# Subsequent Initial Study/Mitigated Negative Declaration for the San Miguel Community Services District Machado Wastewater Treatment Facility Upgrade and Recycled Water Distribution Project, San Miguel, San Luis Obispo County, California

**MARCH 2024**

PREPARED FOR

**San Miguel Community Services District**

PREPARED BY

**SWCA Environmental Consultants**

# SUBSEQUENT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE SAN MIGUEL COMMUNITY SERVICES DISTRICT MACHADO WASTEWATER TREATMENT FACILITY UPGRADE AND RECYCLED WATER DISTRIBUTION PROJECT, SAN MIGUEL, SAN LUIS OBISPO COUNTY, CALIFORNIA

Prepared for

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# 1 INTRODUCTION

The Machado Wastewater Treatment Facility (WWTF) underwent the most recent significant upgrade in the late 1990s, bringing its current and permitted capacity to 200,000 gallons per day (gpd). The San Miguel Community Services District (SMCSD) currently treats an average of approximately 192,000 gpd (SMCSD 2020). As noted in the *San Miguel Community Plan Update Final Environmental Impact Report* (Final EIR) (County of San Luis Obispo 2016c), San Miguel is expected to grow to a population of 3,658 by the year 2035. The SMCSD acknowledges that the existing Machado WWTF is nearing capacity and has, therefore, proposed the WWTF upgrade to meet projected population growth and to comply with regulatory requirements.

The *San Miguel Wastewater Treatment Plant Upgrade Project Final Initial Study/Mitigated Negative Declaration*, adopted in August 2022 (2022 IS/MND; Dudek 2022), evaluated the potential environmental impacts associated with the upgrade of the Machado WWTF to increase the permitted daily capacity from 200,000 to 500,000 gpd and enable treated effluent to be stored or conveyed to nearby agricultural operations for non-edible agricultural irrigation. The 2022 IS/MND evaluated the potential impacts associated with the construction of the following improvements within the footprint of the existing WWTF, hereafter referred to as the approved project:

- Construction of a new headworks with a flow spitter and an influent pumping station;
- Construction of a new secondary and tertiary treatment package facility with a membrane bioreactor (MBR) unit, blowers, internal mixed liquor recycle, ultraviolet (UV) disinfection system, biosolids dewatering system, and chemical storage;
- Replacement of existing influent lift station pumping facilities and construction of new treated effluent/recycled water pumping facilities;
- Construction of support facilities, including office and laboratories, maintenance and equipment storage, electrical and controls facilities, backup power generation facilities, and a septage receiving station; and
- Optional construction of a solar photovoltaic (PV) field.

Since adoption of the 2022 IS/MND, the approved project has been revised to include the construction of three additional percolation beds in the northern portion of the Machado WWTF and one additional percolation pond on the adjacent western parcel (Assessor's Parcel Number [APN] 021-051-020) and the removal of two effluent holding ponds, including one pond from the southern portion of the Machado WWTF and one pond from the western portion of the Machado WWTF, that would be filled for the construction of the treatment package facility and operations building. Additionally, the proposed headworks and influent lift station would be relocated within the project site to keep these facilities out of the floodplain. These support facilities would be combined into a larger operations building that would contain the office, laboratories, and an equipment storage facility and be connected to the maintenance shop with a covered carport. Other support facilities, including the electrical and control rooms, backup power generation facilities, and a septage receiving station, would remain as standalone facilities. These improvements would predominantly be constructed within the footprint of the project previously analyzed in the 2022 IS/MND.

The 2022 IS/MND did not evaluate the potential environmental impacts associated with the construction of a new recycled water conveyance system; however, the recycled water conveyance system was briefly described as a new 8-inch high-density polyethylene (HDPE) pipe water transmission and distribution pipelines intended to convey recycled water to large vineyards to the east and west of the Machado WWTF. At the time the 2022 IS/MND was being prepared, the precise alignment of this feature had not

been determined and the recycled water conveyance system was described in the 2022 IS/MND as a potential future project not included as part of the Machado WWTF upgrade.

Pursuant to Section 15162 of the California Environmental Quality Act (CEQA) Guidelines, when a lead agency has adopted an IS/MND for a project, a subsequent IS/MND does not need to be prepared for the project unless the lead agency determines that one or more of the following conditions are met:

1. Substantial project changes are proposed that will require major revisions of the previous IS/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes would occur with respect to the circumstances under which the project is undertaken that require major revisions to the previous IS/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the previous IS/MND was adopted shows any of the following:
    a. The project will have one or more significant effects not discussed in the previous IS/MND;
    b. Significant effects previously examined will be substantially more severe than identified in the previous IS/MND;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measures or alternatives; or
    d. Mitigation measures or alternatives that are considerably different from those analyzed in the previous IS/MND would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

Based on the potential new environmental impacts associated with construction of the new recycled water conveyance system, preparation of a Subsequent IS/MND is considered to be the appropriate level of review for this project pursuant to Section 15162 of the State CEQA Guidelines. This Subsequent IS/MND evaluates the potential environmental impacts associated with the modified WWTF upgrade and the installation of the new recycled water conveyance system, hereafter referred to as the proposed project.

## 1.1 Project Location

The project site encompasses the Machado WWTF and adjacent western parcel (APN 021-051-020) and three pipeline alignments beginning at the Machado WWTF and terminating at the E&J Gallo Winery property, the Vino Farms property, and the intersection of 16th Street and N Street in the unincorporated community of San Miguel in San Luis Obispo County, California (Figure 1).

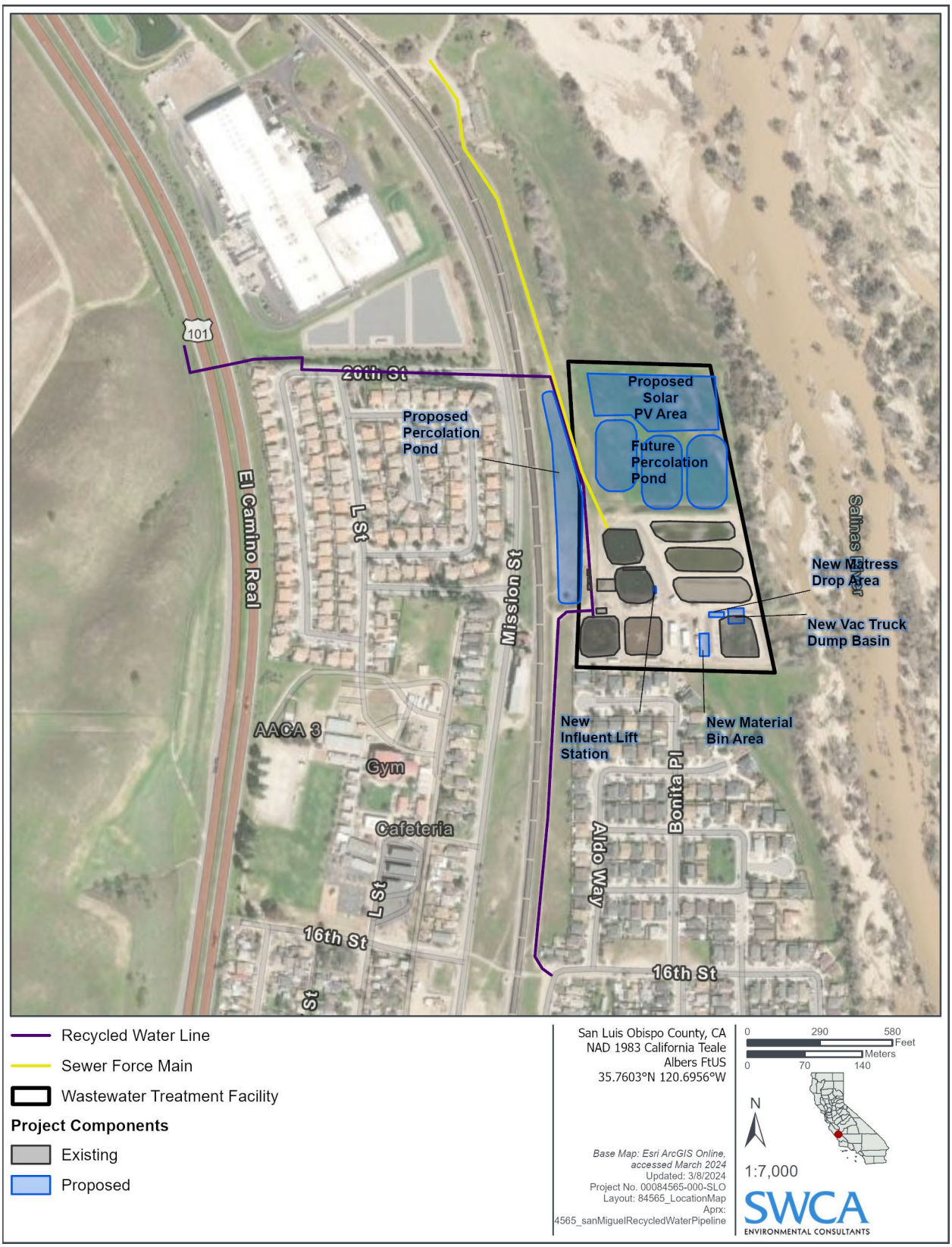


**Figure 1. Project Location Map.**

# 1.2 Environmental Setting

The project site consists of the Machado WWTF and adjacent western parcel and the proposed recycled water conveyance system alignments. The proposed recycled water conveyance system alignment consists of two recycled water transmission pipelines and sewer force main. The proposed northern segment of the recycled water transmission pipeline would extend approximately 2,500 linear feet beginning at the southwestern portion of the Machado WWTF, generally extending northwest, and terminating at the southeastern edge of the Vino Farms property to the northwest of the Machado WWTF. The proposed southern segment of the recycled water transmission pipeline would extend approximately 1,600 linear feet beginning at the southwestern portion of the Machado WWTF, extending south, and terminating at the intersection of 16th Street and N Street. The proposed sewer force main would extend 2,400 linear feet beginning in the western portion of the Machado WWTF, generally extending in a north/northwest direction, and terminating at the E&J Gallo Winery property.

The Machado WWTF occupies approximately 38.4 acres comprising four separate parcels, including Assessor's Parcel Numbers (APNs) 021-051-013, -015, -016, and -017. The main WWTF occupies approximately 17.8 acres, while the remaining 20.6 acres are located within the channel of the Salinas River east of the Machado WWTF and mapped within Federal Emergency Management Agency (FEMA) Special Flood Hazard Zone A. The existing WWTF is comprised of a series of four partially mixed aerated lagoons and three percolation ponds. The existing WWTF is bordered by the Union Pacific Railroad (UPRR), located approximately 120 feet west; the Salinas River, located approximately 50 feet east; single-family residences, located approximately 15 feet south; and open space to the north.

The proposed recycled water conveyance system alignments predominantly consist of previously developed roadways and otherwise disturbed areas and is generally surrounded by the Machado WWTF, E&J Gallo Winery, and existing residences. The project site consists of previously developed areas and areas with non-native grassland, and ruderal vegetation. There are scattered ornamental trees located along the recycled water conveyance system alignment. The Salinas River is located approximately 50 feet east of the Machado WWTF; however, there are no surface water features or drainages located within the project area.

# 1.3 Project Description

The SMCSD proposes to upgrade the Machado WWTF and install a new 8-inch polyvinyl chloride (PVC) and HDPE wastewater transmission pipeline and a 4-inch PVC sewer force main. These project components are described in detail below.

## 1.3.1 *Machado WWTF Upgrade*

The proposed WWTF upgrade would increase the permitted daily capacity from 200,000 to 500,000 gpd and enable the use of treated effluent to be stored or conveyed to nearby agricultural operations for non-potable agricultural irrigation. The project includes the construction of a new headworks, a new MBR unit, and associated support facilities.

### HEADWORKS

The Machado WWTF headworks would be developed in the western portion of the Machado WWTF. The headworks would include mechanical screening, grit removal, and a concrete equalization structure, described below.

### Influent Pumping Station

A new influent pumping station would replace the existing aging pumping station. The new influent pumping station would be constructed as a "wet-well" type and equipped with multiple (minimum of two) submersible pumps. Wastewater would pass through the headworks and into the pumping station to lift it to a higher elevation so that it can flow through the remainder of the Machado WWTF by gravity. Odor control would be installed to minimize wet-well turbulence and includes collection of odors in scrubbers or biofilters or the addition of odor control chemicals to the sewer upstream of the pumping station. Chemicals typically used for odor control include chlorine, hydrogen peroxide, metal salts (ferrous chloride and ferric sulfate), oxygen, air, and potassium permanganate. The influent pump station would be approximately 550 square feet and located immediately downstream of the influent manhole adjacent to the MBR. Like the headworks structure, the influent lift station would be primarily below ground, with the base being approximately 18 feet below the ground surface.

### Headworks

The headworks system consists of two identical trains running parallel, each with a mechanical rake coarse screen, grit removal system, and fine screen with 2-millimeter perforations that would remove additional suspended solids from wastewater. Solids removed by the headworks equipment would be stored in a dumpster for hauling to the Chicago Grade landfill. The approximate area of the two headworks trains is 2,000 square feet.

### Influent Equalization

A below-ground equalization tank would be installed next to the headworks to accommodate diurnal flows during maximum month flow events. The area of the influent equalization tank is approximately 2,200 square feet and 5 feet deep. The equalization tank would include two pumps to pump flows to the MBR. Larger peak flows would overflow from the equalization tank to the equalization pond to the north of the tank and headworks facility.

The equalization pond would be retrofitted from existing Pond 4 to hold influent water during high-flow events. When the high flows recede, the flow would be pumped back to the headworks fine screen from the equalization pond though the influent equalization lift station.

## MEMBRANE BIOREACTOR UNIT

Once wastewater passes through the influent pumping station and headworks and the primary treatment process is complete, the flow would pump into the MBR unit. Components of the MBR unit would include a new pre-engineered package MBR municipal wastewater treatment system, along with a new pre-engineered system for the disinfection of treated effluent, which shall be accomplished by an enclosed, low pressure, UV unit(s) and a new pre-engineered package biosolids dewatering system. Facilities for chemical storage, as required for MBR operation and maintenance, would be incorporated into the MBR unit. Initially the MBR unit would be installed on a structural concrete slab with an approximate footprint of 55,000 square feet. The MBR unit would initially not be enclosed in a building and would be exposed to the atmosphere. The maximum height of the equipment would extend approximately 12 feet above the adjacent ground surface. In the future, the SMCSD may consider enclosing the MBR unit in an environmentally controlled building, which would have a similar footprint (i.e., 55,000 square feet) and a maximum building height of approximately 25 feet. The building would be located within the existing WWTF in San Miguel.

MBR technology provides simultaneous secondary and tertiary treatment. The separation of liquid and solids is accomplished by operating submerged membranes under vacuum with product water drawn through the membranes with permeating pumps or using a gravity-assist siphon system. The solids remaining on the surface of the membranes are returned to the head of the aeration basins. A portion of the solids are wasted just as with conventional activated sludge. MBRs require finer (2-millimeter) screening than conventional activated sludge to remove fine materials that can wrap around and clog the membranes. Another added benefit is that the volume of air to be treated for odor control is smaller than conventional treatment. Solids removed from the MBR would be conveyed for sludge management, dewatering, and disposal.

### Blowers

Blowers would create air flow to support the aeration process. Proper air supply is critical to various functions in the Machado WWTF.

### Internal Mixed Liquor Recycle

Internal mixed liquor recycle equipment is important for the treatment process to remove excess nitrogen and phosphorus from effluent.

### Ultraviolet Disinfection System

UV disinfection uses UV radiation to destroy or inactivate disease-causing organisms. UV lamps would be contained within vessels and water would be pumped through the vessels at a set flow rate. The UV disinfection process enables the treated effluent to meet California Code of Regulations (CCR) Title 22 standards for use of reclaimed water for surface irrigation.

### Biosolids Dewatering System

The biosolids dewatering system would include a dewatering press, feed pump and polymer system, aeration system, and stainless-steel liquid storage tank. The operation and controls of the biosolids dewatering system shall be integrated into the MBR System control system and SMCSD supervisory control and data acquisition (SCADA) system. The sludge dewatering equipment shall have the capacity to produce a dewatered sludge with a minimum of 20% solids. Dewatered sludge would fall from the press by gravity into the SMCSD-supplied roll-off dumpster or equivalent container for disposal and subsequent transport to the Chicago Grade landfill.

### Chemical Storage

The Machado WWTF uses certain chemicals to maintain the treatment process. These chemicals would be housed in the MBR unit slab, with secondary containment, and managed in accordance with an approved hazardous materials business plan.

## SUPPORT FACILITIES

### Percolation Beds

The proposed upgrade of the Machado WWTF would require the construction of three new percolation beds (Percolation Beds 4–6) in the northern portion of the Machado WWTF site and one new percolation bed on the adjacent western parcel (APN 021-051-020) (see Figure 1). Each new percolation bed would be approximately 0.75 acre in size and would allow for a greater area for percolating effluent.

## Recycled Water Storage Pond and Pump Station

The recycled water storage pond would be retrofitted from existing Pond 4 to hold tertiary treated effluent prior to reuse. The project includes an approximately 450-square-foot recycled water pump station, which will include a precast concrete pump vault about 20 feet below grade located on the north-facing side of the storage pond to deliver recycled water for on-site use and to nearby vineyards.

## Operations Building

The proposed upgrade of the Machado WWTF would require trained and certified staff with expertise in mechanical plant operations and laboratory testing to be on-site. The increased operator presence and laboratory testing requirements would require that a permanent environmentally controlled operations building be constructed at the Machado WWTF site. The operations building would consist of offices, laboratories, and equipment storage rooms within a 9,245-square-foot building that would be connected to the maintenance shop by a covered carport. The operations building would be located near the main entrance to the Machado WWTF. Other support facilities, including the electrical and control rooms, backup power generation facilities, and a septage receiving station, would remain as standalone facilities.

## Environmentally Controlled Electrical and Controls Facilities

With the upgrade of the existing WWTF, the existing electrical service and controls infrastructure would be upgraded. Currently, the electrical and controls equipment is located outside and exposed to the weather, with only a shade structure for protection from the elements. It is anticipated that as part of the proposed project, there would be a significant increase in the number and sophistication of the electrical and controls devices and components required for the operation, monitoring, and control of the Machado WWTF. To properly protect the required electrical and controls systems and to provide an environment where they can be properly serviced and maintained, the proposed project includes a 900-square-foot, 15-foot-high building to house this equipment.

## Upgrade and Modernization of the Electrical, Controls, and SCADA Systems

The proposed project would include an upgrade to the existing electrical service and controls infrastructure. The existing WWTF requires only basic electrical and controls infrastructure and minimal automation. The existing SCADA system is utilized primarily for alarm notification to off-site operators and for basic acquisition of operational data. With the increased sophistication and complexity of operations that would occur as a result of the Machado WWTF upgrade, it would be necessary to upgrade and modernize the electrical, controls, and SCADA systems. It is imperative that the planning and design of these system upgrades be accomplished with comprehensive input from SMCSD operations staff to ensure that the electrical, controls, and SCADA systems that are ultimately installed are compatible with the capabilities and expertise of the Machado WWTF operators.

## Backup Power Generation Facilities

The proposed project would include an on-site, automatically starting generator, capable of ensuring continuous operation of all critical wastewater treatment system units for a duration equal to the longest power outage on record.

## Septage Receiving Station

A new septage receiving station is desired by the SMCSD for receiving septage unloaded from hauling vehicles. The receiving station can be a source of revenue for the SMCSD and would provide a service to the surrounding sphere of influence. Wastes received could include residential, portable toilet, septage

tank, and/or pre-approved industrial wastes. Typically, liquid waste is pumped into a septage receiving station where rags and trash are removed and deposited into a dumpster. Following initial trash removal, grit is removed and deposited into a dumpster. The flow is then combined with the influent wastewater for treatment.

### Solids Management and Hauling

The wastewater treatment process results in treated wastewater and solids. Solids are routinely extracted from equipment and ponds and, if no use is available, transported to the Chicago Grade Landfill, located at 2290 Homestead Road in Templeton, California. Materials are hauled off-site twice per month using a roll-off container truck equipped with a 12-foot container.

### Solar Photovoltaic Field

The SMCSD is continually looking to maximize treatment efficiency and minimize overall cost. Under this option, the proposed project would include the installation of ground-mounted solar panels in the northern portion of the proposed project, immediately north of the proposed percolation beds 4 through 6. Solar energy would be captured by an array of solar PV panels mounted to fixed racking or to a single axis tracking system. The total number of panels used would depend on the final selection of the actual panels to be used. The panels would be arranged in series to effectively increase output voltage.

The panels would be aligned in rows to be spaced based on specific design criteria and would be mounted on the racking systems. The type of anchoring system and/or foundation supports for the racking structures would be determined based on a preliminary geotechnical assessment, but it is anticipated that the racks would be supported by screw or driven piles into the ground. A fixed racking system would be stationary, with panels mounted to tilt to the south. If used, the tracking system would rotate slowly throughout the day at a range of approximately 60 degrees facing east-to-west to stay perpendicular to the incoming solar rays so production can be optimized. The number of panels per tracker would depend on final configuration and, at its highest rotated edge, would have a maximum height that would be defined by the topography of the terrain and the dimensions of the chosen panels. The minimum clearance from the lower edge of the panel to ground level is approximately 18 to 24 inches but would be subject to change pending final design. Power from the solar PV system would be used to provide supplemental power to the Machado WWTF.

## CONSTRUCTION

Construction of the proposed project is anticipated to commence in late 2024/early 2025 and would continue for a minimum of 22 months, subject to the regulatory approval process.

A temporary construction staging area would be required for construction activities and would be located on SMCSD property at the Machado WWTF. The construction staging area would be approximately 100 feet by 200 feet. The construction staging area would be cleared of vegetation if necessary, and crushed rock would be used to stabilize soil to create a temporary entry road, temporary parking, and temporary fabrication areas. Soil excavated during construction may be stockpiled, if feasible, at the construction staging area until it has been determined that it would not be needed for structural fill or backfill. Equipment, material, temporary office space, and construction equipment would be staged in the temporary construction staging area.

Construction would occur between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday. The construction workforce is anticipated to require an average of approximately 20 workers on a daily basis and at peak activities may be up to 50 workers. The project would require approximately 16.15 acres of

ground disturbance, including 25,925 cubic yards of cut and 22,250 cubic yards of fill with a maximum excavation depth of 25 feet.

### OPERATIONS AND MAINTENANCE

Operation of the proposed project would occur 24 hours a day, 7 days a week, 365 days a year. Two employees would be required to staff the Machado WWTF, and workers would be on-site in rotating 9-hour shifts, consistent with ongoing operations. Only security lighting would be provided, otherwise all lighting would be interior to the buildings.

The pipelines associated with the proposed project would be inspected, maintained, and repaired following completion of construction in accordance with regulatory requirements and in a manner consistent with good maintenance and repair practices. This would involve both routine preventative maintenance and emergency procedures to maintain service continuity.

The Machado WWTF and reclaimed water pipe system are designed with a 50-year operational life span; however, with routine maintenance, the operational life span may be longer.

## 1.3.2 *Wastewater Transmission Pipeline and Sewer Force Main*

The project includes the installation of two new 8-inch PVC and HDPE wastewater transmission pipelines and a 4-inch PVC sewer force main to convey wastewater to nearby vineyards and facilitate the future collection of effluent from E&J Gallo Winery, hereafter referred to as the recycled water conveyance system.

### RECYCLED WATER TRANSMISSION PIPELINE

The proposed recycled water transmission pipelines include two segments, including the northern segment and the southern segment. The northern segment would extend approximately 2,500 linear feet beginning at the southwestern portion of the Machado WWTF and terminating at the southeastern edge of the Vino Farms property to the northwest of the Machado WWTF. The pipeline would exit the Machado WWTF from the northwest and would travel north toward 20th Street, parallel to Mission Street. The pipeline would turn west, crossing under UPRR and Mission Street and would extend west along 20th Street until it crosses north under 20th Street between L Street and San Buena Ventura Way. The pipeline would extend northwest through the southwestern edge of the E&J Gallo Winery property, cross under U.S. Highway 101 (US 101), and terminate at the eastern edge of the Vino Farms property (see Figure 1).

