with collection and salvage of paleontological resources and who meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor or their designee. The Qualified Professional Paleontologist may recommend that monitoring be reduced in frequency or ceased entirely based on geologic observations. Such decisions shall be subject to review and approval by the County. In the event of a fossil discovery by the paleontological monitor or construction personnel, all construction activity within 50 feet of the find shall cease, and the Qualified Professional Paleontologist shall evaluate the find. If the fossil(s) is (are) not scientifically significant, then construction activity may resume. If it is determined that the fossil(s) is (are) scientifically significant, the following shall be completed: <ul style="list-style-type: none"> ▫ Fossil Salvage. The paleontological monitor shall salvage (excavate and recover) the fossil to protect it from damage/destruction. Typically, fossils can be safely salvaged quickly by a single paleontological monitor with minimal disruption to construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically sensitive deposits. After the fossil(s) is (are) salvaged, construction activity may resume. 	<p>excavating or grading that impacts sediments greater than two feet below the current ground surface.</p> <p>In the event of a fossil discovery by the paleontological monitor or construction personnel, halt construction activity within 50 feet of the find. If it is determined that the fossil(s) is (are) scientifically significant, follow outlined procedures.</p>	<p>Verify procedures followed in the event paleontological resources are identified.</p>	<p>Upon completion of ground-disturbing activities.</p>		

Mitigation Measure	Implementation Procedures	Monitoring and Reporting Action	Monitoring Timing	Monitoring Responsibility	Compliance Verification (Initial, Date, Comments)
<ul style="list-style-type: none"> ▫ Fossil Preparation and Curation. Fossils shall be identified to the lowest (most-specific) possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Professional Paleontologist. ▫ Final Paleontological Mitigation Report. Upon completion of ground-disturbing activities (or laboratory preparation and curation of fossils, if necessary), the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts. The report shall include a summary of the field and laboratory methods employed; an overview of project geology; and, if fossils were discovered, an analysis of the fossils, including physical description, taxonomic identification, and scientific significance. The report shall be submitted to the County Planning Division and, if fossil curation occurred, the designated scientific institution. 					

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