The southern segment would extend approximately 1,600 linear feet beginning at the southwestern portion of the Machado WWTF and terminating at the intersection of 16th Street and N Street. The pipeline would exit the Machado WWTF from the southwest and travel south toward 16th Street within a previously disturbed roadway on a parcel currently owned UPRR (see Figure 1).

### SEWER FORCE MAIN

The proposed sewer force main would extend 2,400 linear feet beginning in the western portion of the Machado WWTF and terminating at the E&J Gallo Winery property. The pipeline would exit the Machado WWTF from the northwest and travel in a northwesterly direction, parallel to Mission Street and the UPRR, before terminating in the eastern portion of the E&J Gallo Winery property at an existing sewer pipeline (see Figure 1). Approximately 700 feet of the sewer force main would be constructed on SMCSD property, and approximately 1,700 feet of the sewer force main would be constructed on E&J Gallo Winery property.

### CONSTRUCTION

The project would include trenching activities for the installation of the proposed pipelines. The proposed trenches would be approximately 4 to 5 feet deep and 2 feet wide. In addition, boring methods would be used to install the pipeline at roadway crossings and under the UPRR, requiring bore pits up to 20 feet deep. No drainage crossings would be required. Construction activities would require 1.37-acre of ground disturbance, including 1,810 cubic yards of cut and fill. Construction of the northern segment of the recycled water transmission pipeline segment is anticipated to begin in late 2024 and occur over a period of 3 months. Construction of the proposed recycled water transmission pipeline would require periodic road closures and traffic controls along 20th Street during the 3-month construction period. Traffic could be limited to a single lane along 20th Street and could be detoured and directed to 19th Street if 20th Street requires full closure. Following construction activities, the project site would be returned to preconstruction conditions.

Prior to undertaking construction activities, the SMCSD would secure all required permits from agencies with jurisdiction over the rights-of-way along the proposed alignment. Private right-of-way would be secured from property owners.

## 1.4 Required Discretionary Approvals

The SMCSD is the Lead Agency, as defined by CEQA, for the proposed project.

Permits and/or approvals may be required from the following agencies prior to construction of the proposed project:

- County of San Luis Obispo Grading/Building Permit
- County of San Luis Obispo Condition Use Permit
- County of San Luis Obispo Encroachment Permit
- San Luis Obispo County Air Pollution Control District Construction Permit
- Central Coast Regional Water Quality Control Board General Construction Permit

# 2 ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The proposed project could have a "Potentially Significant Impact" for environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

| | | |
|---|---|---|
| ☒ Aesthetics | ☐ Greenhouse Gas Emissions | ☐ Public Services |
| ☐ Agriculture and Forestry Resources | ☒ Hazards and Hazardous Materials | ☐ Recreation |
| ☒ Air Quality | ☐ Hydrology and Water Quality | ☒ Transportation |
| ☒ Biological Resources | ☒ Land Use and Planning | ☒ Tribal Cultural Resources |
| ☒ Cultural Resources | ☐ Mineral Resources | ☒ Utilities and Service Systems |
| ☐ Energy | ☐ Noise | ☒ Wildfire |
| ☒ Geology and Soils | ☐ Population and Housing | ☒ Mandatory Findings of Significance |

## ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

**Date:** 3/28/2024 **Signed:** Kelly Dodds Digitally signed by Kelly Dodds DN: CN=Kelly Dodds, E=kelly.dodds@sanmiguelcsd.org Reason: I am approving this document Location: Date: 2024.03.28 13:00:13-07'00' Foxit PDF Editor Version: 12.0.0

# I. Aesthetics

| Environmental Issues | 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? | ☐ | ☐ | ☐ | ☒ |
| (b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| (c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| (d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☒ | ☐ | ☐ |

## *Setting*

CEQA establishes that it is the policy of the state to take all action necessary to provide people of the state "with . . . enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California Public Resources Code [PRC] Section 21001(b)). A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints. Some scenic vistas are officially or informally designated by public agencies or other organizations. A substantial adverse effect on a scenic vista would occur if the project would significantly degrade the scenic landscape as viewed from public roads or other public areas. A proposed project's potential effect on a scenic vista is largely dependent on the degree to which it would complement or contrast with the natural setting, the degree to which it would be noticeable in the existing environment, and whether it detracts from or complements the scenic vista.

The California Scenic Highway Program was created by the State Legislature in 1963 with the intention of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. US 101 is the primary north–south transportation route that traverses the region, which generally provides views of commercial and residential development throughout the community of San Miguel and the city of Paso Robles. The Machado WWTF is located approximately 0.25 mile east of US 101, and the proposed northern segment of the recycled water conveyance system alignment is located adjacent to and under US 101, which at this location, is eligible for designation as a scenic highway (California Department of Transportation [Caltrans] 2018).

The unincorporated community of San Miguel is located along the Salinas River, approximately 10 miles north of the city of Paso Robles in rural northern San Luis Obispo County. The community is predominantly comprised of active ranching and agriculture activities. The topography in the area is generally level to rolling, with low rising hills and shallow valleys and larger hills and mountains forming the backdrop. The common vegetative features of the region are the grass-covered valleys and hills with scattered oak trees. Oak woodlands are common, particularly in canyons and along streams on the west

side of the community. Willows, sycamores, and cottonwoods can be seen in riparian corridors along the Salinas and Estrella Rivers (County of San Luis Obispo 2016b).

The project site includes the Machado WWTF and the proposed recycled water conveyance system alignment. The Machado WWTF consists of existing WWTF infrastructure and is bordered by the UPRR to the west, the Salinas River to the east, single-family residences to the south, and open space to the north. The recycled water conveyance system alignment predominantly consists of previously developed and otherwise disturbed roadways beginning at the Machado WWTF and terminating at the E&J Gallo Winery, Vino Farms properties, and the intersection of 16th Street and N Street. The recycled water conveyance system alignment is generally surrounded by the Machado WWTF, E&J Gallo Winery, and existing residences.

## *Environmental Evaluation*

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

The project site is not located within the viewshed of a scenic vista; therefore, proposed upgrades to the Machado WWTF and installation of the proposed recycled water conveyance system would not result in the long-term alteration or degradation of the existing visual character or quality of the project site or its surroundings, and *no impacts* would occur.

### 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 Machado WWTF is located approximately 0.25 mile east of US 101, and the northern segment of the proposed recycled water conveyance system alignment is located adjacent to and under US 101, which at this location, is eligible for designation as a scenic highway (Caltrans 2018). Due to distance and existing intervening development, proposed WWTF upgrade activities located within the Machado WWTF would not be visible from US 101. In addition, construction of the proposed pipelines would be limited to temporary visual impacts during construction and would not result in a permanent change to the viewshed from US 101; therefore, the project would not damage scenic resources within a state scenic highway, and *no impacts* would occur.

### c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The proposed project includes construction activities for the upgrade of the Machado WWTF and the installation of a recycled water conveyance system within previously developed roadways in the unincorporated community of San Miguel. Short-term construction activities would be visible from surrounding areas during the construction period and would include the presence of construction equipment, vehicles, staging areas, and construction materials. Following the construction period, associated vehicles and equipment would be removed from the project site; therefore, construction impacts would be temporary in nature and would not substantially degrade the long-term existing character of the immediate or surrounding area.

New buildings and components associated with the proposed WWTF upgrades would be constructed within the footprint of the existing WWTF and adjacent western parcel. New buildings and aboveground features would be limited to the footprint of the existing WWTF and development on the adjacent western parcel would be limited to a new percolation bed that would be constructed at grade. Therefore, proposed WWTF upgrades would not result in the development of new buildings or other aboveground features in previously undeveloped areas that could block existing views or alter the existing rural character of the project area. In addition, new buildings, structures, and other components associated with the Machado WWTF upgrade would be consistent with the level and scale of existing development at the Machado WWTF and would not result in visually incompatible features. The proposed recycled water conveyance system would be installed below grade and would not result in the construction of aboveground features that could block existing views or alter the existing visual character of the project area. Therefore, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and impacts would be *less than significant*.

### d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed project includes the upgrade of the Machado WWTF and the installation of a recycled water conveyance system. Proposed WWTF upgrades would include the construction of a new headworks, a new MBR, and associated support facilities, including a solar component and storage and operations buildings. The new buildings and components associated with the proposed WWTF upgrade would be constructed within the footprint of the existing WWTF and adjacent western parcel and would not create an additional source of outdoor lighting in the project area. In addition, installation of exterior lighting would be required to comply with the *San Miguel Community Plan* (County of San Luis Obispo 2016b) and County of San Luis Obispo (County) Land Use Ordinance (LUO) Section 22.10.060, which requires exterior lighting sources to be used for illumination purposes only and to be designed to direct light away from surrounding areas, to minimize light intensity, and to shield the light source from off-site areas. Because solar panels are intended to absorb light rather than reflect it, installation of the solar component would not create a new source of glare in the project area. Further, Mitigation Measure (MM) AES-1 has been identified to reduce the potential for an increase in glare in the project area. The proposed recycled water conveyance system would be installed below grade and would not result in a new source of outdoor lighting or glare. Based on implementation of MM AES-1 and required compliance with the *San Miguel Community Plan* and County LUO Section 22.10.160, the project would not create a substantial new source of light or glare in the project region; therefore, potential impacts would be *less than significant with mitigation*.

## *Conclusion*

With implementation of MM AES-1 and required compliance with the *San Miguel Community Plan* and County LUO Section 22.10.160, the project would not substantially affect a scenic vista, damage a scenic resource, conflict with zoning, or create a source of new light or glare. With implementation of MM AES-1, impacts related to aesthetics would be less than significant.

## *Mitigation Measures*

**MM AES-1** Exterior building materials shall be of a non-glare and non-reflective finish. Windows shall be designed and oriented to minimize glare onto adjacent properties. Illumination from within buildings shall be controlled by window design, location, and tinting. Window glass shall be designed to control spillage of light from interior spaces.

# II. Agriculture and Forestry Resources

| Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:* | | | | |
| (a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| (b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☒ | ☐ |
| (c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| (d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| (e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☒ | ☐ |

## *Setting*

The California Department of Conservation (CDOC) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and current land use. According to the CDOC FMMP, the Machado WWTF is located on land designated as Urban and Built-Up Land and Farmland of Local Potential, and the recycled water conveyance system alignment is located on land designated as Urban and Built-Up Land, Farmland of Local Potential, and Farmland of Local Importance (CDOC 2022).

The Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agriculture or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based on farming and open space uses as opposed to full market value. The Machado WWTF is located within the Public Facilities (PF), Residential Suburban (RS), and Agriculture (AG) land use designations and the proposed recycled water conveyance system alignment is located within the PF, RS, AG, Industrial (IND), and Residential Single-Family (RSF) land use designations. The project site, including the Machado WWTF and the recycled water conveyance system alignment, is not subject to a Williamson Act contract.

Forestland is defined in PRC Section 12220(g) as land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Portions of the project site support dense riparian woodland that provides benefits to wildlife habitat, water quality, and aesthetics.

Timberland is defined in PRC Section 4526 as land, other than land owned by the federal government and land designated by the board as experimental forest land, that is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. The project site does not support any timberland.

## *Environmental Evaluation*

### a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

According to the CDOC FMMP, the Machado WWTF is located on land designated as Urban and Built-Up Land and Farmland of Local Potential, and the recycled water conveyance system alignment is located on land designated as Urban and Built-Up Land, Farmland of Local Potential, and Farmland of Local Importance (CDOC 2022). Therefore, implementation of the project would not result in conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and *no impacts* would occur.

### b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The northeastern portion of the Machado WWTF and portions of the proposed recycled water conveyance system alignment are located within the AG land use designation. The portion of the Machado WWTF within the AG land use designation is located east of the Salinas River; however, the proposed WWTF upgrades would be limited to the existing Machado WWTF and adjacent western parcel and would not extend into the northeastern portion of the parcel or east of the Salinas River; therefore, proposed WWTF upgrades would not interfere with existing zoning for agriculture use. Although portions of the proposed recycled water conveyance system alignment are located within the AG land use designation, the pipelines associated with the conveyance system would be installed below grade within previously developed roadways and otherwise disturbed areas and would not interfere with existing or planned agricultural uses in the project area. Therefore, the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract, and impacts would be *less than significant*.

### 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))?

The project site is located within the AG, PF, RS, IND, and RSF land use designations and does not include land use designations or zoning for forest land or timberland. Therefore, the project would not conflict with or cause rezoning of forestland or land for timber production, and *no impacts* would occur.

### d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The project site is not zoned for forestland and is not considered forestland as defined by PRC Section 12220(g). Further, the project does not include the removal of any native trees within the project area. Therefore, the project would not result in the loss of forest land or convert forest land to non-forest use, and *no impacts* would occur.

### 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?

There are existing vineyards and other croplands located in the vicinity of the project site. Short-term construction activities would be limited to previously developed and otherwise disturbed areas and would not directly interfere with surrounding agricultural activities. During construction, the project would result in dust emissions; however, construction activities would be temporary in nature and would not result in a new localized source of dust emissions that could damage nearby crops. The project does not require a substantial increase in groundwater use in a manner that could reduce the availability of groundwater for nearby agricultural lands. The purpose of the project is to increase delivery of recycled water for irrigation for surrounding vineyards. As such, the project would result in a beneficial impact to surrounding agricultural lands. Therefore, the project would not result in other changes to the environment that could result in the conversion of agricultural land to non-agricultural use, and impacts would be *less than significant*.

## *Conclusion*

The project would not directly or indirectly result in the conversion of farmland, forest land, or timber land to non-agricultural uses or non-forest uses and would not conflict with agricultural zoning or otherwise adversely affect agricultural resources or uses. Potential impacts related to agricultural and forestry resources would be less than significant, and no mitigation measures are necessary.

## *Mitigation Measures*

Mitigation is not necessary.

# III. Air Quality

| Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:* | | | | |
| (a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| (b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☒ | ☐ | ☐ |
| (c) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☒ | ☐ | ☐ |
| (d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☒ | ☐ | ☐ |

## *Setting*

The community of San Miguel is located within the South Central Coast Air Basin (SCCAB), which also includes Santa Barbara and Ventura Counties. Air quality within the SCCAB is regulated by several jurisdictions, including the U.S. Environmental Protection Agency (USEPA), California Air Resources Board (CARB), and San Luis Obispo County Air Pollution Control District (SLOAPCD). Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. The CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA) of 1988. The California Department of Public Health (CDPH) established California Ambient Air Quality Standards (CAAQS) in 1962 to define the maximum amount of a pollutant (averaged over a specified period of time) that can be present without any harmful effects on people or the environment. The CARB adopted the CAAQS developed by the CDPH in 1969, which had established CAAQS for 10 criteria pollutants: particulate matter (less than 10 microns in diameter [$PM_{10}$] and less than 2.5 microns in diameter [$PM_{2.5}$]), ozone ($O_3$), nitrogen dioxide ($NO_2$), sulfate, carbon monoxide (CO), sulfur dioxide ($SO_2$), visibility-reducing particles, lead (Pb), hydrogen sulfide ($H_2S$), and vinyl chloride.

The Federal Clean Air Act (FCAA) later required the USEPA to establish National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment, and also set deadlines for their attainment. The USEPA has established NAAQS for six criteria pollutants (all of which are also regulated by the CAAQS): CO, lead, $NO_2$, ozone, $PM_{10}$ and $PM_{2.5}$, and $SO_2$.

California law continues to mandate compliance with the CAAQS, which are often more stringent than the NAAQS. However, California law does not require that the CAAQS be met by specified dates as is the case with the NAAQS; rather, it requires incremental progress toward attainment. The SLOAPCD is the agency primarily responsible for ensuring that the NAAQS and CAAQS are not exceeded and that air quality conditions within the county are maintained.

## SAN LUIS OBISPO COUNTY CLEAN AIR PLAN

The SLOAPCD *San Luis Obispo County 2001 Clean Air Plan* (2001 CAP; SLOAPCD 2001) is a comprehensive planning document intended to evaluate long-term air pollutant emissions and cumulative effects and provide guidance to the SLOAPCD and other local agencies on how to attain and maintain the state standards for ozone and $PM_{10}$. The 2001 CAP presents a detailed description of the sources and pollutants that impact the jurisdiction's attainment of state standards, future air quality impacts to be expected under current growth trends, and an appropriate control strategy for reducing ozone precursor emissions, thereby improving air quality. In order to be considered consistent with the 2001 CAP, a project must be consistent with the land use planning and transportation control measures and strategies outlined in the 2001 CAP.

## SLOAPCD CRITERIA POLLUTANT THRESHOLDS

The SLOAPCD has developed and updated their *CEQA Air Quality Handbook* (most recently updated with a 2023 Administrative Update Version) to help local agencies evaluate project-specific impacts and determine if air quality mitigation measures are needed, or if potentially significant impacts could result (SLOAPCD 2012, 2023). This handbook includes established thresholds for both short-term construction emissions and long-term operational emissions.

Use of heavy equipment and earth-moving operations during project construction can generate fugitive dust and engine combustion emissions that may have substantial temporary impacts on local air quality and climate change. Combustion emissions, such as nitrogen oxides ($NO_X$), reactive organic gases (ROG), greenhouse gases (GHGs), and diesel particulate matter (diesel PM), are most significant when using large, diesel-fueled scrapers, loaders, bulldozers, haul trucks, compressors, generators, and other heavy equipment. The SLOAPCD has established thresholds of significance for each of these contaminants.

Operational impacts are focused primarily on the indirect emissions (i.e., motor vehicles) associated with residential, commercial, and industrial development. Certain types of projects can also include components that generate direct emissions, such as power plants, gasoline stations, dry cleaners, and refineries (referred to as stationary source emissions). The SLOAPCD has established several different methods for determining the significance of project operational impacts:

1. Demonstrate consistency with the most recent CAP for San Luis Obispo County;
2. Demonstrate consistency with a plan for the reduction of GHG emissions that has been adopted by the jurisdiction in which the project is located that complies with State CEQA Guidelines Section 15183.5;
3. Compare predicted ambient criteria pollutant concentrations resulting from the project to federal and state health standards, when applicable;
4. Compare calculated project emissions to SLOAPCD emission thresholds; and
5. Evaluate special conditions which apply to certain projects.

The SLOAPCD has also estimated the number of vehicular round trips on an unpaved roadway necessary to exceed the 25 pounds per day (lbs/day) threshold of significance for the emission of particulate matter ($PM_{10}$). According to the SLOAPCD estimates, an unpaved roadway of one mile in length carrying 6.0 round trips would likely exceed the 25 lbs/day $PM_{10}$ threshold.

### SENSITIVE RECEPTORS

Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants, such as the elderly, children, people with asthma or other respiratory illnesses, and others who are at a heightened risk of negative health outcomes due to exposure to air pollution. Some land uses are considered more sensitive to changes in air quality than others due to the population that occupies the uses and the activities involved. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residences. There are existing single-family residences located along the southern boundary of the Machado WWTF and along several portions of the proposed recycled water conveyance system alignment.

### NATURALLY OCCURRING ASBESTOS

Naturally Occurring Asbestos (NOA) is identified as a toxic air contaminant by the CARB. Serpentine and other ultramafic rocks are fairly common throughout San Luis Obispo County and may contain NOA. If these areas are disturbed during construction, NOA-containing particles can be released into the air and have an adverse impact on local air quality and human health. The project site is not located in an area identified as containing NOA by the SLOAPCD (SLOAPCD 2024).

## *Environmental Evaluation*

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

The SLOAPCD has developed the *CEQA Air Quality Handbook* to evaluate project-specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. In order to be considered consistent with the 2001 CAP, a project must be consistent with the land use planning and transportation control measures and strategies outlined in the CAP (SLOAPCD 2012, 2023). Adopted land use planning strategies include, but are not limited to, planning compact communities with higher densities, providing for mixed land use, and balancing jobs and housing. The project does not include development of retail or commercial uses that would be open to the public; therefore, land use planning strategies such as mixed-use development and planning compact communities are generally not applicable.

The proposed project would be consistent with the AG, PF, RS, and RSF land use designations. The project does not include the construction of new residences or other uses that result in a substantial increase in population or associated vehicle trips. Operation of the project would result in two additional employees, which would be consistent with the level of growth anticipated in the *SLOCOG 2023 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS; San Luis Obispo Council of Governments [SLOCOG] 2023) and *2050 Regional Growth Forecast* that projects an increase of 18,207 jobs between 2015 and 2045, or 607 jobs per year (SLOCOG 2018). In addition, the project would be consistent with the general level of development anticipated and projected in the CAP and would therefore not conflict with or obstruct the implementation of the applicable air quality plan. Therefore, impacts related to conflict of an air quality plan would be *less than significant*.

## 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?

San Luis Obispo County is designated as non-attainment with Federal health-based standards for the criteria pollutant 8-hour ozone and state health-based standards for the criteria pollutants ozone and $PM_{10}$. According to the federal health-based standards, eastern San Luis Obispo County is in non-attainment status for ozone and $PM_{10}$; however, western San Luis Obispo County is in an attainment area. San Luis Obispo County is currently designated as non-attainment for ozone and $PM_{10}$ under the CAAQS (CARB 2020).

### Short-Term Emissions

Heavy equipment and earth-moving construction activities generate fugitive dust and combustion emissions; these may have substantial temporary impacts on local air quality. Fugitive dust emissions would result from land clearing, demolition, excavation, trenching, grading activities, and trip generation. Combustion emissions, such as $NO_X$ and $PM_{10}$, are most significant when using large diesel-fueled scrapers, loaders, bulldozers, haul trucks, compressors, generators, and other types of equipment.

Estimated construction air emissions were calculated for the originally approved project using the California Emissions Estimator Model (CalEEMod). The CalEEMod results are included as Appendix A. The results of the unmitigated estimated construction emission calculations for the proposed project are shown in Table 1.

**Table 1. Unmitigated Construction Emissions**

| Pollutant | Project Construction Emissions (lbs/day) | SLOAPCD Significance Threshold (lbs/day) | Project Construction Emissions (tons/quarter) | SLOAPCD Significance Threshold (tons/quarter) | Threshold Exceeded? |
|---|---|---|---|---|---|
| $ROG+NO_X$ (Combined) | 79.56 | 137 | 2.28 | 2.5 | No |
| Diesel Particulate Matter (Diesel PM) | 5.63 | 7 | 0.5 | 0.13 | **Yes** |
| Fugitive Dust ($PM_{10}$) | 12.9 | -- | 0.83 | 2.5 | No |

Source: CalEEMod (2024); Appendix A

Based on the results shown in Table 1, construction air emissions would be in compliance with the daily and quarterly thresholds for $ROG+NO_X$ and $PM_{10}$; however, construction air emissions would exceed the daily and quarterly SLOAPCD threshold for diesel PM. Therefore, MM AQ-1 through MM AQ-3 have been identified to ensure compliance with SLOAPCD standard mitigation measures and implementation of best available control technology (BACT) for construction equipment to reduce diesel PM emissions. With implementation of MM AQ-1 through MM AQ-3, the project would not result in construction air emissions in exceedance of SLOAPCD thresholds; therefore, impacts would be *less than significant with mitigation*.

### Long-Term Emissions

Long-term air emissions are typically generated by area sources (e.g., architectural coatings, landscape maintenance equipment, etc.), energy sources (e.g., electricity use, natural gas use, etc.), mobile sources (e.g., vehicle use), and stationary sources (e.g., generators). Estimated operational air emissions were calculated using CalEEMod. The CalEEMod results are included in Appendix A. The results of the unmitigated estimated operational emission calculations for the proposed project are shown in Table 2.

**Table 2. Unmitigated Operational Emissions**

| Pollutant | Project Operational Emissions (lbs/day) | SLOAPCD Significance Threshold (lbs/day) | Project Operational Emissions (tons/quarter) | SLOAPCD Significance Threshold (tons/quarter) | Threshold Exceeded? |
|---|---|---|---|---|---|
| ROG+$NO_X$ (Combined) | 7.06 | 25 | 0.66 | 25 | No |
| Diesel Particulate Matter (Diesel PM) | 0.1 | 1.25 | 0.01 | -- | No |
| Fugitive Dust ($PM_{10}$) | 0.02 | 25 | 0.004 | 25 | No |

Source: CalEEMod (2024); Appendix A

Based on the results shown in Table 2, operational air emissions would be in compliance with the annual SLOAPCD thresholds during project operation. Therefore, the project would not exceed daily or annual operational emissions threshold for any criteria air pollutants, and operational impacts would be *less than significant*.

## c) Would the project expose sensitive receptors to substantial pollutant concentrations?

According to the SLOAPCD *CEQA Air Quality Handbook*, projects that occur within 1,000 feet of sensitive receptors have the potential to result in adverse impacts involving construction emissions (SLOAPCD 2012, 2023). There are several sensitive receptors located within 1,000 feet of the project site, including single-family residences located along the southern boundary of the Machado WWTF and along several portions of the proposed recycled water conveyance system alignment. Due to the close proximity of sensitive receptors to the project site, MM AQ-1 through MM AQ-3 have been identified to ensure compliance with standard SLOAPCD construction requirements, including diesel idling restrictions intended to reduce exposure of diesel PM and fugitive dust emissions to sensitive receptor locations. With implementation of MM AQ-1 through MM AQ-3, the project would not expose sensitive receptors to substantial pollutant concentrations; therefore, impacts would be *less than significant with mitigation*.

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

Construction activities generally have the potential to emit odors from diesel equipment, paints, solvents, fugitive dust, and adhesives. Any odors generated by construction activities would be intermittent and temporary, and generally would not extend beyond the construction area. Any construction odors would be temporary and limited to the construction phase of the proposed project.

The project would include development of a recycled water conveyance system and upgrades to the existing WWTF. Odor control would be installed within the Machado WWTF to minimize long-term odors from wet-well turbulence, including collection of odors in scrubbers or biofilters or the addition of odor control chemicals to the sewer upstream of the pump station. Chemicals typically used for odor control include chlorine, hydrogen peroxide, metal salts (ferrous chloride and ferric sulfate), oxygen, air, and potassium permanganate. Further, the proposed recycled water conveyance system would be installed below-ground, which would avoid the release of potential nuisance odors during recycled water distribution. Therefore, the project would not result in uncontrolled sources of odor during operation.

The project is not located in an area with known potential for NOA (SLOAPCD 2023). Therefore, construction activities would not have the potential to expose workers or surrounding land uses to harmful levels of NOA. However, the project includes the demolition of existing facilities within the Machado

WWTF and would also require removal and disturbance of existing roadway components that may result in release of asbestos-containing material (ACM). MM AQ-3 has been included to require testing and proper handling of materials to be removed prior to removal from the site. With implementation of MM AQ-3, the proposed project would not result in odors or other emissions; therefore, impacts would be *less than significant with mitigation*.

## Conclusion

The project would be consistent with the 2001 CAP. With implementation of Measures AQ-1 through AQ-3, the project would not exceed SLOAPCD thresholds or expose sensitive receptors to substantial pollutant concentrations, adverse odors, or other emissions, and impacts related to air quality would be less than significant.

## Mitigation Measures

**MM AQ-1** **San Luis Obispo County Air Pollution Control District Fugitive Dust Mitigation Measures (Expanded List).** At the time of application for grading and construction permits, the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities:

1. Reduce the amount of the disturbed area where possible;
2. Use of water trucks or sprinkler systems, in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the San Luis Obispo County Air Pollution Control District (SLOAPCD) limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour (mph). Reclaimed (non-potable) water shall be used whenever possible. Please note that during drought conditions, water use may be a concern and the contractor or builder shall consider the use of a SLOAPCD-approved dust suppressant where feasible to reduce the amount of water used for dust control.
3. All dirt stockpile areas shall be sprayed daily as needed;
4. Permanent dust control measures identified in the approved project revegetation and landscape plans shall be implemented as soon as possible following completion of any soil disturbing activities;
5. Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading shall be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
6. All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD;
7. All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;
8. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;

9. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114;
10. "Track-Out" is defined as sand or soil that adheres to and/or agglomerates on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in California Vehicle Code Section 23113 and California Water Code 13304. To prevent track out, designate access points and require all employees, subcontractors, and others to use them. Install and operate a "track-out prevention device" where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can be any device or combination of devices that are effective at preventing track out, located at the point of intersection of an unpaved area and a paved road. Rumble strips or steel plate devices require periodic cleaning to be effective. If paved roadways accumulate tracked out soils, the track-out prevention device may need to be modified.
11. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible;
12. All of these fugitive dust mitigation measures shall be shown on grading and building plans; and
13. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition.

**MM AQ-2** **San Luis Obispo County Air Pollution Control District Standard Measures for Construction Equipment.** At time of application for grading and construction permits, the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities when diesel-powered vehicles/equipment are in use:

1. Maintain all construction equipment in proper tune according to manufacturer's specifications;
2. Fuel all off-road and portable diesel-powered equipment with California Air Resources Board (CARB)-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
3. Use diesel construction equipment meeting CARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation;
4. Use on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
5. Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures

(e.g., captive or nitrogen oxides [$NO_X$] exempt area fleets) may be eligible by proving alternative compliance;

6. All on- and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;
7. Diesel idling within 1,000 feet of sensitive receptors is not permitted;
8. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
9. Electrify equipment when feasible;
10. Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and
11. Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

**MM AQ-3** **Asbestos-Containing Material.** An asbestos-containing material survey consisting of a visual inspection, sampling, testing, and reporting shall be performed by a Certified Asbestos Consultant to determine if building materials contain asbestos-containing material and would require special handling and disposal during demolition. If asbestos-containing material is detected, proposed construction activities shall be conducted in full compliance with the requirements stipulated in the National Emission Standards for Hazardous Air Pollutants (40 Code of Federal Regulations [CFR] 61, Subpart M – Asbestos: National Emission Standards for Hazardous Air Pollutants). These requirements include, but are not limited to, the following:

1. Written notification, within at least 10 business days of activities commencing, to the San Luis Obispo County Air Pollution Control District (SLOAPCD);
2. Preparation of an asbestos survey conducted by a Certified Asbestos Consultant; and
3. Implementation of applicable removal and disposal protocol and requirements for identified naturally occurring asbestos.

# IV. Biological Resources

| Environmental Issues | 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 Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| (b) | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| (c) | Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| (d) | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☒ | ☐ | ☐ |
| (e) | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| (f) | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

## *Setting*

The Federal Endangered Species Act (FESA) of 1973 provides legislation to protect federally listed plant and animal species. The California Endangered Species Act (CESA) of 1984 ensures legal protection for plants listed as rare or endangered and animal species formally listed as endangered or threatened, and also maintains a list of California Species of Special Concern (SSC). SSC status is assigned to species that have limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the California Department of Fish and Wildlife (CDFW) has the authority to review projects for their potential to impact special-status species and their habitats.

The Migratory Bird Treaty Act (MBTA) protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to put an end to the commercial trade in bird feathers, popular in the latter part of the 1800s. The MBTA is enforced by the U.S. Fish and Wildlife Service (USFWS), and potential impacts to species protected under the MBTA are evaluated by the USFWS in consultation with other federal agencies and are required to be evaluated under CEQA.

The project site consists of the Machado WWTF and the proposed recycled water conveyance system alignment, which begins at the Machado WWTF, extends along previously developed roadways and otherwise disturbed areas, and terminates at the at the E&J Gallo Winery property, the Vino Farms property, and the intersection of 16th Street and N Street in the unincorporated community of San Miguel. The project site consists entirely of previously developed areas and areas with non-native grassland, bare ground, and ruderal vegetation. There are scattered ornamental trees located along the recycled water conveyance system alignment. The Salinas River is located approximately 50 feet east of the Machado WWTF; however, there are no surface water features or drainages located within the project area.

According to a review of the CDFW California Natural Diversity Database (CNDDB; CDFW 2024), the following special-status plant and six special-status wildlife have been previously documented within the project region:

- **Special-Status Plants**
    - Santa Lucia purple amole (*Hooveria purpurea var. purpurea*): A federally threatened species and a California Rare Plant Rank (CRPR) 1B.1 that typically occurs in chaparral, cismontane woodland, and valley and foothill grassland habitats. The nearest recorded occurrence of this species is located approximately 7.5 miles west of the project site (CNDDB Occ. 16).
- **Special-Status Wildlife**
    - tricolored blackbird (*Agelaius tricolor*): A CDFW Species of Special Concern (SSC) that typically occurs in freshwater, marsh, swamp, and wetland habitats. The nearest recorded occurrence of this species is located approximately 1.5 miles southeast of the project site (CNDDB Occ. 879).
    - western pond turtle (*Emys marmorata*): A CDFW SSC that typically occurs in aquatic, marsh, swamp, and wetland habitats. The nearest recorded occurrence of this species is located approximately 2.5 miles northwest of the project site (CNDDB Occ. 1,001).
    - bald eagle (*Haliaeetus leucocephalus*): A CDFW Fully Protected (FP) species that typically occurs in lower montane coniferous forest and old growth forest habitats. The nearest recorded occurrence of this species is located approximately 6.8 miles west of the project site (CNDDB Occ. 253).
    - foothill yellow-legged frog South Coast Distinct Population Segment (DPS) (*Rana boylii* pop. 6): A federally and state endangered species that typically occurs in aquatic, riparian forest, riparian scrub, and riparian woodland habitats. The nearest recorded occurrence of this species is located approximately 4.7 miles northwest of the project site (CNDDB Occ. 40).
    - least Bell's vireo (*Vireo bellii pusillus*): A federally and state endangered species that typically occurs in riparian forest, riparian scrub, and riparian woodland habitats. The nearest recorded occurrence of this species is located approximately 9 miles northwest of the project site (CNDDB Occ. 120).
    - San Joaquin kit fox (SJKF; *Vulpes macrotis mutica*): A federally endangered and state threatened species that typically occurs in scrub and grassland habitats. The undeveloped portions of the project site are located in the County-designated important habitat for SJKF where a standard mitigation ration of 4:1 is required in order to reduce potential impacts to kit fox habitat to a less-than-significant level. The nearest recorded occurrence of this species is located approximately 1.3 miles northwest of the project site (CNDDB Occ. 1,192).

## *Environmental Evaluation*

### 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 Game or U.S. Fish and Wildlife Service?

#### Special-Status Plants

The project includes ground-disturbing activities for the proposed WWTF upgrades and installation of the recycled water conveyance system, which would have the potential to result in direct removal of special-status plant species if present within the project site during construction. Based on a biological field survey of the Machado WWTF conducted by Dudek on June 11, 2020 (Dudek 2022), and a separate biological field survey of the recycled water conveyance system alignment conducted by SWCA Environmental Consultants (SWCA) on November 29, 2023, no special-status plant species were observed within the project area. The project site is limited to previously developed areas and areas with non-native grassland, and ruderal vegetation that experience frequent mowing as well as human and vehicle disturbance. Although the potential for occurrence is low due to existing site conditions, there is some potential for Santa Lucia purple amole to occur in the non-native grassland habitat in the northern portion of the Machado WWTF. MM BIO-1 has been identified to ensure that no take of purple amole would occur during project construction. In addition, due to the existing conditions of the project site and frequent site disturbance, other special-status plant species are not expected to occur within the project area. Based on implementation of MM BIO-1, the project would not result in adverse impacts to special-status plant species; therefore, impacts would be *less than significant with mitigation*.

#### Special-Status Wildlife

The project includes ground-disturbing activities for the proposed WWTF upgrades and installation of the recycled water conveyance system, which would have the potential to result in direct (i.e., take) or indirect (i.e., noise, dust, light pollution) disturbance to special-status wildlife species if present within the project area during project construction. Based on a biological field survey of the Machado WWTF conducted by Dudek on June 11, 2020 (Dudek 2022), and a separate biological field survey of the recycled water conveyance system alignment conducted by SWCA on November 29, 2023, no special-status wildlife species were observed within the project area. The project site is comprised of previously disturbed and developed areas, non-native grassland, and ruderal vegetation that experiences frequent human and vehicle disturbance, which reduces the availability of suitable habitat for special-status wildlife species within the project area. In addition, there are no natural surface water features or drainages that could support western pond turtle or foothill yellow-legged frog within the project site. MM BIO-2 and MM BIO-3 require project personnel to undergo a Worker Environmental Awareness Program (WEAP) training and implement construction best management practices (BMPs) to reduce general construction-related impacts to special-status wildlife species.

There are scattered ornamental trees located along the recycled water conveyance system alignment that could provide nesting habitat for special-status and migratory bird species. The project does not include the removal of native or riparian trees that could directly disturb any nesting bird species; however, proposed construction activities could indirectly disturb nesting migratory bird species if present within the project area. MM BIO-4 has been identified to require a preconstruction nesting bird survey and identifies the proper protocol in the event nesting birds are present within the project area.

There is riparian vegetation associated with the Salinas River approximately 50 feet east of the Machado WWTF that could provide suitable nesting habitat for least Bell's vireo. The project does not include removal or disturbance of existing riparian habitat that could directly affect least Bell's vireo individuals; however, proposed construction activities could indirectly affect least Bell's vireo individuals if present within the project area. MM BIO-5 has been identified to require a preconstruction survey for least Bell's vireo and identifies the proper protocol in the event individuals are present within the project area.

The northern portion of the Machado WWTF consists of non-native grassland that could provide suitable habitat for SJKF. The project site is located in the County's designated important habitat for SJKF where a standard mitigation ratio of 4:1 is required in order to reduce potential impacts to kit fox habitat to a less-than-significant level. However, this portion of the Machado WWTF is surrounded by previously developed areas and is not connected to other suitable habitat areas for SJKF. Further, this area is relatively small in size (less than 40 acres), which further reduces the potential to support suitable habitat for SJKF (Dudek 2022). The nearest recorded occurrence of this species is located approximately 1.3 miles northwest of the project site (CNDDB Occ. 1,192); however, this occurrence is more than 10 years old. Therefore, there is low potential for SJKF to occur within the project area because it was determined that the northern portion of the Machado WWTF supports marginally suitable habitat for SJKF. Proposed construction activities would have the potential to result in direct and indirect affects to SJKF individuals if present during construction activities. MM BIO-6 and MM BIO-7 have been identified to reduce potential impacts to SJKF and ensure compliance with the County's SJKF standard mitigation ratio.

Based on implementation of MM BIO-1 through MM BIO-7, the project would not result in adverse impacts to special-status wildlife; therefore, impacts would be *less than significant with mitigation*.

## 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, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

There is riparian vegetation associated with the Salinas River located approximately 50 feet east of the Machado WWTF; however, the riparian vegetation is located outside of the proposed area of disturbance and no removal or disturbance of the existing riparian vegetation would occur. The project site consists of previously developed areas, non-native grassland, and ruderal vegetation. The project site does not include any riparian habitat or sensitive natural communities; therefore, the project would not result in a substantial adverse effect on any riparian habitat or other sensitive natural community, and *no impacts* would occur.

## 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?

The Salinas River is located approximately 50 feet east of the Machado WWTF; however, there are no wetlands, surface water features, or drainages located within the project area (USFWS 2024). Based on the absence of wetlands within the project area, the project would not result in a substantial adverse effect on a federally or state-protected wetland; therefore, *no impacts* would occur.

### 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 project site and surrounding area consist of existing development, including roadways, residences, vineyards, small businesses, fencing, UPRR, and other features, which limit terrestrial habitat connectivity within the project area. Further, MM BIO-6 has been identified in *Impact Discussion IV(a)* to avoid loss of SJKF habitat within the project area. The Salinas River is located approximately 50 feet east of the Machado WWTF; however, the project does not include direct alteration to the Salinas River that could interfere with migratory fish or breeding habitat. Further, the project would be required to comply with Regional Water Quality Control Board (RWQCB) General Construction Permit requirements and post-construction stormwater requirements (PCRs) and County LUO Section 22.52.120 to address short- and long-term impacts related to erosion, sedimentation, and other pollutants, which would reduce the potential for a short- or long-term increase of polluted runoff within the project area that could otherwise interfere with migratory fish or breeding habitat. As previously identified, there is potential for migratory birds to utilize ornamental trees within the project area for nesting habitat. The project would not result in the removal of ornamental trees in a manner that could reduce the availability of long-term nesting habitat for migratory birds within the project area. Based on implementation of MM BIO-6 and required compliance with RWQCB and County LUO requirements, the project would not interfere substantially with the movement of any migratory wildlife species; therefore, impacts would be *less than significant with mitigation*.

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

Chapter 22.58 of the County Inland LUO establishes regulations for clear-cutting oak woodlands and the *San Miguel Community Plan* includes provisions for avoiding impacts to tree species protected by the County (County of San Luis Obispo 2016b). The project does not include the removal of any native trees, such as coast live oak (*Quercus agrifolia*), or the clear-cutting of any oak woodlands; therefore, the project would not be subject to regulations included in County LUO Section 22.58. Therefore, the project would not conflict with the County LUO, and *no impacts* would occur.

### 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 project does not overlap with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other conservation plans. Therefore, the project would not conflict with any approved local, regional, or state habitat conservation plans, and *no impacts* would occur.

## *Conclusion*

MM BIO-1 through MM BIO-7 have been included to avoid and/or minimize potential impacts related to biological resources. Therefore, with implementation of MM BIO-1 through MM BIO-7, potential impacts related to biological resources would be less than significant.

## *Mitigation Measures*

**MM BIO-1** **Updated Special-Status Plant Surveys.** Prior to ground disturbance associated with construction of the solar component and installation of the recycled water conveyance system component, a qualified botanist shall conduct botanical surveys in accordance with U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and California Native Plant Society (CNPS) guidelines. Surveys shall be seasonally timed so that all potentially occurring plant species are in identifiable condition during at least one survey. Potentially occurring plant species shall be determined based on a review of information in the *San Miguel Community Plan* and updated queries of the CDFW California Natural Diversity Database (CNDDB) and the CNPS Rare Plant Inventory. In addition to the species mentioned in the *San Miguel Community Plan*, the surveys shall target any potentially occurring species that are listed, candidates for listing, or proposed for listing under the federal Endangered Species Act or California Endangered Species Act and any species with a California Rare Plant Rank (CRPR) of 1 or 2.

Any special-status plants identified during the survey shall be mapped onto a site-specific aerial photograph and topographic map. Survey results shall be submitted to the County of San Luis Obispo (County) Planning and Building Department for approval. If federally listed, state listed, or CRPR 1B species are found during special-status plant surveys, then the project shall be re-designed to avoid impacting these plant species, if feasible. Rare plant occurrences that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits of construction shall have bright orange protective fencing installed at least 30 feet beyond their extent, or another distance as approved by a County-approved biologist, to protect them from direct and indirect impacts. A restoration plan shall be prepared and submitted to the County as well as other federal or state agencies as appropriate (for instance, if a state-listed plant is involved). The restoration plan shall include, at a minimum, the following components:

1. Description of the project/impact site (location, responsible parties, and areas to be impacted by habitat type).
2. Goal(s) of the compensatory mitigation project (type[s] and area[s] of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type[s] to be established, restored, enhanced, and/or preserved).
3. Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values).
4. Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan).
5. Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule).
6. Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports).

7. Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80% survival of container plants and 30% relative cover by vegetation type.
8. An adaptive management program and remedial measures to address any shortcomings in meeting success criteria.
9. Notification of completion of compensatory mitigation and agency confirmation.
10. Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).

**MM BIO-2** **Worker Environmental Awareness Program (WEAP) Training.** Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend Worker Environmental Awareness Program (WEAP) training, conducted by a County-approved biologist, to aid workers in recognizing special-status resources that may occur in the project area. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer indicating they have attended the WEAP and understand the information presented to them. The form shall be submitted to the County to document compliance.

**MM BIO-3** **Additional Construction Measures.** The construction contractor shall implement several additional construction-related measures protecting biological resources, as outlined in the *San Miguel Community Plan*:

1. All vehicle maintenance/fueling/staging shall occur not less than 100 feet from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies.
2. At the end of each workday, excavations shall be secured with a cover or a ramp provided to prevent wildlife entrapment.
3. All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.
4. If at any time during construction of the project an Endangered/Threatened species enters the construction site or otherwise may be impacted by the project, all project activities shall cease. A USFWS/CDFW-approved biologist shall document the occurrence and consult with the USFWS and/or CDFW, as appropriate.

**MM BIO-4** **Preconstruction Nesting Bird Survey and Nest Avoidance.** For construction activities occurring during the nesting season (generally February 1–September 15), surveys for nesting birds covered by the California Fish and Game Code and the Migratory Bird Treaty Act shall be conducted by a County-approved biologist no more than 14 days prior to vegetation removal. Prior to the surveys, the survey scope and the name, qualifications, and contact information for the surveying biologist must be submitted to the County Planning and Development Department. Surveys shall be conducted during the time when birds are active and shall be sufficient to reliably conclude presence/absence. The

surveys shall include the entire project disturbance area plus a 500-foot buffer around the site. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 300 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A County-approved biologist shall confirm that breeding/nesting is completed and young have fledged prior to removal of the buffer. The results of the preconstruction survey shall be submitted to the County prior to construction, and construction shall not commence without authorization from the County.

**MM BIO-5** **Least Bell's Vireo Protocol Surveys.** Prior to issuance of a construction permit for any project component requiring construction activities within 800 feet of riparian vegetation associated with the Salinas River, a qualified ornithologist shall conduct surveys for least Bell's vireo in accordance with the Least Bell's Vireo Survey Guidelines (USFWS 2001). The surveys shall be conducted during the appropriate season and in accordance with all requirements of the protocol. If through consultation with the USFWS and CDFW it is determined that protocol surveys are not required, said consultation shall be documented prior to issuance of any construction permits. If surveys are required, and least Bell's vireo are detected during the surveys, the San Miguel Community Services District (SMCSD) shall consult further with USFWS and CDFW to determine appropriate measures to avoid impacts to least Bell's vireo. Upon completion of the project, the biological monitor shall prepare a Final Compliance Report documenting all compliance activities implemented for the project, including the preconstruction survey results. The report shall be submitted to the County within 30 days of completion of the project.

**MM BIO-6** **San Joaquin Kit Fox Compensatory Habitat Mitigation**. The SMCSD shall mitigate for the loss of San Joaquin kit fox habitat in the proposed expansion area in accordance with the *San Miguel Community Plan* and in coordination with the County. The SMCSD shall mitigate for the loss of any non-native grassland, agricultural, or disturbed lands in the proposed expansion area at a ratio agreed upon through County coordination.

**MM BIO-7** **Preconstruction San Joaquin Kit Fox Survey and Kit Fox Avoidance.** Prior to initiation of construction activities, a qualified biologist shall conduct a survey for San Joaquin kit fox dens and sign in suitable habitats within 200 feet of the expansion and the proposed water pipeline alignment. Suitable habitats include native and non-native grasslands and associated scrub, oak savannah adjacent to grasslands, lands that are dryland farmed, and ruderal lands associated with the above-described habitats. The pedestrian survey shall include parallel transects that provide full visual coverage of the survey area, with transects spaced between 30 and 100 feet, depending on vegetation height and density. Dens identified during the survey shall be avoided in accordance with the *Standardized Recommendations and for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 2011). If any potential San Joaquin kit fox dens are identified during the survey, a 50-foot no disturbance buffer shall be established and marked with flagged stakes. If a known den, one confirmed to be currently or previously occupied by a San Joaquin kit fox, is identified during surveys, a 100-foot no disturbance buffer shall be established and marked with flagged stakes. If a natal/pupping den is identified, the qualified biologist shall contact the USFWS. Definitions for "potential," "known," and "natal" dens are included in Appendix II of the *San Joaquin Kit Fox Survey Protocol for the Northern Range* (USFWS 1999). If it is not

feasible to avoid a potential den, measures may be implemented to monitor the den to determine whether it is occupied. Dens must be monitored for a minimum of 3 days using tracking medium or motion-sensor camera to determine whether it is occupied. If kit fox is not detected, the den may be excavated using hand tools, and the no-disturbance buffer may be removed. If a den is determined to be occupied, kit fox may not be excluded, the den may not be excavated and backfilled, and a minimum 100-foot no disturbance buffer must remain in place. Additional measures shall be implemented during construction, regardless of whether San Joaquin kit foxes are identified during surveys, to ensure impacts to San Joaquin kit foxes are minimized and avoided, as outlined in the *Standardized Recommendations and for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 2011):

1. Project-related vehicles shall observe a daytime speed limit of 20 miles per hour (mph) throughout the site in all project areas, except on county roads and federal and state highways.
2. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals.
3. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.
4. All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from a construction or project site.
5. No firearms shall be allowed on the project site.
6. No pets, such as dogs or cats, shall be permitted on the project site.
7. Use of rodenticides and herbicides in project areas shall be restricted.
8. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured, or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to USFWS.
9. An employee education program shall be conducted for this project if subsequent to surveys there are anticipated impacts to kit fox or other endangered species. The program shall consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and agency personnel involved in the project. The program shall include the following: a description of the San Joaquin kit fox and

its habitat needs, a report of the occurrence of kit fox in the project area, an explanation of the status of the species and its protection under the Endangered Species Act, and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information shall be prepared for distribution to the previously referenced people and anyone else who may enter the project site.

10. In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape or USFWS shall be contacted for guidance.
11. Any contractor, employee, or military or agency personnel who is responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFW immediately in the case of a dead, injured or entrapped kit fox.
12. The USFWS Sacramento Office and CDFW shall be notified in writing within 3 working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information.
13. New sightings of kit fox shall be reported to the CNDDB. A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed shall also be provided to the USFWS at:

    Endangered Species Division
    2800 Cottage Way, Suite W2605
    Sacramento, California 95825-1846
    (916) 414-6620 or (916) 414-6600

# V. Cultural Resources

| Environmental Issues | 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? | ☐ | ☒ | ☐ | ☐ |
| (b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | ☐ | ☒ | ☐ | ☐ |
| (c) Disturb any human remains, including those interred outside of dedicated cemeteries? | ☐ | ☐ | ☒ | ☐ |

## *Setting*

PRC Section 5024.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for California Register of Historical Resources (CRHR) eligibility. The purpose of the CRHR is to maintain listings of the state's historical resources and to indicate what

properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change.

As defined by CEQA, a historical resource includes:

1. A resource listed in or determined to be eligible for listing in the CRHR.
2. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant. The architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural records of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence.

Resources are evaluated for eligibility for the CRHR under the following four criteria:

- **Criterion 1:** The resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- **Criterion 2:** The resource is associated with the lives of persons important in our past;
- **Criterion 3:** The resource 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; and
- **Criterion 4:** The resource has yielded, or may be likely to yield, information important in prehistory or history.

A Phase I Archaeological Survey Report (ASR) was prepared for the originally approved project to determine the presence and likelihood of presence of cultural resources within the project area (Dudek 2021). The Phase I ASR included the results and findings of background review and a pedestrian survey of the project area. A records search at the Central Coast Information Center (CCIC), located at the University of Santa Barbara, California, and a review of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) were conducted to identify any previously recorded cultural resources within the project area. The results of the records search indicated that one prehistoric cultural resource (CA-SLO-1271) has been previously recorded within the project site, and one historic resource (CA-SLO-65) and one multi-component archaeological site consisting of both prehistoric and historic resources (CA-SLO-67, transferred to supplemental loci of CA-SLO-65) are immediately adjacent to the project site:

- CA-SLO-1271 is a prehistoric site located within the Machado WWTF and is documented as consisting of burnt granite rock, chert debitage, and a Pismo clam shell and cut animal bone of historic age. The site was originally formally recorded in 1989 and described as a low-density concentration of heat-treated granite and chert artifacts. Although not documented in the official site record, a review of previously conducted cultural resources studies revealed that a Phase II significance evaluation was conducted in 2004 (Stewart) that determined CA-SLO-1271 was not significant under CEQA and no further testing or avoidance was recommended.
- CA-SLO-65 is a historic site that includes Mission San Miguel Arcángel and the immediately surrounding area and is documented as consisting of the mission adobe, the mission cemetery, historic refuse, and artifacts related to the habitation of Native Americans at the mission.
- CA-SLO-67 is a multicomponent site, consisting of both prehistoric and historic period resources and is described as a dark midden with medium marine shell content that has likely been minimized in size due to modern development, with the historic component of the site consisting of reportedly the former camp site of Lt. Col. John C. Fremont.

Pedestrian field surveys of the project area were conducted on June 24 and December 16, 2020. The pedestrian field surveys did not identify any previously unidentified cultural resources within the project area.

A Supplemental Phase I Archaeological Survey was conducted for the proposed project (SWCA 2024), which included background research and a pedestrian survey of project areas not previously included in the Phase I ASR prepared for the originally approved project. Background research included a review of SWCA's in-house cultural resources library for information regarding prior studies and known resources in the vicinity of the project area, specifically *Phase I Surface Survey of 728 Ocean Boulevard, Shell Beach, California*, prepared by Thor Conway of Heritage Discoveries Inc. in 2003. The background research identified that the subject property is within the known boundary of CA-SLO-98, which is described as an extensive prehistoric habitation site with abundant artifacts and ecofacts and known human remains. A supplemental pedestrian field survey of the project area conducted on November 13, 2023, revealed sparse evidence of CA-SLO-98 within the project area. However, all materials were observed in a disturbed context and aside from a low-density scatter of shell fragments and a single flake, no artifacts or features were observed in excavated areas.

## *Environmental Evaluation*

### a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Based on the results of the Phase I ASR and Supplemental Phase I Archaeological Survey, there are previously recorded historical resources associated with CA-SLO-65 and CA-SLO-67 within the project area (Dudek 2021; SWCA 2024). Proposed WWTF upgrades would be limited to the existing footprint of the Machado WWTF and would not result in changes to nearby buildings or structures in a manner that could directly affect any built historical resources. Further, the proposed recycled water conveyance system would be installed within previously developed roadways and other previously disturbed areas and does not require any demolition or removal of existing buildings or structures within the project area that could directly affect any built historical resources. However, due to the cultural sensitivity of the general project area, there is potential for unknown intact subsurface historical cultural resources to exist within the project area. MM CR-1 through MM CR-4 require the preparation and implementation of a Cultural Resource Monitoring and Inadvertent Discovery Plan, completion of a WEAP training, archaeological construction monitoring, and adherence to inadvertent discovery protocol to reduce the potential to adversely affect previously unknown subsurface historical cultural resources during construction activities. Based on implementation of MM CR-1 through MM CR-4, the project would not result in adverse impacts to known or unknown historical resources; therefore, impacts would be *less than significant with mitigation*.

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

Based on the results of the Phase I ASR and Supplemental Phase I Archaeological Survey, there are previously recorded prehistoric resources associated with CA-SLO-1271, CA-SLO-67, and CA-SLO-98 within the project area (Dudek 2021; SWCA 2024). Proposed WWTF upgrades and installation of the recycled water conveyance system would be conducted within previously developed or otherwise disturbed areas, which reduces the potential for intact cultural resources to exist within the proposed area of disturbance. However, due to the cultural sensitivity of the general project area, there is potential for unknown cultural archaeological resources to exist within the project area. As described in *Impact Discussion V(a)*, implementation of MM CR-1 through MM CR-4 requires the preparation and

implementation of a Cultural Resource Monitoring and Inadvertent Discovery Plan, completion of a WEAP training, archaeological construction monitoring, and adherence to inadvertent discovery protocol to reduce the potential to adversely affect previously unknown cultural resources during construction activities. Based on implementation of MM CR-1 through MM CR-4, the project would not result in adverse impacts to known or unknown archaeological resources; therefore, impacts would be *less than significant with mitigation*.

### c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No burial areas have been previously identified or were observed during the pedestrian surveys within the project area. However, background review of previously identified cultural resources within the project area indicates the potential for previously unidentified human remains to occur within the project area. In addition, due to the cultural sensitivity of the general project area, there is potential for unknown human remains to exist within the project area. The project would be required to comply with California Health and Safety Code Section 7050.5, which outlines the protocol for unanticipated discovery of human remains. 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. The County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Based on required compliance with California Health and Safety Code Section 7050.5, the project would not result in adverse impacts to known or unknown human remains; therefore, impacts would be *less than significant*.

## *Conclusion*

With implementation of MM CR-1 through MM CR-4, the project would not result in adverse impacts to known or unknown historical, cultural, or human resources, and potential impacts related to cultural resources would be less than significant.

## *Mitigation Measures*

**MM-CUL-1** **Cultural Resource Monitoring and Inadvertent Discovery Plan.** Impacts to cultural resources shall be minimized through implementation of pre- and post-construction tasks. Tasks pertaining to cultural resources include the development of a Cultural Resource Monitoring and Inadvertent Discovery Plan. The purpose of the plan is to outline a program of treatment and mitigation in the case of an inadvertent discovery of cultural resources during ground-disturbing phases (including but not limited to preconstruction site mobilization, grubbing, construction ground disturbance, construction grading, trenching, and landscaping) and to provide for the proper identification, evaluation, treatment, and protection of any cultural resources during the construction of the project. This plan shall define the process to be followed for the identification and management of cultural resources in the project area during construction. The existence and importance of adherence to this plan shall be stated on all construction plans.

**MM-CUL-2** **Worker Environmental Awareness Program (WEAP) Training.** All project personnel shall be briefed regarding unanticipated discoveries prior to the start of construction activities. A basic presentation shall be prepared and presented by a qualified

archaeologist to inform all personnel working on the project about the archaeological sensitivity of the area. The purpose of the Worker Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection and the immediate contact of the on-call archaeologist and, if appropriate, tribal representative. Necessity of training attendance shall be stated on all construction plans.

**MM-CUL-3** **Archaeological Construction Monitoring.** In consideration of the general sensitivity of the project site for cultural resources, a qualified archaeologist shall be retained to conduct spot monitoring as well as on-call response in the case of an inadvertent discovery of archaeological resources. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue spot monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits. The archaeologist shall be responsible for maintaining monitoring logs. Following the completion of construction, the qualified archaeologist shall provide an archaeological monitoring report to the San Miguel Community Services District (SMCSD) and the Central Coast Information Center with the results of the cultural monitoring program.

**MM-CUL-4** **Inadvertent Discovery of Archaeological Resources.** In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending on the significance of the find under the California Environmental Quality Act (CEQA; 14 California Code of Regulations Section 15064.5(f), California Public Resources Code Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted. If the discovery is Native American in nature, consultation with and/or monitoring by a tribal representative may be necessary. If a discovery consists of possible human remains, the County of San Luis Obispo (County) Coroner and SMCSD project representative shall be contacted immediately. If the County Coroner determines that the remains are Native American, the County Coroner shall contact the California Native American Heritage Commission (NAHC), who will provide the name and contact information for the most likely descendant (MLD). Treatment of the discovery shall be decided in consultation with the MLD provided by the NAHC. Additionally, a tribal representative shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the SMCSD project representative grants authorization.

# VI. Energy

| Environmental Issues | 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? | ☐ | ☐ | ☒ | ☐ |
| (b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☒ | ☐ |

## *Setting*

Pacific Gas and Electric Company (PG&E) is the primary electricity provider for urban and rural communities within San Luis Obispo County. The 2022 PG&E electric power mix consists of 38% renewable energy sources and 57% GHG-free energy sources (PG&E 2022).

The County has adopted the *County of San Luis Obispo General Plan Conservation and Open Space Element* (COSE), which establishes goals and policies that aim to reduce vehicle miles traveled (VMT), conserve water, increase energy efficiency and the use of renewable energy, and reduce GHG emissions (County of San Luis Obispo 2010). The COSE provides the basis and direction for the development of the *County of San Luis Obispo EnergyWise Plan* (EWP), which outlines in greater detail the County's strategy to reduce government and community-wide GHG emissions through a number of goals, measures, and actions, including energy efficiency and development and use of renewable energy resources (County of San Luis Obispo 2011). The EWP established the goal to reduce community-wide GHG emissions to 15% below 2006 baseline levels by 2020. Two of the six community-wide goals identified to accomplish this were to "[a]ddress future energy needs through increased conservation and efficiency in all sectors" and "[i]ncrease the production of renewable energy from small-scale and commercial-scale renewable energy installations to account for 10% of local energy use by 2020." In addition, the County has published the *EnergyWise Plan 2016 Update* to summarize progress toward implementing measures established in the EWP and outline overall trends in energy use and emissions since the baseline year of the EWP inventory (2006). While the timeline for the goals in this plan has since passed, the EWP still provides helpful context for evaluating a project's consistency with the County's goals related to energy efficiency, energy conservation, and renewable energy.

## *Environmental Evaluation*

### 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?

During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. The energy consumed during construction would be temporary in nature and would be typical of other similar construction activities in the county. Federal and state regulations in place require the use of fuel-efficient equipment and vehicles and require wasteful activities, such as diesel idling, to be limited. Construction contractors, in an effort to ensure cost efficiency, would not be expected to engage in wasteful or unnecessary energy and fuel practices. Although not required to reduce impacts,

implementation of MM AQ-2 identified in Section III, *Air Quality*, would further reduce already less-than-significant impacts by ensuring compliance with diesel-idling restrictions and requiring the use of alternative fuel for construction equipment where feasible. Energy consumption during construction would not conflict with a state or local plan for renewable energy and would not be wasteful, unnecessary, or inefficient; therefore, would be *less than significant*.

The project includes upgrades to the Machado WWTF and installation of a recycled water conveyance system, which would result in a marginal increase in overall operational energy use. Electricity and natural gas would be provided by PG&E, which consists of 38% renewable energy sources and 57% GHG-free energy sources (PG&E 2022). By using electricity and natural gas from PG&E, the project would reduce the long-term use of non-renewable energy resources. Further, the project includes the installation of a solar PV system in the northern portion of the project site and power from the solar PV system would be used to provide supplemental power to the Machado WWTF, which would further reduce the long-term use of non-renewable energy resources. New buildings associated with the proposed WWTF upgrade would be required to comply with Title 24 of the California Energy Code (CEC) and California Building Code (CBC) 2022 Building Energy Efficiency Standards to further reduce operational energy use through implementation of green building and energy efficient building design features. The proposed installation of the new recycled water conveyance system would not generate any new employment opportunities and the proposed WWTF upgrade would result in a limited increase of two additional employees, which would generate a negligible number of new vehicle trips to and from the site. As such, the project would not result in a substantial increase in fossil fuel consumption. Based on the limited increase in energy use required for operation of the project, use of clean energy resources, and required compliance with the CEC and CBC, the project would not cause a substantial increase in energy use; therefore, operational impacts would be *less than significant*.

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

As previously evaluated, proposed construction activities would require the use of energy in the form of diesel fuel and gasoline for worker and construction vehicles and equipment. The energy consumed during construction would be temporary and would not represent a significant or wasteful demand on available resources, which would be consistent with applicable renewable energy plans.

In order to be compliant with the County COSE and EWP, the project would be required to reduce GHG emissions where feasible in energy consumption. Electricity and natural gas would be provided by PG&E, which consists of 38% renewable energy sources and 57% GHG-free energy sources (PG&E 2022). The project also includes the installation of a solar component, which would be used to provide supplemental power to the Machado WWTF. By utilizing PG&E and proposed solar PV panels for electricity, 95% or more of the project's electricity demand would be sourced from renewable energy or GHG-free energy sources, which is consistent with the County COSE and EWP. Further, new buildings associated with the Machado WWTF upgrade would be required to comply with Title 24 of the CEC and CBC 2022 Building Energy Efficiency Standards to ensure compliance with energy efficient building design to reduce operational energy use. Therefore, the project would be compliant with applicable energy efficiency plans and impacts would be *less than significant*.

## *Conclusion*

The project would be provided energy from GHG-free sources and would be subject to Title 24 of the CEC and CBC 2022 Building Energy Efficiency Standards for energy efficient building design. The project would not result in excessive energy use during construction or operation and would be consistent

with applicable energy efficiency plans. Therefore, potential impacts related to energy would be less than significant.

### *Mitigation Measures*

Mitigation is not necessary.

# VII. Geology and Soils

| Environmental Issues | 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: | | | | |
| (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| (ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| (iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| (iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| (b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| (c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☒ | ☐ |
| (d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| (e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |
| (f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |

### *Setting*

Ground shaking refers to the motion that occurs in response to regional and local earthquakes. Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. Ground shaking can endanger life and safety due to damage or collapse of structures or lifeline facilities. Liquefaction is the sudden loss of soil strength due to a rapid increase in soil pore water pressure resulting from ground shaking during an earthquake.

Landslides and slope instability can occur as a result of wet weather, weak soils, improper grading, improper drainage, steep slopes, adverse geologic structure, earthquakes, or a combination of these factors.

San Luis Obispo County is located in a geologically complex and seismically active region. The *County of San Luis Obispo General Plan Safety Element* identifies three active faults that traverse through the County and that are currently zoned under the State of California Alquist-Priolo Fault Zoning Act: the San Andreas, the Hosgri-San Simeon, and the Los Osos (County of San Luis Obispo 1999). There are three known active to potentially active faults in proximity to project site. The potentially active Rinconada Fault is located approximately 5 miles southwest of San Miguel and is classified as Quaternary (age undifferentiated). The active San Andreas Fault is approximately 25 miles northeast of San Miguel and is classified as Historic (displacement has occurred in the last 200 years). The active Hosgri-San Simeon Fault is approximately 25 miles southwest of San Miguel and is classified as Holocene-active (displacement during past 11,700 years) (CDOC 2015).

Highly erodible soils are those that are easily carried by water and, to a lesser extent, by wind. Surface erosion is more commonly visible, but subsurface erosion can lead to damage to pipes, roads, foundations, and other structural elements. Expansive soils are largely comprised of clays, which expand in volume when water is absorbed and shrink as the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. If the shrink-swell potential is rated moderate to high, then damage to buildings, roads, structural foundations, and pipes can occur. In the northern portion of the city, there are some areas of expansive clay soil that require special construction standards for foundations and infrastructure. Expansive clay problems can be surmounted by appropriate engineering design and construction techniques. Surficial soil types within the project area include the following soil types (Natural Resources Conservation Service [NRCS] 2024):

- **Hanford and Greenfield soils, 0 to 2 percent slopes.** This well-drained soil has a low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of fine sandy loam.
- **Hanford and Greenfield soils, 2 to 9 percent slopes.** This well-drained soil has a low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of fine sandy loam.
- **Metz loamy sand, 0 to 5 percent slopes.** This somewhat excessively drained soil has a very low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of loamy sand and stratified sand to very fine sandy loam.

The project area is underlain by floodplain and river channel deposits consisting of interbedded sand, gravel, silt, and clay sediments, which are no more than 50 to 100 feet thick. These sediments are in turn underlain by the Paso Robles Formation, which is approximately 700 to 2,000 feet thick. The Paso Robles Formation is a Plio-Pleistocene, predominantly non-marine geologic unit comprising relatively thin, often discontinuous sand and gravel layers interbedded with thicker layers of silt and clay. The formation was deposited in alluvial fan, flood plain, and lake depositional environments. The formation is typically unconsolidated and generally poorly sorted (i.e., mixed sediment sizes). The sand and gravel beds in the Paso Robles Formation have a high percentage of Monterey shale gravel and have lower permeability compared to the overlying alluvial unit. The formation also contains minor amounts of gypsum and woody coal (City of Paso Robles 2011; Paso Robles Subbasin Groundwater Sustainability Agencies 2020). The project site is underlain by surficial Quaternary alluvium (Qa) from the Holocene era, older alluvial deposits (Qoa) from the Pleistocene era, and the Paso Robles Formation from the Pleistocene era. Qa has a low paleontological sensitivity within the top 5 feet of the unit due to the relatively young age of

the surficial sediments; however, Qoa and the Paso Robles Formation have a high paleontological sensitivity.

## *Environmental Evaluation*

### a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

#### a-i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The nearest potentially active fault to the project site is the Rinconada Fault, located approximately 5 miles southwest of San Miguel. However, the project site is not underlain by an Alquist-Priolo Fault Zone; therefore, rupture of a known Alquist-Priolo Fault would not occur under the project site, and *no impacts* would occur.

#### a-ii) Strong seismic ground shaking?

The project site is located in a seismically active region and there is always potential for seismic ground shaking to occur. As previously identified, there are three potentially active faults located within the region, including the Rinconada Fault, located approximately 5 miles southwest of San Miguel; the San Andreas Fault, located approximately 25 miles northeast of San Miguel; and the Hosgri-San Simeon Fault, located approximately 25 miles southwest of San Miguel (CDOC 2015). The proposed WWTF upgrade would result in the construction of new buildings and structures within the footprint of the existing Machado WWTF and adjacent western parcel. The construction of new occupiable buildings and structures would be required to be designed and constructed in accordance with seismic design standards identified in the 2022 CBC and other engineering standards to adequately withstand earthquake loads and associated risk, including seismic ground shaking. The proposed recycled water conveyance system would be installed below grade and does not include the construction of new occupiable buildings or other components that could expose people to increased risk associated with seismic ground shaking. Based on required compliance with the 2022 CBC, the project would not result in the risk of loss, injury, or death as a result of seismic-related risk; therefore, impacts would be *less than significant*.

#### a-iii) Seismic-related ground failure, including liquefaction?

According to the Safety Element maps, the project site is located in an area with low to high potential for liquefaction (County of San Luis Obispo 1999). The construction of new occupiable buildings and structures would be required to be designed and constructed in accordance with seismic design standards identified in the 2022 CBC and other engineering standards to adequately withstand earthquake loads and associated risk, including liquefaction. The proposed recycled water conveyance system would be installed below grade and does not include the construction of new occupiable buildings or other components that could expose people to increased risk associated with liquefaction. Based on required compliance with the 2022 CBC, the project would not result in the risk of loss, injury, or death as a result of liquefaction; therefore, impacts would be *less than significant*.

#### a-iv) Landslides?

According to the Safety Element maps, the project site is located in an area with low potential for landslides and the project site and surrounding area are relatively flat, which further reduces the potential

for landslides to occur. Further, the construction of new occupiable buildings and structures would be required to be designed and constructed in accordance with the 2022 CBC and other applicable engineering standards to adequately withstand risk associated with landslides. The proposed recycled water conveyance system would be installed below grade and does not include the construction of new occupiable buildings or other components that could expose people to increased risk associated with landslides. Based on the low potential for landslides and required compliance with the 2022 CBC, the project would not result in the risk of loss, injury, or death as a result of landslides; therefore, impacts would be *less than significant*.

## b) Result in substantial soil erosion or the loss of topsoil?

The proposed WWTF upgrades would result in approximately 16.15 acres of ground disturbance, including 25,925 cubic yards of cut and 22,250 cubic yards of fill, and installation of the proposed recycled water conveyance system would result in approximately 1.37 acres of ground disturbance, including 1,810 cubic yards of cut and fill. The project would not require ground disturbance within the Salinas River or any surface water features. However, proposed ground-disturbing activities have the potential to increase erosion and loss of topsoil at the project site that could runoff into the Salinas River and surrounding areas. The project would disturb more than 1 acre of soils and would be required to comply with RWQCB General Construction Permit requirements, including preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) with BMPs to address erosion during construction activities. In addition, County LUO Section 22.52.120 requires the preparation and implementation of an Erosion and Sedimentation Control Plan for all construction and grading projects to minimize potential short- and long-term impacts related to erosion and sedimentation, and includes requirements for specific erosion control materials, setbacks from creeks, and siltation. Following construction activities, the project site would be covered in hardscapes and would not include any long-term activities that could generate substantial soil erosion or loss of topsoil. Based on required compliance with RWQCB requirements and County LUO Section 22.52.120, potential impacts related to soil erosion and loss of topsoil would be *less than significant.*

## 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?

As previously described, the project site is located in an area with low to high risk for liquefaction to occur and a low risk for landslides to occur. Additionally, the project site is not located in an area with known land subsidence (U.S. Geological Survey [USGS] 2024). The project would be constructed in accordance with the 2022 CBC and other applicable engineering standards to adequately withstand and minimize risk associated with potential ground-failure events; therefore, potential impacts related to ground failure would be *less than significant*.

## 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?

Typically, expansive soils are comprised of clay. Soils in the project site primarily consist of Hanford and Greenfield soils, 0 to 2 percent slopes; Hanford and Greenfield soils, 2 to 9 percent slopes; and Metz loamy sand, 0 to 5 percent slopes. These soil types have a low risk of soil expansion because they are predominantly comprised of fine sand and loam (NRCS 2024). Further, the project would be required to be constructed in accordance with the 2022 CBC and other applicable engineering standards to further

avoid risk associated with development on expansive soils. Based on the low potential for soil expansion and required compliance with the 2022 CBC and other applicable engineering standards, the project would not result in risk associated with soil expansion, and impacts would be *less than significant*.

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

The project does not include the installation of septic tanks or alternative wastewater disposal systems; therefore, *no impacts* would occur.

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

The project site is underlain by surficial Qa from the Holocene era, Qoa from the Pleistocene era, and the Paso Robles Formation from the Pleistocene era. Qa has a low paleontological sensitivity within the top 5 feet of the unit due to the relatively young age of the surficial sediments; however, Qoa and the Paso Robles Formation have a high paleontological sensitivity. The project would require ground-disturbing and excavation activities with a maximum depth of 25 feet. Based on the extent of proposed ground-disturbing activities and the relatively high paleontological sensitivity of the project area, there is potential for unknown paleontological resources to exist within the project area. MM CR-3 identified in Section V, *Cultural Resources*, requires archaeological construction monitoring during ground-disturbing activities, which would reduce the potential to disturb unknown paleontological resources if present within the proposed area of disturbance. Further, MM GEO-1 has been identified to require paleontological resource monitoring for excavations that exceed 5 feet in depth and also identifies the proper protocol to be implemented in the event of inadvertent discovery of unknown paleontological resources. Based on implementation of MM CR-3 and MM GEO-1, the project would not disturb paleontological resources; therefore, impacts would be *less than significant with mitigation*.

## *Conclusion*

The project would be constructed in accordance with the 2022 CBC and other applicable engineering standards to reduce the potential for risk of loss, injury, or death as a result of seismic or other geologic stresses. Based on required compliance with RWQCB and County LUO requirements, the project would not result in impacts related to substantial erosion. The project does not include the installation of septic tanks or alternative wastewater disposal systems. In addition, with implementation of MM CR-3 and MM GEO-1, the project would not disturb paleontological resources. Therefore, upon implementation of MM CR-3 and MM GEO-1, impacts related to geology and soils would be less than significant.

## *Mitigation Measures*

Implement MM CR-3 and the following mitigation measure:

**MM GEO-1** **Paleontological Resource Construction Monitoring**. Excavations that will exceed 5 feet in depth shall be monitored by a qualified paleontological monitor. The frequency of monitoring shall be determined by the paleontologist. If no fossils are observed during the first 50% of excavations that exceed 3 feet in depth, or if the paleontologists can determine that excavations are not disturbing Pleistocene- or Pliocene-aged sediments, then the frequency of monitoring may be at the discretion of the paleontologist. If fossils are discovered, then work shall be stopped to allow a qualified paleontologist to recover

the fossils. Once salvaged, fossils shall be identified to the lowest 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.

# VIII. Greenhouse Gas Emissions

| Environmental Issues | 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? | ☐ | ☐ | ☒ | ☐ |
| (b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

## *Setting*

GHGs are any gases that absorb infrared radiation in the atmosphere and are different from the criteria pollutants discussed in Section III, *Air Quality*. The primary GHGs that are emitted into the atmosphere as a result of human activities are carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), and fluorinated gases.

### CALIFORNIA AIR RESOURCES BOARD 2022 SCOPING PLAN

The CARB *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), dated November 16, 2022, identifies a plan to reach carbon neutrality by 2045 or earlier (CARB 2022). The 2022 Scoping Plan is the first plan that adds carbon neutrality as a science-based guide beyond established emission reduction targets. It identifies a feasible path to achieve carbon neutrality by 2045, or earlier, while also assessing the progress the state is making toward reducing its GHG emissions by at least 40% below 1990 levels by 2030, as called for in Senate Bill (SB) 32 and laid out in the 2017 Scoping Plan. Specifically, this plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40% below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 or earlier.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as a driving principle throughout the document.
- Incorporates the contribution of natural and working lands to the state's GHG emissions, as well as its role in achieving carbon neutrality.

- Relies on the most up to date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration as well as direct air capture.

Evaluates multiple options for achieving our GHG and carbon neutrality targets, as well as the public health benefits and economic impacts associated with each.

### SAN LUIS OBISPO COUNTY REGIONAL TRANSPORTATION PLAN/ SUSTAINABLE COMMUNITIES STRATEGY

The 2023 RTP/SCS was adopted by SLOCOG on June 7, 2023 (SLOCOG 2023). The 2023 RTP/SCS is the San Luis Obispo region's long-term blueprint for a transportation system that enhances quality of life and meets the mobility needs of the region's residents and visitors, now and in the future. This blueprint offers the region's communities a mix of mobility options for people and goods and makes a strong commitment to creating a more sustainable transportation system that maximizes choice, holistically addresses transportation issues, and is both visionary and attainable. SB 375 (2008) dramatically shifted the context and framework for RTP development, placing new emphasis on performance and outcomes and presenting significant opportunities to create healthier, more equitable communities and regions. The 2023 RTP/SCS is an integrated plan for transportation, land use, and housing that must meet feasible GHG reduction targets for cars and light trucks set by the CARB.

## *Environmental Evaluation*

### a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment, which would result in a short-term increase in GHG emissions. GHG emissions generated during construction would be temporary in nature and would be typical of other similar construction activities in the county. Construction contractors would be required to comply with state and local diesel-idling limitations, including limiting idling to 5 minutes or less, which would reduce GHG-emissions during equipment and vehicle use during construction. Although not required to reduce impacts, implementation of MM AQ-2 identified in Section III, *Air Quality*, would further reduce already less-than-significant impacts by ensuring compliance with diesel-idling restrictions and requiring the use of alternative fuel for construction equipment where feasible. Based on required compliance with diesel-idling restrictions, construction of the proposed project is not anticipated to generate substantial GHG emissions in a manner that would have a significant effect on the environment; therefore, short-term impacts would be *less than significant*.

The project includes upgrades to the Machado WWTF and installation of a recycled water conveyance system, which would result in a marginal increase in overall operational energy use and associated GHG emissions. Electricity and natural gas would be provided by PG&E, which consists of 38% renewable energy sources and 57% GHG-free energy sources (PG&E 2022). By utilizing PG&E for electricity, 69% of the project's electricity demand would be sourced from GHG-free energy sources. The project also includes the installation of a solar PV system in the northern portion of the project site and power from the solar PV system would be used to provide supplemental power to the Machado WWTF, which would further result in energy use from GHG-free energy sources. Further, new buildings associated with the proposed WWTF upgrade would be required to comply with Title 24 of the CEC and CBC 2022 Building Energy Efficiency Standards to further reduce operational energy use and associated GHG emissions through implementation of green building and energy efficient building design features. The proposed

installation of the new recycled water conveyance system would not generate any new employment opportunities and the proposed WWTF upgrade would result in a limited increase of two additional employees, which would generate a negligible number of new vehicle trips to and from the site. As such, the project would not result in a substantial increase in GHG emissions associated with an increase in vehicle trips to and from the project site. Based on the use of clean energy resources, limited increase in vehicle trips to and from the project site, and required compliance with the CEC and CBC, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; therefore, operational impacts would be *less than significant*.

### b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The 2023 RTP/SCS identifies transportation and land use planning strategies to reduce VMT within the region (SLOCOG 2023). The proposed project is limited to upgrades to the Machado WWTF and installation of a recycled water conveyance system and does not include the establishment of new commercial, residential, or other land uses that would be subject to land use planning strategies. The proposed installation of the new recycled water conveyance system would not generate any new employment opportunities and the proposed WWTF upgrade would result in a limited increase of two additional employees, which would generate a negligible number of new vehicle trips to and from the site. Therefore, the project would not result in a substantial increase in VMT, which is consistent with the goal of the land use planning strategies identified in the 2023 RTP/SCS. As identified in *Impact Discussion VIII(a)*, the project would not generate a substantial increase in short- or long-term GHG emissions, which would be consistent with state and local GHG-reduction goals. Therefore, the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be *less than significant*.

## *Conclusion*

The project would be consistent with the goals of the 2023 RTP/SCS and would not generate a substantial amount of short- or long-term GHG emissions; therefore, impacts related to GHG emissions would be less than significant.

## *Mitigation Measures*

Mitigation is not necessary.

# IX. Hazards and Hazardous Materials

| Environmental Issues | 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? | ☐ | ☒ | ☐ | ☐ |
| (b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☒ | ☐ | ☐ |
| (c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☒ | ☐ | ☐ |
| (d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| (f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| (g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | ☐ | ☐ | ☒ | ☐ |

## *Setting*

The Hazardous Waste and Substances Site (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements related to the disclosure of information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Cortese List. Various state and local government agencies are required to track and document hazardous material release information for the Cortese List. The California Department of Toxic Substance Control (DTSC) EnviroStor database tracks DTSC cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination, such as federal superfund sites, state response sites, voluntary cleanup sites, school cleanup sites, school investigation sites, and military evaluation sites. The State Water Resources Control Board (SWRCB) GeoTracker database contains records for sites that impact, or have the potential to impact, water in California, such as Leaking Underground Storage Tank (LUST) sites, Department of Defense sites, and Cleanup Program Sites. The remaining data regarding facilities or sites identified as meeting the "Cortese List" requirements can be located on the CalEPA website (https://calepa.ca.gov/sitecleanup/corteselist/). Based on a query of the DTSC EnviroStor and SWRCB GeoTracker databases, there are no previously recorded hazardous materials sites located within

or adjacent to the Machado WWTF or recycled water conveyance system alignment (DTSC 2024; SWRCB 2024).

The California Health and Safety Code provides regulations pertaining to the abatement of fire related hazards and requires that local jurisdictions enforce the CBC, which provides standards for fire resistive building and roofing materials, and other fire-related construction methods. The County Safety Element provides a Fire Hazard Zones Map that indicates unincorporated areas in the County within moderate, high, and very high fire hazard severity zones. According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone (FHSZ) viewer, the Machado WWTF is located in a moderate FHSZ, and the recycled water conveyance system alignment is located within a moderate FHSZ and within a local responsibility area (LRA) (CAL FIRE 2023). For more information about fire-related hazards and risk assessment, see Section XX, *Wildfire*.

The County also has adopted general emergency plans for multiple potential natural disasters, including the Local Hazard Mitigation Plan, County Emergency Operations Plan, Earthquake Plan, Dam and Levee Failure Plan, Hazardous Materials Response Plan, County Recovery Plan, and Tsunami Response Plan.

## *Environmental Evaluation*

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

The project would require limited quantities of hazardous substances, including gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc. during construction, which has the potential to result in an accidental spill or release. Construction contractors would be required to comply with applicable federal and state environmental and workplace safety laws for the handling, transport, and storage of hazardous materials, including 22 CCR Division 4.5. Operation of the project would involve the transport, storage, use, or disposal of hazardous materials including diesel fuel. The project would be required to comply with applicable federal and state environmental and workplace safety laws for the handling, transport, and storage of hazardous materials, including 22 CCR Division 4.5. MM HAZ-1 and MM HAZ-2 have been identified to further reduce the potential to release hazardous materials through preparation and implementation of a contingency plan for handling hazardous materials and a Hazardous Materials Business Plan. Based on required compliance with 22 CCR Division 4.5 and implementation of MM HAZ-1 and MM HAZ-2, the project would not result in adverse impacts associated with the routine transport, use, or disposal of hazardous materials; therefore, impacts would be *less than significant with mitigation.*

### 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?

As previously discussed, short- and long-term project activities would include the use of heavy equipment, vehicles, and commonly used hazardous substances, including, but not limited to, paint, solvents, oils, fuel, and gasoline. Commonly used hazardous substances within the project site would be transported, stored, and used according to regulatory requirements and existing procedures for the handling of hazardous materials. Further, MM HAZ-1 and MM HAZ-2 have been identified to further reduce the potential to release hazardous materials through preparation and implementation of a contingency plan for handling hazardous materials and a Hazardous Materials Business Plan.

Aerially deposited lead (ADL) from the historical use of leaded gasoline exists along heavily traveled roadways throughout California (i.e., principal arterial roadways, freeways, and expressways). Typically, ADL is found within 30 feet of the edge of pavement associated with these roadways, with the highest concentrations occurring in the top 6 inches of soil within 10 feet of the edge of pavement. In some cases, lead is as deep as 2 to 3 feet below the surface and can extend 20 feet or more from the edge of pavement. The installation of the proposed recycled water conveyance system would require boring methods up to 20 feet deep to install the pipeline under US 101 and other roadway crossings. Proposed excavation activities under US 101 would have the potential to release ADL if present within soils under or adjacent to US 101. MM HAZ-3 has been identified to reduce potential impacts related to release of ADL during project construction. 20th Street and other proximate roadways would not be expected to contain ADL due to the limited amount of current and historical vehicle travel; therefore, proposed ground-disturbing activities along 20th Street would not result in the release of ADL.

As discussed in Section III, *Air Quality*, the project site is not located in an area with the potential for NOA to occur. However, the project includes the demolition of existing facilities within the Machado WWTF and would also require removal and disturbance of existing roadway components that may result in release of ACM or lead-based paint. MM AQ-3 has been included in Section III, *Air Quality*, to require testing and proper handling of materials to be removed prior to removal from the site.

Based on required compliance with existing regulations and implementation of MM AQ-3 and MM HAZ-1 through MM HAZ-3, the proposed project would not 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; therefore, impacts would be *less than significant with mitigation*.

## c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The nearest schools to the project site are Lillian Larsen Elementary School and San Miguel Joint Union School located approximately 0.15 mile southwest of the Machado WWTF. As evaluated in *Impact Discussion IX(a)* and *Impact Discussion IX(b)*, commonly used hazardous substances within the project site would be transported, stored, and used according to regulatory requirements and existing procedures for the handling of hazardous materials to avoid accidental release or accident conditions within the project area. MM HAZ-1 and MM HAZ-2 have been identified to further reduce the potential to release hazardous materials within 0.25 mile of an existing school through preparation and implementation of a contingency plan for handling hazardous materials and a Hazardous Materials Business Plan. In addition, MM AQ-3 and MM HAZ-3 have been identified to avoid the release of ACM, lead-based paint, and ADL within the project area. Based on required compliance with 22 CCR Division 4.5 and implementation of MM AQ-3 and MM HAZ-1 through MM HAZ-3, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school; therefore, impacts would be *less than significant with mitigation*.

## d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Based on a query of the DTSC EnviroStor and SWRCB GeoTracker databases, there are no previously recorded hazardous materials sites located within or adjacent to the project site (DTSC 2024; SWRCB

2024). The project site is not located on or adjacent to a site that is on a list of hazardous materials site pursuant to California Government Code Section 65962.5; therefore, the project would not create a significant hazard to the public or the environment related to disturbance in a hazardous materials site, and *no impacts* would occur.

## 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 nearest airport to the project site is an abandoned airfield located approximately 0.3 mile southeast of the project site. The nearest active airport to the project site is the Paso Robles Municipal Airport, located approximately 6.5 miles southeast of the project site. There are no active airports within 2 miles of the project site; therefore, the project would not result in airport-related safety or noise hazards, and *no impacts* would occur.

## f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project includes the construction of upgrades to the Machado WWTF and the installation of a recycled water conveyance system within existing roads and disturbed areas beginning at the Machado WWTF and terminating at the E&J Gallo Winery property, the Vino Farms property, and the intersection of 16th Street and N Street. Emergency and other vehicle access to the Machado WWTF would continue to be provided via Bonita Place. The proposed WWTF upgrades would be constructed entirely within the footprint of the existing Machado WWTF and adjacent western parcel and would not require any road closures or traffic controls along proximate roadways. Installation of the proposed recycled water conveyance system would require work along roadways within the project area, which would require periodic road closures and traffic controls along 20th Street during the 3-month construction period. Traffic could be limited to a single lane along 20th Street and could be detoured and directed to 19th Street if 20th Street requires full closure. Therefore, detour routes would be established to ensure adequate emergency and other vehicle access within the project area. In addition, MM HAZ-4 has been identified to require prior notice be given to all emergency response providers likely to be affected by the closure and detours. Upon implementation of MM HAZ-4, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be *less than significant*.

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

The Machado WWTF is located in a moderate FHSZ, and the recycled water conveyance system alignment is located within a moderate FHSZ and within a LRA (CAL FIRE 2023). Proposed occupiable buildings would be required to be constructed in accordance with California Fire Code (CFC) and CBC requirements to reduce risk associated with fire ignition and exposure of project occupants to wildfire risk. Other project components would not result in the development of new residences, buildings, or other occupiable structures that could exacerbate the risk of wildfire ignition or expose project occupants to pollutant concentrations from a wildfire. Based on the required compliance with CFC and CBC requirements, the project would not people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires; therefore, impacts would be *less than significant*.

## *Conclusion*

Based on required compliance with CCR requirements, the project would not result in significant hazards related to the routine transport, use, or disposal of hazardous materials. With implementation of MM AQ-3 and MM HAZ-1 through MM HAZ-3, the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The project is not located within 2 miles of an active airport or within or adjacent to a previously recorded hazardous materials site. The project would not impair implementation of an adopted emergency response plan or emergency evacuation plan and would not expose people or structures to a significant risk involving wildfires. Therefore, with implementation of MM AQ-3 and MM HAZ-1 through MM HAZ-3, impacts related to hazards and hazardous materials would be less than significant.

## *Mitigation Measures*

Implement MM AQ-3 and the following mitigation measures:

**MM HAZ-1** **Contingency Plan for Handling Hazardous Materials.** Prior to initiation of construction activities, the Contractor shall prepare and submit to the County of San Luis Obispo (County) Environmental Health Department a contingency plan for handling hazardous materials, whether found or introduced on-site during construction. This plan shall include standard construction measures as specified in federal, state, and local regulations for hazardous materials, removal of on-site debris, and confirmation of presence of pipelines on-site. At a minimum, the following measures shall be included in the contingency plan:

1. If contaminated soils or other hazardous materials are encountered during any soil-moving operation during construction (e.g., trenching, excavation, grading), construction shall be halted and the Hazardous Material Control Plan shall be implemented.
2. Instruct workers on recognition and reporting of materials that may be hazardous.
3. Minimize delays by continuing performance of the work in areas not affected by hazardous materials operations.
4. Identify and contact subcontractors and licensed personnel qualified to undertake storage, removal, transportation, disposal, and other remedial work required by, and in accordance with, laws and regulations.
5. Forward to engineer, copies of reports, permits, receipts, and other documentation related to remedial work.
6. Notify such agencies as are required to be notified by laws and regulations within the time stipulated by such laws and regulations.
7. File requests for adjustments to contract time and contract price due to the finding of hazardous materials in the work site in accordance with conditions of contract.

**MM HAZ-2** **Hazardous Materials Business Plan.** Prior to operation, the contractor shall complete and submit a Hazardous Materials Business Plan to the San Miguel Community Services District (SMCSD) staff, or their designee, and the County Environmental Health

Department. As a component of the Hazardous Materials Business Plan, detailed procedures for handling and storage of hazardous materials used on site, and response to emergency or accidental releases of hazardous materials used on site shall be included.

**MM HAZ-3** **Hazardous Substances.** Prior to initiation of any site preparation/construction activities for project construction, soils within the project area shall be tested for aerially deposited lead (ADL) prior to the beginning of work to determine if ADL is present in soils within the project area. If soils within the project area contain ADL, contaminated soils shall be handled in accordance with California Department of Transportation (Caltrans) Standard Specifications 14-11.08 and 14-11.09A.

**MM HAZ-4** **Prior Notice of Road Closures/Detours.** Prior to the implementation of any lane/road closures or detour routes, the SMCSD and/or its project contractors shall provide notice to all emergency response providers likely to be affected by the closure and detours, including, but not limited to, the San Miguel Fire Department, County Fire Department/California Department of Forestry and Fire Protection (CAL FIRE), and San Luis Obispo County Sherriff's Department. The notice shall include the following information: dates of construction, location and anticipated duration of temporary lane/road closures and detours, and contact information, including the phone number and email address of the SMCSD staff person responsible for responding to and addressing public complaints regarding access. The notice shall be provided at least 2 weeks prior to any planned road closure.

# X. Hydrology and Water Quality

| Environmental Issues | 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? | ☐ | ☐ | ☒ | ☐ |
| (b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☒ | ☐ |
| (c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| (i) Result in substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☒ | ☐ |
| (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; | ☐ | ☐ | ☒ | ☐ |
| (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☒ | ☐ |
| (iv) Impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| (d) | In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☒ | ☐ |
| (e) | Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☒ | ☐ |

## *Setting*

The RWQCB *Water Quality Control Plan for the Central Coast Basin* (Basin Plan; RWQCB 2019) describes how the quality of surface water and groundwater in the Central Coast Region should be managed to provide the highest water quality reasonably possible. The Basin Plan outlines the beneficial uses of streams, lakes, and other waterbodies for humans and other life. There are 24 categories of beneficial uses, including, but not limited to, municipal water supply, water contact recreation, non-water contact recreation, and cold freshwater habitat. Water quality objectives are then established to protect the beneficial uses of those water resources. The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements to individuals, communities, or businesses whose discharges can affect water quality.

The County LUO dictates which projects are required to prepare a drainage plan, including any project that would, for example, change the runoff volume or velocity leaving any point of the site, result in an impervious surface of more than 20,000 square feet, or involve hillside development on slopes steeper than 10%. Preparation of a drainage plan is not required where grading is exclusively for an exempt agricultural structure, crop production, or grazing. The County LUO also dictates that an Erosion and Sedimentation Control Plan is required year-round for all construction and grading permit projects and site disturbance activities of 0.5 acre or more in geologically unstable areas, on slopes steeper than 30%, on highly erodible soils, or within 100 feet of any watercourse.

Per the County's Stormwater Program, the County Public Works Department is responsible for ensuring that new construction sites implement BMPs during construction, and that site plans incorporate appropriate post-construction stormwater runoff controls. Construction sites that disturb 1 acre or more must obtain coverage under the SWRCB Construction General Permit. The Construction General Permit requires the preparation of a SWPPP to minimize on-site sedimentation and erosion. There are several types of projects that are exempt from preparing a SWPPP, including routine maintenance to existing developments, emergency construction activities, and projects exempted by the SWRCB or RWQCB. Projects that disturb less than 1 acre must implement all required elements within the site's Erosion and Sedimentation Control Plan as required by the County LUO.

For planning purposes, the flood event most often used to delineate areas subject to flooding is the 100-year flood. The County Safety Element establishes policies to reduce flood hazards and reduce flood damage, including, but not limited to, prohibition of development in areas of high flood hazard potential, discouragement of single-road access into remote areas that could be closed during floods, and review of plans for construction in low-lying areas. In September 2022, FEMA released preliminary flood maps for San Luis Obispo County that revise flood hazards in areas where the base flood elevation was not previously evaluated, including along the Salinas River in San Miguel. Based on the results of the updated Flood Insurance Rate Maps (FIRM), the eastern portion of the Machado WWTF lies within the 100-year and 500-year floodplain. According to FEMA FIRM 06079C0150G (effective date 11/16/2012),

the recycled water conveyance system alignment is located in shaded Zone X, an area with minimal flood hazard (FEMA 2024).

The Salinas River is located approximately 50 feet east of the Machado WWTF; however, there are no surface water features or drainages located within the project area.

## *Environmental Evaluation*

### a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The Salinas River is located approximately 50 feet east of the Machado WWTF; however, there are no surface water features or drainages located within the project area. The proposed WWTF upgrades would result in approximately 16.15 acres of ground disturbance, including 25,925 cubic yards of cut and 22,250 cubic yards of fill, and installation of the proposed recycled water conveyance system would result in approximately 1.37 acres of ground disturbance, including 1,810 cubic yards of cut and fill. The project would not require ground disturbance within the Salinas River or any surface water features; however, proposed ground-disturbing activities and use of construction vehicles and equipment have the potential to increase erosion and other pollutants at the project site that could runoff into the Salinas River and surrounding areas. The project would disturb more than 1 acre of soil and would be required to comply with RWQCB General Construction Permit requirements, including preparation and implementation of a SWPPP with BMPs to address erosion during construction activities. In addition, County LUO Section 22.52.120 requires the preparation and implementation of an Erosion and Sedimentation Control Plan for all construction and grading projects to minimize potential short- and long-term impacts related to erosion and sedimentation, and includes requirements for specific erosion control materials, setbacks from creeks, and siltation. Based on required compliance with RWQCB requirements and County LUO Section 22.52.120, potential impacts related to soil erosion and loss of topsoil would be *less than significant.*

### 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 is located within the Paso Robles Groundwater Basin (PRGWB), which is designated as a Level of Severity III basin. Natural recharge in the subbasin is derived from infiltration of precipitation, seepage from streams, and return flow from irrigation and other uses (California Department of Water Resources [DWR] 2004). The project includes the upgrade of the Machado WWTF and the installation of a recycled water conveyance system to increase the permitted daily capacity from 200,000 to 500,000 gpd and enable treated effluent to be stored or conveyed to nearby agricultural operations for non-edible agricultural irrigation. The proposed WWTF upgrades and installation of the recycled water conveyance system would not result in additional groundwater pumping and, therefore, would not decrease groundwater supply within the project area. The project would increase the amount of recycled water conveyed to surrounding agricultural land to provide additional water for irrigation, which would ultimately reduce groundwater pumping within the PRGWB and also increase return flows from irrigation. The proposed WWTF upgrades would result in a marginal increase in additional impervious surface area within the Machado WWTF; however, this small-scale addition of impervious surfaces within the project site would not substantially decrease the ability for groundwater recharge within the

PRGWB. Further, the project does not include work within the Salinas River or other drainages that could substantially decrease groundwater recharge within the project area. Therefore, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge; therefore, impacts would be *less than significant*.

## c) 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:

### c-i) Result in substantial erosion or siltation on- or off-site?

The proposed WWTF upgrades would result in approximately 16.15 acres of ground disturbance, including 25,925 cubic yards of cut and 22,250 cubic yards of fill, and installation of the proposed recycled water conveyance system would result in approximately 1.37 acres of ground disturbance, including 1,810 cubic yards of cut and fill. Proposed ground-disturbing activities have the potential to increase erosion and siltation at the project site that could runoff into the Salinas River and surrounding areas. The project would disturb more than 1 acre of soils and would be required to comply with RWQCB General Construction Permit requirements, including preparation and implementation of a SWPPP with BMPs to address erosion during construction activities. In addition, County LUO Section 22.52.120 requires the preparation and implementation of an Erosion and Sedimentation Control Plan for all construction and grading projects to minimize potential short- and long-term impacts related to erosion and sedimentation, and includes requirements for specific erosion control materials, setbacks from creeks, and siltation. Following construction activities, the project site would be covered in hardscapes and would not include any long-term activities that could generate substantial soil erosion or siltation. Based on required compliance with RWQCB requirements and County LUO Section 22.52.120, potential impacts related to soil erosion and siltation would be *less than significant.*

### c-ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

The proposed project includes the upgrade of the Machado WWTF and the installation of a recycled water conveyance system. The proposed WWTF upgrades would include the construction of a new headworks, a new MBR, and associated support facilities, including a solar component and storage and operations buildings, which would result in a marginal increase in impervious surface area within the project area. The recycled water conveyance system would be installed below grade and the proposed alignment would be returned to preconstruction conditions following construction activities; therefore, the proposed recycled water distribution system would not result in an increase in impervious surface area. The project site is located within a Municipal Separate Storm Sewer System (MS4) stormwater management area and would be subject to implementation of a Stormwater Control Plan (SWCP) in accordance with County regulations or RWQCB Post-Construction Requirements (PCRs) for long-term stormwater control measures at the project site. Based on required compliance with County regulations, the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; therefore, impacts would be *less than significant*.

### c-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?

The proposed project includes the upgrade of the Machado WWTF and the installation of a recycled water conveyance system, which would result in a marginal increase in impervious surface area in the project area. The project would be required to implement an SWCP in accordance with County regulations or RWQCB PCRs to address long-term stormwater control measures at the project site. Further, the project would be required to comply with RWQCB General Construction Permit requirements and County LUO Section 22.52.120 to address short- and long-term impacts related to erosion, sedimentation, and other pollutants, which would reduce the potential for a short- or long-term increase of polluted runoff within the project area. Based on required compliance with County and RWQCB requirements, the project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; therefore, impacts would be *less than significant*.

### c-iv) Impede or redirect flood flows?

In September 2022, FEMA released preliminary flood maps for San Luis Obispo County that revised flood hazards in areas where the base flood elevation was not previously evaluated, including along the Salinas River in San Miguel. Based on the results of the updated FIRM, the eastern portion of the Machado WWTF lies within the 100-year and 500-year floodplain. According to FEMA FIRM 06079C0150G (effective date 11/16/2012), the recycled water conveyance system alignment is located in shaded Zone X, an area with minimal flood hazard (FEMA 2024). Based on 500-year flood modeling of post-construction conditions, flood elevations would increase a maximum of 4 inches over preconstruction flood elevations, which is considered negligible (Dudek 2022). Further, the project does not include direct alteration of the Salinas River or existing drainages within the project area in a manner that could substantially alter or redirect flood flows. Construction of the proposed solar component would be required to comply with County LUO Section 22.14.060.D to ensure construction above the base flood elevation, which would avoid impediment or redirection of flood flows. Further, the project would be required to implement an SWCP in accordance with County regulations or RWQCB PCRs to address long-term stormwater control at the project site. Based on required compliance with County LUO and RWQCB requirements, the project would not impede or redirect flood flows, and impacts would be *less than significant*.

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

In September 2022, FEMA released preliminary flood maps for San Luis Obispo County that revised flood hazards in areas where the base flood elevation was not previously evaluated, including along the Salinas River in San Miguel. Based on the results of the updated FIRM, the eastern portion of the Machado WWTF lies within the 100-year and 500-year floodplain. According to FEMA FIRM 06079C0150G (effective date 11/16/2012), the recycled water conveyance system alignment is located in Zone X, an area with minimal flood hazard (FEMA 2024). According to the CDOC San Luis Obispo County Tsunami Inundation Map, the project is not within a tsunami inundation area. Seiches occur as a series of standing waves induced by seismic shaking or land sliding into an impounded body of water. The project site is not located in proximity to any impounded waterbody that would be subject to seiche. In addition, according to the DWR Division of Safety of Dams, the Nacimiento Dam has been classified as an “Extremely High” downstream hazard potential (Monterey County Water Resources Agency [MCWRA] 2020).

In the event of inundation, potential on-site contaminants, including untreated wastewater, screened solid waste, sludge, and trash, could be released downstream and into the neighboring environment, resulting in potentially significant impacts. All critical facilities necessary for the continued operation of the Machado WWTF would be constructed on the west side of the existing site above the 500-year flood limit to prevent future impacts at the Machado WWTF due to flooding. Further, the project would be required to comply with RWQCB General Construction Permit requirements, including preparation and implementation of a SWPPP with BMPs to address erosion during construction activities. In addition, County LUO Section 22.52.120 requires the preparation and implementation of an Erosion and Sedimentation Control Plan for all construction and grading projects to minimize potential short- and long-term impacts related to erosion and sedimentation, and includes requirements for specific erosion control materials, setbacks from creeks, and siltation. The project would be required to implement an SWCP in accordance with County regulations or RWQCB PCRs to address long-term stormwater control at the project site and ensure that the project does not discharge stormwater runoff generated by a 95th percentile, 24-hour storm event. Required compliance with RWQCB and County LUO requirements would reduce the potential for erosion and other pollutants to occur at the project site that could be released in the event of flooding; therefore, impacts would be *less than significant*.

### e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project site is under the jurisdiction of the Central Coast RWQCB and would be subject to the Basin Plan, which sets water quality objectives and criteria to protect water quality in the Central Coast region (RWQCB 2019). As previously identified, the project would be required to comply with RWQCB General Construction Permit requirements and County LUO Section 22.52.120 to address short- and long-term impacts related to erosion, sedimentation, and other pollutants. Based on required compliance with RWQCB requirements and County LUO Section 22.52.120, the project would not conflict with the RWQCB 2019 Basin Plan, and impacts would be *less than significant*.

The project site is located within the PRGWB and is subject to the Paso Robles Subbasin Groundwater Sustainability Plan (GSP) (Paso Robles Groundwater Sustainability Agencies 2020). As previously identified, the proposed project would not result in additional groundwater pumping and, therefore, would not decrease groundwater supply within the project area. Further, the project would increase the amount of recycled water conveyed to surrounding agricultural land to provide additional water for irrigation, which would ultimately reduce groundwater pumping within the PRGWB and also increase groundwater recharge in the form of return flows from irrigation. Therefore, the proposed project would not conflict with the Paso Robles Subbasin GSP, and impacts would be *less than significant*.

## *Conclusion*

Based on required compliance with RWQCB and County LUO requirements, the project would not result in adverse impacts related to water quality, groundwater quality, stormwater runoff, or flood flows. The project would be consistent with sustainable management of the Paso Robles Subbasin and water quality standards of the Basin Plan. Therefore, impacts related to hydrology and water quality would be less than significant.

## *Mitigation Measures*

Mitigation is not necessary.

# XI. Land Use and Planning

| Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| (a) Physically divide an established community? | ☐ | ☐ | ☒ | ☐ |
| (b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☒ | ☐ | ☐ |

## *Setting*

The *County of San Luis Obispo General Plan Land Use Element* (LUE) provides policies and standards for the management of growth and development in each unincorporated community and rural areas of the county and serves as a reference point and guide for future land use planning studies throughout the county. The LUE identifies strategic growth principles to define and focus the County's proactive planning approach and balance environmental, economic, and social equity concerns. Each strategic growth principle correlates with a set of policies and implementation strategies that define how land will be used and resources protected. The Machado WWTF is located within the PF, RS, and AG land use designations and the proposed recycled water conveyance system alignment is located within the PF, RS, AG, IND, and RSF land use designations.

## *Environmental Evaluation*

### a) Would the project physically divide an established community?

The project includes the construction of upgrades to the Machado WWTF and the installation of a recycled water conveyance system within existing roads and disturbed areas beginning at the Machado WWTF and terminating at the E&J Gallo Winery property, the Vino Farms property, and the intersection of 16th Street and N Street. The proposed WWTF upgrades would be constructed entirely within the footprint of the existing Machado WWTF and the adjacent western parcel and would not include any features that would physically divide an established community. Installation of the proposed recycled water conveyance system would require work along roadways within the project area, which would require periodic road closures and traffic controls along 20th Street during the 3-month construction period. Traffic could be limited to a single lane along 20th Street and could be detoured and directed to 19th Street if 20th Street requires full closure; therefore, detour routes would be established to avoid physically dividing the community during the short-term construction period. Temporary traffic controls would be removed following completion of the construction period, and the roadway would be returned to preconstruction conditions. Therefore, the project would not result in features that could physically divide an established community, and impacts would be *less than significant*.

### 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?

As evaluated throughout this Initial Study, the project would be consistent with the property's land use designations and the guidelines and policies for development within the *San Miguel Community Plan*, County Inland LUO, and COSE. Further, the project was found to be consistent with standards and policies set forth in the County General Plan, the 2001 CAP, and other land use policies for this area. The project would also be required to be consistent with standards set forth by County Fire/CAL FIRE and the County Public Works Department. The project would be required to implement MM AES-1, MM AQ-1 through MM AQ-3, MM BIO-1 through MM BIO-7, MM CR-1 through MM CR-4, MM GEO-1, and MM HAZ-1 through MM HAZ-4 to mitigate potential impacts associated with Aesthetics, Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Geology and Soils, and Hazards and Hazardous Materials, Transportation, and Wildfire, which is consistent with the identified plans and policies intended to avoid or mitigate adverse environmental effects. Upon implementation of the identified mitigation measures, the project would not conflict with other local policies or regulations adopted for the purpose of avoiding or mitigating environmental effects; therefore, impacts would be *less than significant with mitigation*.

## *Conclusion*

Implementation of the proposed project would not physically divide an established community. Upon implementation of the mitigation measures identified throughout this document, the project would be consistent with the County LUO, County COSE, County General Plan, *San Miguel Community Plan*, 2001 CAP, and other applicable documents. Therefore, impacts would be less than significant upon implementation of the identified mitigation measures.

## *Mitigation Measures*

Implement MM AES-1, MM AQ-1 through MM AQ-3, MM BIO-1 through MM BIO-7, MM CR-1 through MM CR-4, MM GEO-1, and MM HAZ-1 through MM HAZ-4.

# XII. Mineral Resources

| Environmental Issues | 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? | ☐ | ☐ | ☐ | ☒ |
| (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? | ☐ | ☐ | ☐ | ☒ |

## *Setting*

The California Surface Mining and Reclamation Act (SMARA) of 1975 requires that the State Geologist classify land into mineral resource zones (MRZs) according to the known or inferred mineral potential of the land (PRC Sections 2710–2796).

The three MRZs used in the SMARA classification-designation process in the San Luis Obispo-Santa Barbara Production-Consumption Region are defined below (California Geological Survey 2011):

- **MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or where well-developed lines of reasoning, based upon economic-geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.
- **MRZ-3:** Areas containing known or inferred aggregate resources of undetermined significance.

## *Environmental Evaluation*

### 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?

There are no known mineral resources located within the project area. Further, the project site consists of previously developed and disturbed areas, which further reduces the potential for intact mineral resources to be present within the project area. The project site is not located in an area with known mineral resources; therefore, the project would not result in the loss of availability of known mineral resources, and *no impacts* would occur.

### 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?

There are no known mineral resources located within the project area. Further, the project site consists of previously developed and disturbed areas, which further reduces the potential for intact mineral resources to be present within the project area. The project site is not located in an area with locally important mineral resources; therefore, the project would not result in the loss of availability of known mineral resources, and *no impacts* would occur.

## *Conclusion*

No impacts to mineral resources would occur as a result of the project.

## *Mitigation Measures*

Mitigation is not necessary.

# XIII. Noise

| Environmental Issues | 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? | ☐ | ☐ | ☒ | ☐ |
| (b) Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| (c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

## *Setting*

The *County of San Luis Obispo General Plan Noise Element* provides a policy framework for addressing potential noise impacts in the planning process. The purpose of the Noise Element is to minimize future noise conflicts. The Noise Element identifies the major noise sources in the county (highways and freeways, primary arterial roadways and major local streets, railroad operations, aircraft and airport operations, local industrial facilities, and other stationary sources) and includes goals, policies, and implementation programs to reduce future noise impacts. Among the most significant polices of the Noise Element are numerical noise standards that limit noise exposure within noise-sensitive land uses and performance standards for new commercial and industrial uses that might adversely impact noise-sensitive land uses.

Noise sensitive uses that have been identified by the County include the following:

- Residential development, except temporary dwellings
- Schools (preschool to secondary, college and university, and specialized education and training)
- Healthcare services (e.g., hospitals, clinics, etc.)
- Nursing and personal care
- Churches
- Public assembly and entertainment
- Libraries and museums
- Hotels and motels
- Bed and breakfast facilities
- Outdoor sports and recreation
- Offices

All sound levels referred to in the Noise Element are expressed in A-weighted decibels (dBA). A-weighting deemphasizes the very low and very high frequencies of sound in a manner similar to the human ear. There is an on-site residence located within the southeastern corner of the project parcel and the project site is surrounded by off-site single-family residential dwellings in all directions of the project site.

The County LUO establishes acceptable standards for exterior and interior noise levels and describes how noise shall be measured. Exterior noise level standards (Table 3) are applicable when a land use affected by noise is one of the sensitive uses listed in the Noise Element. Exterior noise levels are measured from the property line of the affected noise-sensitive land use.

**Table 3. Maximum Allowable Exterior Noise Level Standards**

| Sound Levels[1] | Daytime 7:00 a.m. to 10:00 p.m. | Nighttime[2] |
|---|---|---|
| Hourly Equivalent Sound Level ($L_{eq}$, dB) | 50 | 45 |
| Maximum level (dB) | 70 | 65 |

Source: County of San Luis Obispo (1992)

Note: $L_{eq}$ = equivalent sound level

[1] When the receiving noise-sensitive land use is outdoor sports and recreation, noise level standards are increased by 10 db.

[2] Applies only to uses that operate or are occupied during nighttime hours.

## *Environmental Evaluation*

### 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?

During project construction, noise from construction activities may intermittently dominate the noise environment in the immediate project area. The project would require the use of typical construction equipment (e.g., dozers, excavators, etc.) during proposed construction activities. According to the Federal Highway Administration (FHWA), noise from standard construction equipment generally ranges from 67.7 to 81.9 dBA in equivalent sound level ($L_{eq}$) at 50 feet from the source (FHWA 2018). There are several sensitive receptors located within 1,000 feet of the project site, including single-family residences located along the southern boundary of the Machado WWTF and along several portions of the proposed recycled water conveyance system alignment. Construction-related noise would be short term and intermittent and would not result in a permanent increase in ambient noise within the project area. According to County LUO Section 22.10.120.A.4, construction noise is exempt from the County's noise standards between the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on weekends. Proposed construction activities would be limited to the hours specified in the County LUO.

The project includes the upgrade of the Machado WWTF and the installation of a recycled water conveyance system. The project would not include the development of new incompatible land uses that would generate noise in excess of surrounding residential land uses or the County's noise standards. In addition, the project would result in a limited increase of two additional employees and associated vehicle trips and would not result in a substantial number of new vehicle trips in a manner that could result in a noticeable increase in vehicle noise along proximate roadways. Therefore, following short-term construction activities, operational noise generated by the project would be generally consistent with the existing ambient noise level within the project area, and potential impacts would be *less than significant*.

### b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

According to County LUO Section 22.10.170, construction-related vibration is exempt from the County's vibration standards between the hours of 7:00 a.m. and 9:00 p.m. The project does not include pile-driving or other high-impact activities that would generate substantial groundborne noise or groundborne vibration during construction. Standard construction equipment would generate some groundborne noise and vibration during ground-disturbing activities; however, these activities would be limited in duration and consistent with other standard construction activities. In addition, any groundborne noise or vibration generated by short-term construction activities would be limited to the immediate work area and is not anticipated to disturb nearby residential land uses. Operation of the project does not include new features that could generate substantial groundborne noise. Therefore, impacts related to exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be *less than significant*.

### c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airport to the project site is an abandoned airfield, located approximately 0.3 mile southeast of the project site, and the nearest active airport to the project site is the Paso Robles Municipal Airport, located approximately 6.5 miles southeast of the project site. There are no active airports within 2 miles of the project site; therefore, the project would not result in airport-related noise hazards, and *no impacts* would occur.

## *Conclusion*

The project would not generate a substantial increase in temporary or permanent ambient noise levels or generate groundborne noise in a manner that would result in disturbance. The project site is not located within an airport land use plan or within 2 miles of an active airport. Therefore, impacts related to noise would be less than significant.

## *Mitigation Measures*

Mitigation is not necessary.

# XIV. Population and Housing

| Environmental Issues | 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 (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☒ |

| Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| (b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

## *Setting*

The *County of San Luis Obispo General Plan Housing Element (2020-2028)* (County of San Luis Obispo 2020) is intended to facilitate the provision of needed housing in the context of the County LUE and related ordinance. It is also intended to meet the requirements of state law. It contains a number of relevant goals, objectives, policies, and implementation programs to ensure the County meets its goals of meeting the housing needs while remaining consistent with state law. According to the SLOCOG *2050 Regional Growth Forecast for San Luis Obispo County*, the projected population for the community of San Miguel in 2025 is 2,689 (SLOCOG 2018).

## *Environmental Evaluation*

### 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 the development of new residences, businesses, or other uses that could facilitate direct population growth within the city. The project includes the construction of upgrades to the Machado WWTF and installation of a new recycled water conveyance system to meet existing and projected population growth and to comply with regulatory requirements. The proposed installation of the new recycled water conveyance system would not generate any new employment opportunities and the proposed WWTF upgrade would result in a limited increase of two additional employees. Therefore, the project would not generate new employment opportunities that could otherwise increase population growth within the city. Proposed construction activities have the potential to generate short-term employment opportunities; however, project construction is expected to use workers from the local employment force and would not require workers to relocate to the project area. Therefore, the project would not result in substantial or unplanned population growth, and *no impacts* would occur.

### b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site consists of the Machado WWTF and existing roadways, and there are no existing residences located on the project site. Therefore, the project would not require the removal of existing housing and would not displace a substantial number of people or housing that would necessitate the construction of replacement housing elsewhere, and *no impacts* would occur.

## *Conclusion*

The project would not induce substantial or unplanned population growth and does not require the removal of existing residences; therefore, impacts related to population and housing would be less than significant.

## *Mitigation Measures*

Mitigation is not necessary.

# XV. Public Services

| Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| *Would the project:* | | | | |
| (a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| Fire protection? | ☐ | ☐ | ☐ | ☒ |
| Police protection? | ☐ | ☐ | ☐ | ☒ |
| Schools? | ☐ | ☐ | ☐ | ☒ |
| Parks? | ☐ | ☐ | ☐ | ☒ |
| Other public facilities? | ☐ | ☐ | ☐ | ☒ |

## *Setting*

The SMCSD is the fire agency that serves San Miguel. The fire station is located on the east side of Mission Street just north of 11th Street, approximately 0.63 mile southwest of the project site. The station is staffed by volunteers and has one fire chief, one assistant chief, one fire captain, one lieutenant, and 10 firefighters. A mutual aid agreement is maintained with CAL FIRE and Camp Roberts for additional fire protection services.

General law enforcement in San Miguel is provided by the San Luis Obispo County Sheriff's Department. The nearest substation is the North County substation in Templeton, approximately 13.5 miles south of the project site.

San Miguel is served by the San Miguel Joint Union School District (SMJUSD), which operates two elementary schools: Lillian Larsen Elementary School in San Miguel and Cappy Culver Elementary School in Heritage Ranch.

Within the unincorporated areas of the county, there are currently 23 parks, three golf courses, four trails/staging areas, and eight Special Areas that include natural areas, coastal access, and historic

facilities currently operated and maintained by the County. County park facilities in the unincorporated community of San Miguel include San Miguel Park. Natural open space in San Miguel includes Wolf Natural Area (located south of the bridge on North River Road) and San Miguel Staging Area (future trail head for Salinas River Trail located northwest of the bridge on North River Road).

## *Environmental Evaluation*

### a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

#### *Fire protection?*

The project does not include the construction of new buildings or structures that would directly increase demand on existing fire protection services. The project includes the construction of upgrades to the Machado WWTF and installation of a new recycled water conveyance system to meet existing and projected population growth and to comply with regulatory requirements and would not facilitate unplanned or substantial population growth in a manner that would increase demand on existing fire protection services. The project would not require new or physically altered governmental facilities for fire protection services; therefore, *no impacts* related to fire protection would occur.

#### *Police protection?*

The project does not include the construction of new residences, businesses, or other uses that would directly increase demand on existing police protection services. The project would be limited to the upgrade of the Machado WWTF and installation of a new recycled water conveyance system and would not facilitate unplanned or substantial population growth in a manner that would increase demand on existing police protection services. The project would not require new or physically altered governmental facilities for police protection services; therefore, *no impacts* would occur.

#### *Schools?*

As discussed in Section XIV, *Population and Housing*, the project would not induce substantial direct or indirect population growth. The project would not result in an increase of school-aged children in the area; therefore, the project would not create an increased demand on local schools, and *no impacts* would occur.

#### *Parks?*

As discussed in Section XIV, *Population and Housing*, the project would not induce substantial direct or indirect population growth. The project would not result in a population increase that could result in deterioration of existing recreation facilities or require the expansion of new facilities; therefore, the project would not require the construction of new or physically altered public recreation facilities, and *no impacts* would occur.

### *Other public facilities?*

As discussed in Section XIV, *Population and Housing*, the project would not induce substantial direct population growth. The project does not propose features that would significantly increase the demand on public facilities, such as libraries or post offices, or result in the need for new or physically altered governmental facilities; therefore, *no impacts* would occur.

## *Conclusion*

The project would not increase demand for fire or police protection services, schools, parks, libraries, or other public facilities; therefore, no impacts related to public services would occur as a result of the project.

## *Mitigation Measures*

Mitigation is not necessary.

# XVI. Recreation

| Environmental Issues | 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? | ☐ | ☐ | ☐ | ☒ |
| (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? | ☐ | ☐ | ☐ | ☒ |

## *Setting*

The *County of San Luis Obispo General Plan Parks and Recreation Element* establishes goals, policies, and implementation measures for the management, renovation, and expansion of existing parks and recreation facilities and the development of new parks and recreation facilities in order to meet existing and projected needs and to assure an equitable distribution of parks throughout the county. Within the unincorporated areas of the county, there are currently 23 parks, three golf courses, four trails/staging areas, and eight Special Areas that include natural areas, coastal access, and historic facilities currently operated and maintained by the County. County park facilities in the unincorporated community of San Miguel include San Miguel Park. Natural open space in San Miguel includes Wolf Natural Area (located south of the bridge on North River Road) and San Miguel Staging Area (future trail head for Salinas River Trail located northwest of the bridge on North River Road).

## *Environmental Evaluation*

### 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 discussed in Section XIV, *Population and Housing*, the project includes the construction of upgrades to the Machado WWTF and installation of a new recycled water conveyance system to meet existing and projected population growth and to comply with regulatory requirements. The project would not facilitate unplanned or substantial population growth in a manner that would increase the use of existing recreational facilities and lead to substantial deterioration of existing recreational facilities. Therefore, the project would not reduce the availability of the multi-use trail in a manner that could increase use and lead to physical deterioration of other trails or facilities within the city, and *no impacts* would occur.

### 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?

The project does not include the development of new or expanded recreational facilities; therefore, *no impacts* related to adverse physical effects on the environment as a result of construction or expansion of recreational facilities would occur.

## *Conclusion*

The project would not increase the use of existing recreational facilities in a manner that would result in physical deterioration and does not include the construction of new or expanded recreational facilities that could result in adverse environmental impacts. Therefore, potential impacts related to recreation would be less than significant, and mitigation would not be necessary.

## *Mitigation Measures*

Mitigation is not necessary.

# XVII. Transportation

| Environmental Issues | 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? | ☐ | ☐ | ☒ | ☐ |
| (b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ☒ | ☐ |
| (c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |

| Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| (d) Result in inadequate emergency access? | ☐ | ☒ | ☐ | ☐ |

## *Setting*

SLOCOG holds several key roles in transportation planning within the county. As the Regional Transportation Planning Agency (RTPA), SLOCOG is responsible for conducting a comprehensive, coordinated transportation program; preparing an RTP; programming state funds for transportation projects; and administering and allocating transportation development act funds required by state statutes. The 2023 RTP/SCS, adopted June 7, 2023, is a long-term blueprint of San Luis Obispo County's transportation system. The plan identifies and analyzes transportation needs of the region and creates a framework for project priorities. SLOCOG represents and works with the County as well as the cities within the county in facilitating the development of the RTP.

In 2013 SB 743 was signed into law with the intent to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions" and required the California Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. As a result, in December 2018, the California Natural Resources Agency certified and adopted updates to the State CEQA Guidelines. The revisions included new requirements related to the implementation of SB 743 and identified VMT per capita, VMT per employee, and net VMT as new metrics for transportation analysis under CEQA (as detailed in Section 15064.3(b)). The County has developed a VMT Program (Transportation Impact Analysis Guidelines, Rincon Consultants, October 2020; VMT Thresholds Study, GHD, March 2021). The program provides interim operating thresholds and includes a screening tool for evaluating VMT impacts.

The County's Framework for Planning (Inland) includes the County LUE and *County of San Luis Obispo General Plan Circulation Element*. The framework establishes goals and strategies to meet pedestrian circulation needs by providing usable and attractive sidewalks, pathways, and trails to establish maximum access and connectivity between land use designations.

## *Environmental Evaluation*

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

The project includes upgrades to the Machado WWTF and installation of a recycled water conveyance system and would not be applicable to existing mixed-land use development or pedestrian and bicycle accessibility standards included in the 2023 RTP/SCS, *2015/16 San Luis Obispo County Bikeways Plan*, or County Circulation Element. The project would result in a limited increase of two employees and associated vehicle trips, which would be accommodated by existing roads. The project does not include other changes to existing roadways that could interfere with program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; therefore, impacts would be *less than significant*.

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

Based on the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, projects that do not indicate substantial evidence that a project would generate a potentially significant level of VMT, that are consistent with an SCS or general plan, or that would generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR 2018).

The County has developed a VMT Program, which provides interim operating thresholds and includes a screening tool for evaluating VMT impacts. The project is limited to the upgrade of the Machado WWTF and installation of a recycled water conveyance system that would generate two additional employees and associated vehicle trips. Therefore, the project would generate a negligible increase in vehicle trips that would fall below the suggested screening threshold of 110 trips/day identified in the state guidance, and potential impacts would be *less than significant*.

## c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project does not include the construction of any new roadways or other roadway features that could increase hazards within the project site. Emergency and other vehicle access would continue to be provided via Bonita Place. Installation of the proposed recycled water conveyance system would require work along roadways within the project area, which would require periodic road closures and traffic controls along 20th Street during the 3-month construction period. Traffic could be limited to a single lane along 20th Street and could be detoured and directed to 19th Street if 20th Street requires full closure. Therefore, detours would be established to maintain safe and adequate ingress and egress within the project area. Following construction, the pipeline would be located underground, and the project site would be returned to preconstruction conditions, which would avoid the creation of roadway hazards along proximate roadways. In addition, the project would not result in any new land uses that could introduce hazards as a result of incompatible uses. Therefore, the project would not increase hazards due to a geometric design feature or incompatible land uses, and impacts would be *less than significant*.

## d) Would the project result in inadequate emergency access?

The project includes the construction of upgrades to the Machado WWTF and the installation of a recycled water conveyance system within existing roads and disturbed areas beginning at the Machado WWTF and terminating at the E&J Gallo Winery property, the Vino Farms property, and the intersection of 16th Street and N Street. Emergency and other vehicle access would continue to be provided via Bonita Place. The proposed WWTF upgrades would be constructed entirely within the footprint of the existing Machado WWTF and adjacent western parcel and would not require any road closures or traffic controls along proximate roadways. Installation of the proposed recycled water conveyance system would require work along roadways within the project area, which would require periodic road closures and traffic controls along 20th Street during the 3-month construction period. Traffic could be limited to a single lane along 20th Street and could be detoured and directed to 19th Street if 20th Street requires full closure. Therefore, detour routes would be established to ensure adequate emergency and other vehicle access within the project area. Further, MM HAZ-4 has been identified in Section IX, *Hazards and Hazardous Materials*, to require prior notice be given to all emergency response providers likely to be affected by the closure and detours Upon implementation of MM HAZ-4, the project would not interfere with emergency access; therefore, impacts would be *less than significant with mitigation*.

## *Conclusion*

The project would not interfere with a program plan, ordinance, or policy addressing the circulation system. The project would generate a negligible amount of vehicle trips to and from the project site during operation and would not exceed the established VMT threshold of 110 trips per day. The project does not include the construction of any new roadways or other roadway features that could increase hazard within the project site. Based on implementation of MM HAZ-4, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, upon implementation of MM HAZ-4, impacts related to transportation would be less than significant.

## *Mitigation Measures*

Implement MM HAZ-4.

# XVIII. Tribal Cultural Resources

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| (a) | Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| | (i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☒ | ☐ | ☐ |
| | (ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☒ | ☐ | ☐ |

## *Setting*

Approved in 2014, Assembly Bill (AB) 52 added tribal cultural resources to the categories of resources that must be evaluated under CEQA. Tribal cultural resources are defined as either of the following:

1. Sites, features, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the CRHR; or
    b. Included in a local register of historical resources as defined in PRC Section 5020.1(k).

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 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Recognizing that tribes have expertise with regard to their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe regarding the potential for adverse impacts on tribal cultural resources as a result of a project. Consultation may include discussing the type of environmental review necessary, the presence and/or significance of tribal cultural resources, the level of significance of a project's impacts on the tribal cultural resources, and available project alternatives and mitigation measures recommended by the tribe to avoid or lessen potential impacts on tribal cultural resources.

## *Environmental Evaluation*

### a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

#### a-i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

As discussed in Section V, *Cultural Resources*, based on the results of the Phase I ASR and Supplemental Phase I Archaeological Survey, there are previously recorded historical resources associated with CA-SLO-65 and CA-SLO-67 within the project area. The project does not include components that could directly affect any built historical resources. However, due to the cultural sensitivity of the general project area, there is potential for unknown intact subsurface historical cultural resources to exist within the project area. MM CR-1 through MM CR-4 requires the preparation and implementation of a Cultural Resource Monitoring and Inadvertent Discovery Plan, completion of a WEAP training, archaeological construction monitoring, and adherence to inadvertent discovery protocol to reduce the potential to adversely affect previously unknown cultural resources during construction activities. Based on implementation of MM CR-1 through MM CR-4, the project would not result in adverse impacts to known or unknown historical resources; therefore, impacts would be *less than significant with mitigation.*

#### a-ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As discussed in Section V, *Cultural Resources*, based on the results of the Phase I ASR and Supplemental Phase I Archaeological Survey, there are previously recorded prehistoric resources associated with

CA-SLO-1271, CA-SLO-67, and CA-SLO-98 within the project area. The proposed WWTF upgrades and installation of the recycled water conveyance system would be conducted within previously developed or otherwise disturbed areas, which reduces the potential for intact cultural resources and human remains to exist within the proposed area of disturbance. However, due to the cultural sensitivity of the general project area, there is potential for unknown cultural archaeological or tribal cultural resources to exist within the project area. Implementation of MM CR-1 through MM CR-4 requires the preparation and implementation of a Cultural Resource Monitoring and Inadvertent Discovery Plan, completion of a WEAP Training, archaeological construction monitoring, and adherence to inadvertent discovery protocol to reduce the potential to adversely affect previously unknown cultural resources during construction activities. In addition, the project would be required to comply with California Health and Safety Code Section 7050.5, which outlines the protocol for unanticipated discovery of human remains. Based on implementation of MM CR-1 through MM CR-4, the project would not result in adverse impacts to known or unknown archaeological resources or human remains; therefore, impacts would be *less than significant with mitigation*.

### *Conclusion*

Based on implementation of MM CR-1 through MM CR-4 and required compliance with California Health and Safety Code 7050.5, the project would not result in adverse impacts to known or unknown historical, archaeological, tribal cultural, or human resources; therefore, upon implementation of MM CR-1 through MM CR-4, impacts related to tribal cultural resources would be less than significant.

### *Mitigation Measures*

Implement MM CR-1 through MM CR-4.

## XIX. Utilities and Service Systems

| Environmental Issues | 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? | ☐ | ☒ | ☐ | ☐ |
| (b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☒ | ☐ |
| (c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| (d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |

| Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| (e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

## *Setting*

The SMCSD provides water, wastewater, and solid waste services to businesses and residences within its jurisdiction. San Miguel is located within the PRGWB, which is considered a high-priority basin (Level of Severity III) by the DWR. The SMCSD obtains its water supply from three water supply wells within the community, which have a maximum production capacity of 1,024 acre-feet per year (AFY) and a historical (2017–2019) production capacity of 303 AFY. There are two potable water storage facilities within the SMCSD water system, providing 700,000 gallons of storage (SMCSD 2020). It is estimated that the SMCSD treats an average daily wastewater flow of 192 gpd from approximately 782 wastewater connections. The SMCSD sanitary sewer collection system includes 46,959 feet (8.9 miles) of collection system pipes ranging in size from 4 to 16 inches in diameter. Sewage is treated at the Machado WWTF, which has a current permitted capacity of 200,000 gpd.

San Miguel Garbage provides solid waste services to San Miguel. There are three landfills in San Luis Obispo County: Cold Canyon Landfill, located near the city of San Luis Obispo; Chicago Grade Landfill, located near the community of Templeton; and Paso Robles Landfill, located east of the city of Paso Robles. The project would be provided solid waste services by Paso Robles Landfill, located approximately 11.5 miles southeast of the project site and/or Chicago Grade Landfill, located approximately 17 miles southeast of the project site.

## *Environmental Evaluation*

### 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?

The project includes the construction of upgrades to the Machado WWTF and the installation of a recycled water conveyance system within existing roads and disturbed areas beginning at the Machado WWTF and terminating at the E&J Gallo Winery property, the Vino Farms property, and the intersection of 16th Street and N Street. As evaluated throughout this Initial Study, the project has the potential to result in adverse impacts related to Aesthetics, Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Geology and Soils, and Hazards and Hazardous Materials, Transportation, and Wildfire. MM AES-1, MM AQ-1 through MM AQ-3, MM BIO-1 through MM BIO-7, MM CR-1 through MM CR-4, MM GEO-1, and MM HAZ-1 through MM HAZ-4 have been included to avoid and/or minimize adverse impacts to less-than-significant levels. Therefore, upon implementation of the identified mitigation measures, adjustment and relocation of utility infrastructure would not result in adverse impacts to the environment; therefore, potential impacts would be *less than significant with mitigation*.

## 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?

The project includes the upgrade of the Machado WWTF and the installation of a recycled water conveyance system to increase the permitted daily capacity from 200,000 to 500,000 gpd and enable treated effluent to be stored or conveyed to nearby agricultural operations for non-edible agricultural irrigation. The proposed WWTF upgrades and installation of the recycled water conveyance system would not result in additional water use or groundwater pumping and, therefore, would not decrease water or groundwater supply. The project would ultimately increase the amount of recycled water conveyed to surrounding agricultural land to provide additional water for irrigation, which would ultimately reduce groundwater pumping within the PRGWB and also increase return flows from irrigation, which would enhance groundwater recharge in the PRGWB. Therefore, the project would not substantially decrease groundwater; therefore, impacts would be *less than significant*.

## 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?

The project includes the upgrade of the Machado WWTF and the installation of a recycled water conveyance system to increase the permitted daily capacity from 200,000 to 500,000 gpd and enable treated effluent to be stored or conveyed to nearby agricultural operations for non-edible agricultural irrigation. The project is intended to account for an expected increase in wastewater generation within the community of San Miguel and does not include features that could directly increase wastewater generation; therefore, the project would not result in an increase in wastewater generation that could exceed the capacity of the Machado WWTF, and impacts would be *less than significant*.

## 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?

Construction of the project may result in a temporary increase in solid waste, which would be disposed of in accordance with applicable state and local laws and regulations, such as California's Green Building Standards Code (CALGreen) Sections 4.408 and 5.408, which requires diversion of at least 75% of construction waste. Based on required compliance with CALGreen regulations, construction of the project would not generate solid waste in excess of local infrastructure capacity. Solid waste generated by the proposed project would be disposed of at Paso Robles Landfill and/or Chicago Grade Landfill, which have adequate capacity to dispose of the solid waste generated by the proposed project. Operation of the project would result in continued operation of the Machado WWTF, consistent with existing operations, and would not generate waste in excess of state or local standards or in excess of the capacity of local infrastructure; therefore, impacts would be *less than significant*.

## e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

As previously described, operation of the project would not result in the long-term increase in the generation of solid waste. Construction-related waste (i.e., excavated soils) would be disposed of according to federal and state regulations, including CALGreen standards for diversion of construction

waste. The project would not generate long-term solid waste and would be compliant with solid waste reduction statutes and regulations. Therefore, impacts would be *less than significant*.

## *Conclusion*

Implementation of MM AES-1, MM AQ-1 through MM AQ-3, MM BIO-1 through MM BIO-7, MM CR-1 through MM CR-4, MM GEO-1, and MM HAZ-1 through MM HAZ-4 would reduce potential adverse environmental impacts related to relocation of utility infrastructure to less-than-significant levels. The project does not require connection to groundwater resources or a local water or wastewater provider. The project would not generate solid waste in exceedance of state or local regulations. Therefore, with implementation of MM AES-1, MM AQ-1 through MM AQ-3, MM BIO-1 through MM BIO-7, MM CR-1 through MM CR-4, MM GEO-1, and MM HAZ-1 through MM HAZ-4, impacts related to utilities and service systems would be less than significant.

## *Mitigation Measures*

Implement MM AES-1, MM AQ-1 through MM AQ-3, MM BIO-1 through MM BIO-7, MM CR-1 through MM CR-4, MM GEO-1, and MM HAZ-1 through MM HAZ-4.

# XX. Wildfire

| Environmental Issues | 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? | ☐ | ☒ | ☐ | ☐ |
| (b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☒ | ☐ |
| (c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☒ | ☐ |
| (d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☒ | ☐ |

## *Setting*

CAL FIRE defines FHSZs based on the presence of fire-prone vegetation, climate, topography, assets at risk (e.g., high population centers), and a fire protection agency's ability to provide service to the area. A lack of designation does not mean the area cannot experience a damaging fire; rather, it indicates that the probability is reduced, generally because the number of days a year that the area has "fire weather" is less than in moderate, high, or very high FHSZs. According to the CAL FIRE FHSZ viewer, the Machado WWTF is located in a moderate FHSZ, and the recycled water conveyance system alignment is located within a moderate FHSZ and within an LRA (CAL FIRE 2023).

## *Environmental Evaluation*

### 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?

The Machado WWTF is located in a moderate FHSZ, and the recycled water conveyance system alignment is located within a moderate FHSZ and an LRA (CAL FIRE 2023). The project includes the construction of upgrades to the Machado WWTF and the installation of a recycled water conveyance system within existing roads and disturbed areas beginning at the Machado WWTF and terminating at the E&J Gallo Winery and Vino Farms properties. Emergency and other vehicle access would continue to be provided via Bonita Place. The proposed WWTF upgrades would be constructed entirely within the footprint of the Machado WWTF and adjacent western parcel and would not require any road closures or traffic controls along proximate roadways. Installation of the proposed recycled water conveyance system would require work along roadways within the project area, which would require periodic road closures and traffic controls along 20th Street during the 3-month construction period. Traffic could be limited to a single lane along 20th Street and could be detoured and directed to 19th Street if 20th Street requires full closure. Therefore, detour routes would be established to ensure adequate emergency and other vehicle access within the project area. Further, MM HAZ-4 has been identified in Section IX, *Hazards and Hazardous Materials*, to require prior notice be given to all emergency response providers likely to be affected by the closure and detours. Upon implementation of MM HAZ-4, the project would not interfere with an energy response or evacuation plan; therefore, impacts would be *less than significant with mitigation*.

### b) Due to slope, prevailing winds, and other factors, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The Machado WWTF is located in a moderate FHSZ, and the recycled water conveyance system alignment is located within a moderate FHSZ and within a LRA (CAL FIRE 2023). The proposed WWTF upgrade would result in the construction of a new headworks, a new MBU, and associated support facilities. Proposed occupiable support facilities would be required to be constructed in accordance with CFC and CBC requirements to reduce risk associated with fire ignition and exposure of project occupants to wildfire risk. Other project components would not result in the development of new residences, buildings, or other occupiable structures that could exacerbate the risk of wildfire ignition or expose project occupants to pollutant concentrations from a wildfire. Based on the required compliance with CFC and CBC requirements, the project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; therefore, impacts would be *less than significant*.

### 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?

The project would result in the upgrade of the Machado WWTF and the installation of a new recycled water conveyance system within a moderate FHSZ and an LRA (CAL FIRE 2023). Proposed occupiable support facilities would be required to be constructed in accordance with CFC and CBC requirements to reduce risk associated with wildfire ignition at the project site. The proposed recycled water conveyance system would be located entirely underground, which would reduce the risk of wildfire ignition at the project site. Based on required compliance with the CFC requirements, construction of the proposed project would not exacerbate fire risk; therefore, impacts would be *less than significant*.

### 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 downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Machado WWTF is located in a moderate FHSZ, and the recycled water conveyance system alignment is located within a moderate FHSZ and within a LRA (CAL FIRE 2023). Proposed occupiable support facilities would be required to be constructed in accordance with CFC and CBC requirements to reduce risk associated with wildfire and post-wildfire risk. Other project components would not result in the development of new residences, buildings, or other occupiable structures that could increase post-fire risks. Based on the required compliance with CFC and CBC requirements, the project would not increase post-fire risks; therefore, impacts would be *less than significant*.

## *Conclusion*

Based on required compliance with the CFC and CBC, the project would not expose people or structures to new or exacerbated wildfire risks. Therefore, impacts related to wildfire would be less than significant, and mitigation is not necessary.

## *Mitigation Measures*

Mitigation is not required.

# XXI. Mandatory Findings of Significance

| | Environmental Issues | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| (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? | ☐ | ☒ | ☐ | ☐ |
| (b) | Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ☒ | ☐ | ☐ |
| (c) | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☒ | ☐ | ☐ |

## *Environmental Evaluation*

### 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 the preceding sections, the project has the potential to significantly degrade the quality of the environment, including effects on biological resources and cultural and tribal cultural resources. During construction, short-term construction activities may adversely affect biological resources, including SJKF and special-status and migratory birds. MM BIO-1 through MM BIO-7 have been identified to reduce potential impacts to less-than-significant levels. In addition, the project is located in a culturally sensitive area and there is potential to uncover unknown cultural resources during short-term construction activities. MM CR-1 through MM CR-4 have been identified to reduce potential impacts to less-than-significant levels.

### 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)?

When project impacts are considered alone or in combination with other impacts, the project-related impacts may be significant. Construction and operation of the project would contribute to cumulative impacts related Aesthetics, Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Geology and Soils, and Hazards and Hazardous Materials, Transportation, and Wildfire. Mitigation measures have been incorporated into the project to reduce project-related impacts to a less-than-significant level. Based on implementation of MM AES-1, MM AQ-1 through MM AQ-3, MM BIO-1 through MM BIO-7, MM CR-1 through MM CR-4, MM GEO-1, and MM HAZ-1 through MM HAZ-4, the cumulative effects of the proposed project would be less than significant.

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

The project would result in air emissions and may disturb hazardous substances during construction of the project. MM AQ-1 through MM AQ-3 and MM HAZ-1 through MM HAZ-3 have been identified that would reduce these project-specific impacts to a less-than-significant level; therefore, the project would not result in substantial, adverse environmental effects to human beings, either directly or indirectly.

## *Conclusion*

Based on implementation of MM AES-1, MM AQ-1 through MM AQ-3, MM BIO-1 through MM BIO-7, MM CR-1 through MM CR-4, MM GEO-1, and MM HAZ-1 through MM HAZ-4, all potential impacts associated with the construction and operation of the proposed project would be mitigated to less-than-significant levels.

# 3 REFERENCES

California Air Resources Board (CARB). 2020. Maps of State and Federal Area Designations. Available at: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed December 2023.

———. 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. December. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed December 2023.

California Department of Conservation (CDOC). 2015. Fault Activity Map of California. Available at: https://maps.conservation.ca.gov/cgs/fam/. Accessed December 2023.

———. 2022. California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed December 2023.

California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database. Available at: https://wildlife.ca.gov/Data/CNDDB. Accessed January 2024.

California Department of Forestry and Fire Protection (CAL FIRE). 2023. Fire Hazard Severity Zone Viewer. Available at: https://egis.fire.ca.gov/FHSZ/. Accessed December 2023.

California Department of Toxic Substance Control (DTSC). 2024. EnviroStor Database. Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed January 2024.

California Department of Transportation (Caltrans). 2018. California State Scenic Highway System Map. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed January 2024.

California Department of Water Resources (DWR). 2004. *Salinas Valley Groundwater Basin, Paso Robles Area Subbasin*. Central Coast Hydrologic Region Salinas Valley Groundwater Basin. California's Groundwater Bulletin 118. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/3_004_06_PasoRoblesAreaSubbasin.pdf. Accessed January 2024.

California Emissions Estimator Model (CalEEMod). 2024. California Emissions Estimator Model. Available at: https://www.caleemod.com/. Accessed January 2024.

California Geological Survey (CGS). 2011. Update of Mineral Land Classification: Concrete Aggregate in the San Luis Obispo – Santa Barbara Production-Consumption Region, California. Available at: https://agenda.slocounty.ca.gov/iip/sanluisobispo/file/getfile/120384. Accessed January 2024.

California Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluation Transportation Impacts in CEQA. December. Available at: https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed January 2024.

California Native Plant Society (CNPS). 2024. Rare Plant Inventory. Available at: https://www.cnps.org/rare-plants/cnps-inventory-of-rare-plants. Accessed January 2024.

City of Paso Robles. 2011. *Paso Robles Basin Groundwater Management Plan*. March. Available at: https://prcity.com/426/Groundwater-Basin-Management-Plan-PDF. Accessed January 2024.

County of San Luis Obispo. 1992. *County of San Luis Obispo General Plan Noise Element*. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Noise-Element.pdf. Accessed January 2024.

———. 1999. *County of San Luis Obispo General Plan Safety Element*. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Safety-Element.pdf. Accessed January 2024.

———. 2010. *County of San Luis Obispo General Plan Conservation and Open Space Element*. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-(1)/Conservation-and-Open-Space-Element.pdf. Accessed January 2024.

———. 2011. *County of San Luis Obispo EnergyWise Plan*. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Energy-and-Climate-Reports/EnergyWise-Plan.pdf. Accessed January 2024.

———. 2016a. *EnergyWise Plan 2016 Update*. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Energy-and-Climate-Reports/EnergyWise-Plan-2016-Update.pdf. Accessed January 2024.

———. 2016b. *San Miguel Community Plan*. Adopted by December 6. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans/San-Miguel-Community-Plan.pdf. Accessed December 2023.

———. 2016c. *San Miguel Community Plan Update Final Environmental Impact Report*. October.

———. 2020. *County of San Luis Obispo General Plan 2020-2028 Housing Element*. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Housing-Element.pdf. Accessed January 2024.

Dudek. 2021. *Phase I Archaeological Survey Report for the San Miguel Community Services District Wastewater Treatment Facility Upgrade/Expansion Project*. Prepared for San Miguel Community Services District. May.

———. 2022. *Final Mitigated Negative Declaration for the San Miguel Wastewater Treatment Plant Upgrade/Expansion Project*. Santa Barbara, California.

Federal Emergency Management Agency (FEMA). 2024. Flood Map Service Center. Available at: https://msc.fema.gov/portal/home. Accessed January 2024.

Federal Highway Administration (FWHA). 2018. *Construction Noise Handbook*. Available at: https://www.nrc.gov/docs/ML1805/ML18059A141.pdf. Accessed December 2023.

Monterey County Water Resources Agency (MCWRA). 2020. Dams and Reservoirs. Available at: https://www.co.monterey.ca.us/government/government-links/water-resources-agency/projects-facilities/dams-and-reservoirs. Accessed December 2023.

Natural Resources Conservation Service (NRCS). 2024. Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed January 2024.

Pacific Gas and Electric Company (PG&E). 2022. Exploring Clean Energy Solutions. Available at: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page. Accessed January 2024.

Paso Robles Subbasin Groundwater Sustainability Agencies. 2020. *Paso Robles Subbasin Groundwater Sustainability Plan.* Available at: https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Paso-Robles-Groundwater-Basin/Final-GSP/Paso-Basin-GSP.pdf. Accessed January 2024.

Pacific Gas and Electric Company (PG&E). 2022. Exploring Clean Energy Solutions. Available at: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page. Accessed December 2023.

Regional Water Quality Control Board (RWQCB). 2019. *Water Quality Control Plan for the Central Coast Basin*. Regional Water Quality Control Board, Central Coast Region. June. Available at: https://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/docs/2019_basin_plan_r3_complete_webaccess.pdf. Accessed January 2024.

San Luis Obispo Air Pollution Control District (SLOAPCD). 2001. *San Luis Obispo County 2001 Clean Air Plan*. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/business/pdf/CAP.pdf. Accessed January 2024.

———. 2012. *CEQA Air Quality Handbook*. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA_Handbook_2012_v2%20%28Updated%20MemoTable1-1_July2021%29_LinkedwithMemo.pdf. Accessed January 2024.

———. 2023. *2023 Administrative Update to the CEQA Air Quality Handbook*. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA%20Handbook%202023_Final.pdf. Accessed January 2024.

———. 2024. NOA Screening Buffers. Available at: https://www.google.com/maps/d/viewer?mid=1YAKjBzVkwi1bZ4rQ1p6b2OmyvIM&ll=35.39907691906895%2C-120.38950318979299&z=12. Accessed January 2024.

San Luis Obispo Council of Governments (SLOCOG). 2018. *2050 Regional Growth Forecast for San Luis Obispo County*. June 2017; Revised December 2017; Revised December 2018. Available at: https://www.dropbox.com/s/gia0tlcyqs51a3w/2050RegionalGrowthForecast_01FullReport_RevDec2018.pdf?dl=0. Accessed December 2023.

———. 2023. *SLOCOG 2023 Regional Transportation Plan*. Final adopted June 7. Available at: https://www.dropbox.com/s/2zp8vhil9q4n9l5/00-%202023%20RTP%20Final%20Adopted.pdf?e=1&dl=0. Accessed December 2023.

San Miguel Community Services District (SMCSD). 2020. *Water and Wastewater Master Plan Update*. Available at: https://www.sanmiguelcsd.org/files/fb11c83b0/XI+-+3+-+LINK+-+2020.09.10_SMCSD+Masterplan.pdf. Accessed January 2024.

State Water Resources Control Board (SWRCB). 2024. GeoTracker Database. Available at: https://geotracker.waterboards.ca.gov/. Accessed January 2024.

SWCA Environmental Consultants (SWCA). 2024. *Supplemental Phase I Archaeological Survey for the Machado Wastewater Treatment Facility Upgrade and Recycled Water Distribution Project, San Miguel, San Luis Obispo County, California*. Prepared for San Miguel Community Services District. January 24.

U.S. Fish and Wildlife Service (USFWS). 1999. *San Joaquin Kit Fox Survey Protocol for the Northern Range*. June.

———. 2001. *Least Bell's Vireo Survey Guidelines*. January 19.

———. 2011. *Standardized Recommendations and for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*. January.

———. 2024. National Wetlands Inventory Surface Waters and Wetlands Mapper. Available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed January 2024.

U.S. Geological Survey (USGS). 2024. Areas of Land Subsidence in California Map. Available at: https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed January 2024.

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# APPENDIX A

# California Emissions Estimator Model Results

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# San Miguel WWTP Upgrade/Expansion Project

**San Luis Obispo County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 9.85 | 1000sqft | 0.00 | 9,845.00 | 0 |
| Research & Development | 2.55 | 1000sqft | 0.00 | 2,550.00 | 0 |
| Unrefrigerated Warehouse-No Rail | 55.00 | 1000sqft | 18.64 | 55,000.00 | 0 |
| User Defined Industrial | 71.83 | User Defined Unit | 1.65 | 71,825.64 | 0 |
| Other Non-Asphalt Surfaces | 3.80 | Acre | 3.80 | 165,528.00 | 0 |
| User Defined Parking | 1.12 | User Defined Unit | 1.12 | 48,784.70 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 3.2 | **Precipitation Freq (Days)** | 44 |
| **Climate Zone** | 3 | | | **Operational Year** | 2026 |
| **Utility Company** | Pacific Gas and Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 203.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on Project Description.

Land Use - WWTF: 18.64-acres
Percolation Pond: 1.65-acres
Tranmission Line: 1.12-acres

Construction Phase - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Trips and VMT - 50 workers for first four phases, then 20 workers for Demobilization phase. Per SMCSD Updated Contruction Schedule. Hauling trip length based on information from SMCSD.

Grading - From Project Description.

Vehicle Trips - Per Project Description, only 2 additional employees.

Energy Use - Pump energy use added to warehouse.

Water And Wastewater - Based on information from SMCSD.

Construction Off-road Equipment Mitigation - In accordance with SLOCAPCD Rule 401.

Energy Mitigation - Based on information provided by SMCSD.

Stationary Sources - Emergency Generators and Fire Pumps - Based on information provided by SMCSD.

Operational Off-Road Equipment -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 45.00 | 89.00 |
| tblConstructionPhase | NumDays | 45.00 | 87.00 |
| tblConstructionPhase | NumDays | 440.00 | 129.00 |
| tblConstructionPhase | NumDays | 440.00 | 130.00 |
| tblConstructionPhase | NumDays | 440.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 8/30/2024 | 10/31/2024 |
| tblConstructionPhase | PhaseEndDate | 11/1/2024 | 8/31/2025 |
| tblConstructionPhase | PhaseEndDate | 7/10/2026 | 4/30/2025 |
| tblConstructionPhase | PhaseEndDate | 3/17/2028 | 2/28/2026 |
| tblConstructionPhase | PhaseEndDate | 11/23/2029 | 4/30/2026 |
| tblConstructionPhase | PhaseStartDate | 8/31/2024 | 5/1/2025 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseStartDate | 11/2/2024 | 11/1/2024 |
| tblConstructionPhase | PhaseStartDate | 7/11/2026 | 9/1/2025 |
| tblConstructionPhase | PhaseStartDate | 3/18/2028 | 3/1/2026 |
| tblEnergyUse | LightingElect | 3.22 | 0.00 |
| tblEnergyUse | NT24E | 5.13 | 0.00 |
| tblEnergyUse | T24E | 0.93 | 24.11 |
| tblGrading | MaterialExported | 0.00 | 3,675.00 |
| tblGrading | MaterialExported | 0.00 | 1,810.00 |
| tblLandUse | LandUseSquareFeet | 9,850.00 | 9,845.00 |
| tblLandUse | LandUseSquareFeet | 0.00 | 71,825.64 |
| tblLandUse | LandUseSquareFeet | 0.00 | 48,784.70 |
| tblLandUse | LotAcreage | 0.23 | 0.00 |
| tblLandUse | LotAcreage | 0.06 | 0.00 |
| tblLandUse | LotAcreage | 1.26 | 18.64 |
| tblLandUse | LotAcreage | 0.00 | 1.65 |
| tblLandUse | LotAcreage | 0.00 | 1.12 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.37 | 0.37 |
| tblOffRoadEquipment | LoadFactor | 0.41 | 0.41 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.50 | 0.50 |
| tblOffRoadEquipment | LoadFactor | 0.48 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.20 | 0.20 |
| tblOffRoadEquipment | LoadFactor | 0.44 | 0.44 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.50 | 0.50 |
| tblOffRoadEquipment | LoadFactor | 0.41 | 0.41 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | LoadFactor | 0.44 | 0.44 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.40 | 0.40 |
| tblOffRoadEquipment | LoadFactor | 0.48 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.37 | 0.37 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Tractors/Loaders/Backhoes |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Trenchers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Generator Sets |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | | Crushing/Proc. Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType | | Generator Sets |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Trenchers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Crushing/Proc. Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Tractors/Loaders/Backhoes |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 2.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblStationaryGeneratorsPumpsUse | HorsePowerValue | 0.00 | 500.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerDay | 0.00 | 1.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerYear | 0.00 | 100.00 |
| tblStationaryGeneratorsPumpsUse | NumberOfEquipment | 0.00 | 1.00 |
| tblTripsAndVMT | WorkerTripLength | 13.00 | 21.00 |
| tblTripsAndVMT | WorkerTripLength | 13.00 | 21.00 |
| tblTripsAndVMT | WorkerTripNumber | 35.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 38.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 40.00 |
| tblVehicleTrips | ST_TR | 2.21 | 0.00 |
| tblVehicleTrips | ST_TR | 1.90 | 1.57 |
| tblVehicleTrips | ST_TR | 1.74 | 0.00 |
| tblVehicleTrips | SU_TR | 0.70 | 0.00 |
| tblVehicleTrips | SU_TR | 1.11 | 1.57 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 1.74 | 0.00 |
| tblVehicleTrips | WD_TR | 9.74 | 0.00 |
| tblVehicleTrips | WD_TR | 11.26 | 1.57 |
| tblVehicleTrips | WD_TR | 1.74 | 0.00 |
| tblWater | IndoorWaterUseRate | 12,718,750.00 | 0.00 |

## 2.0 Emissions Summary

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2024 | 0.3712 | 3.5384 | 3.1518 | 7.2800e-003 | 0.5094 | 0.1500 | 0.6593 | 0.1892 | 0.1390 | 0.3283 | 0.0000 | 645.9506 | 645.9506 | 0.1614 | 6.4800e-003 | 651.9187 |
| 2025 | 0.7076 | 6.4638 | 6.0351 | 0.0157 | 0.5768 | 0.2564 | 0.8332 | 0.2064 | 0.2373 | 0.4437 | 0.0000 | 1,389.1702 | 1,389.1702 | 0.3643 | 0.0142 | 1,402.4945 |
| 2026 | 0.1099 | 0.9882 | 0.8772 | 2.8100e-003 | 0.0400 | 0.0347 | 0.0747 | 0.0109 | 0.0321 | 0.0430 | 0.0000 | 251.7791 | 251.7791 | 0.0616 | 5.5300e-003 | 254.9657 |
| **Maximum** | **0.7076** | **6.4638** | **6.0351** | **0.0157** | **0.5768** | **0.2564** | **0.8332** | **0.2064** | **0.2373** | **0.4437** | **0.0000** | **1,389.1702** | **1,389.1702** | **0.3643** | **0.0142** | **1,402.4945** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2024 | 0.3712 | 3.5384 | 3.1518 | 7.2800e-003 | 0.5094 | 0.1500 | 0.6593 | 0.1892 | 0.1390 | 0.3283 | 0.0000 | 645.9499 | 645.9499 | 0.1614 | 6.4800e-003 | 651.9180 |
| 2025 | 0.7076 | 6.4638 | 6.0351 | 0.0157 | 0.5768 | 0.2564 | 0.8332 | 0.2064 | 0.2373 | 0.4437 | 0.0000 | 1,389.1688 | 1,389.1688 | 0.3643 | 0.0142 | 1,402.4930 |
| 2026 | 0.1099 | 0.9882 | 0.8772 | 2.8100e-003 | 0.0400 | 0.0347 | 0.0747 | 0.0109 | 0.0321 | 0.0430 | 0.0000 | 251.7789 | 251.7789 | 0.0616 | 5.5300e-003 | 254.9654 |
| **Maximum** | **0.7076** | **6.4638** | **6.0351** | **0.0157** | **0.5768** | **0.2564** | **0.8332** | **0.2064** | **0.2373** | **0.4437** | **0.0000** | **1,389.1688** | **1,389.1688** | **0.3643** | **0.0142** | **1,402.4930** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

## EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---|---|---|---|---|
| **1** | **7-1-2024** | **9-30-2024** | 1.6203 | 1.6203 |
| **2** | **10-1-2024** | **12-31-2024** | 2.2830 | 2.2830 |
| **3** | **1-1-2025** | **3-31-2025** | 2.2658 | 2.2658 |
| **4** | **4-1-2025** | **6-30-2025** | 1.7304 | 1.7304 |
| **5** | **7-1-2025** | **9-30-2025** | 1.5248 | 1.5248 |
| **6** | **10-1-2025** | **12-31-2025** | 1.6365 | 1.6365 |
| **7** | **1-1-2026** | **3-31-2026** | 1.0755 | 1.0755 |
| **8** | **4-1-2026** | **6-30-2026** | 0.0258 | 0.0258 |
| | | **Highest** | 2.2830 | 2.2830 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.7236 | 2.0000e-005 | 2.4200e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 4.7200e-003 | 4.7200e-003 | 1.0000e-005 | 0.0000 | 5.0300e-003 |
| Energy | 6.2800e-003 | 0.0571 | 0.0480 | 3.4000e-004 | | 4.3400e-003 | 4.3400e-003 | | 4.3400e-003 | 4.3400e-003 | 0.0000 | 194.9454 | 194.9454 | 0.0227 | 3.7400e-003 | 196.6278 |
| Mobile | 1.9600e-003 | 2.5500e-003 | 0.0169 | 3.0000e-005 | 3.5700e-003 | 3.0000e-005 | 3.6000e-003 | 9.5000e-004 | 3.0000e-005 | 9.8000e-004 | 0.0000 | 3.0933 | 3.0933 | 2.1000e-004 | 1.6000e-004 | 3.1458 |
| Stationary | 0.2200 | 0.0169 | 0.5729 | 8.0000e-005 | | 1.2100e-003 | 1.2100e-003 | | 1.2100e-003 | 1.2100e-003 | 0.0000 | 12.7484 | 12.7484 | 0.0267 | 0.0000 | 13.4148 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 12.3926 | 0.0000 | 12.3926 | 0.7324 | 0.0000 | 30.7021 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.9532 | 1.8517 | 2.8049 | 0.0982 | 2.3500e-003 | 5.9596 |
| **Total** | **0.9518** | **0.0766** | **0.6402** | **4.5000e-004** | **3.5700e-003** | **5.5900e-003** | **9.1600e-003** | **9.5000e-004** | **5.5900e-003** | **6.5400e-003** | **13.3458** | **212.6436** | **225.9894** | **0.8801** | **6.2500e-003** | **249.8551** |

## 2.2 Overall Operational

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.7236 | 2.0000e-005 | 2.4200e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 4.7200e-003 | 4.7200e-003 | 1.0000e-005 | 0.0000 | 5.0300e-003 |
| Energy | 6.2800e-003 | 0.0571 | 0.0480 | 3.4000e-004 | | 4.3400e-003 | 4.3400e-003 | | 4.3400e-003 | 4.3400e-003 | 0.0000 | 194.9454 | 194.9454 | 0.0227 | 3.7400e-003 | 196.6278 |
| Mobile | 1.9600e-003 | 2.5500e-003 | 0.0169 | 3.0000e-005 | 3.5700e-003 | 3.0000e-005 | 3.6000e-003 | 9.5000e-004 | 3.0000e-005 | 9.8000e-004 | 0.0000 | 3.0933 | 3.0933 | 2.1000e-004 | 1.6000e-004 | 3.1458 |
| Stationary | 0.2200 | 0.0169 | 0.5729 | 8.0000e-005 | | 1.2100e-003 | 1.2100e-003 | | 1.2100e-003 | 1.2100e-003 | 0.0000 | 12.7484 | 12.7484 | 0.0267 | 0.0000 | 13.4148 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 12.3926 | 0.0000 | 12.3926 | 0.7324 | 0.0000 | 30.7021 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.9532 | 1.8517 | 2.8049 | 0.0982 | 2.3500e-003 | 5.9596 |
| **Total** | **0.9518** | **0.0766** | **0.6402** | **4.5000e-004** | **3.5700e-003** | **5.5900e-003** | **9.1600e-003** | **9.5000e-004** | **5.5900e-003** | **6.5400e-003** | **13.3458** | **212.6436** | **225.9894** | **0.8801** | **6.2500e-003** | **249.8551** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Plant Grading/Site Prep | Grading | 7/1/2024 | 10/31/2024 | 5 | 89 | |
| 2 | Building Grading/Site Prep | Grading | 5/1/2025 | 8/31/2025 | 5 | 87 | |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | Plant Installation | Building Construction | 11/1/2024 | 4/30/2025 | 5 | 129 | |
| 4 | Building Construction | Building Construction | 9/1/2025 | 2/28/2026 | 5 | 130 | |
| 5 | Demobilization | Building Construction | 3/1/2026 | 4/30/2026 | 5 | 44 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 267**

**Acres of Paving: 4.92**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Building Grading/Site Prep | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Grading/Site Prep | Graders | 1 | 8.00 | 187 | 0.41 |
| Plant Grading/Site Prep | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Plant Grading/Site Prep | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Plant Grading/Site Prep | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Construction | Off-Highway Trucks | 2 | 8.00 | 402 | 0.38 |
| Building Construction | Graders | 3 | 8.00 | 187 | 0.41 |
| Building Construction | Rollers | 3 | 8.00 | 80 | 0.38 |
| Building Construction | Scrapers | 3 | 8.00 | 367 | 0.48 |
| Building Construction | Crushing/Proc. Equipment | 1 | 8.00 | 85 | 0.78 |
| Building Grading/Site Prep | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Grading/Site Prep | Rollers | 1 | 8.00 | 80 | 0.38 |
| Building Grading/Site Prep | Trenchers | 1 | 8.00 | 78 | 0.50 |
| Building Grading/Site Prep | Generator Sets | 2 | 8.00 | 84 | 0.74 |
| Building Grading/Site Prep | Excavators | 1 | 8.00 | 158 | 0.38 |
| Demobilization | Cranes | 0 | 7.00 | 231 | 0.29 |
| Demobilization | Forklifts | 0 | 8.00 | 89 | 0.20 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | |
|---|---|---|---|---|---|
| Demobilization | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Demobilization | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |
| Demobilization | Welders | 0 | 8.00 | 46 | 0.45 |
| Plant Grading/Site Prep | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Plant Grading/Site Prep | Generator Sets | 2 | 8.00 | 84 | 0.74 |
| Plant Grading/Site Prep | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Grading/Site Prep | Rollers | 1 | 8.00 | 80 | 0.38 |
| Plant Grading/Site Prep | Trenchers | 1 | 8.00 | 78 | 0.50 |
| Building Grading/Site Prep | Graders | 1 | 8.00 | 187 | 0.41 |
| Building Grading/Site Prep | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Grading/Site Prep | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Grading/Site Prep | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Plant Installation | Crushing/Proc. Equipment | 1 | 8.00 | 85 | 0.78 |
| Plant Installation | Graders | 3 | 8.00 | 187 | 0.41 |
| Plant Installation | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Installation | Rollers | 3 | 8.00 | 80 | 0.38 |
| Plant Installation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Plant Installation | Scrapers | 3 | 8.00 | 367 | 0.48 |
| Plant Installation | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |

## Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Plant Grading/Site Prep | 14 | 100.00 | 0.00 | 459.00 | 21.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Plant Installation | 17 | 100.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Grading/Site Prep | 15 | 100.00 | 0.00 | 226.00 | 21.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 12 | 100.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Demobilization | 0 | 40.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Plant Grading/Site Prep - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.4099 | 0.0000 | 0.4099 | 0.1626 | 0.0000 | 0.1626 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1959 | 1.9315 | 1.7853 | 3.6300e-003 | | 0.0864 | 0.0864 | | 0.0803 | 0.0803 | 0.0000 | 318.1437 | 318.1437 | 0.0887 | 0.0000 | 320.3602 |
| **Total** | **0.1959** | **1.9315** | **1.7853** | **3.6300e-003** | **0.4099** | **0.0864** | **0.4963** | **0.1626** | **0.0803** | **0.2429** | **0.0000** | **318.1437** | **318.1437** | **0.0887** | **0.0000** | **320.3602** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Plant Grading/Site Prep - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 6.0000e-004 | 0.0376 | 7.5000e-003 | 1.4000e-004 | 3.9200e-003 | 3.0000e-004 | 4.2200e-003 | 1.0800e-003 | 2.9000e-004 | 1.3600e-003 | 0.0000 | 13.8499 | 13.8499 | 5.0000e-004 | 2.2000e-003 | 14.5168 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0184 | 0.0135 | 0.1620 | 5.6000e-004 | 0.0692 | 3.1000e-004 | 0.0695 | 0.0184 | 2.9000e-004 | 0.0187 | 0.0000 | 52.0230 | 52.0230 | 1.0200e-003 | 1.2600e-003 | 52.4248 |
| **Total** | **0.0190** | **0.0511** | **0.1695** | **7.0000e-004** | **0.0731** | **6.1000e-004** | **0.0737** | **0.0195** | **5.8000e-004** | **0.0200** | **0.0000** | **65.8728** | **65.8728** | **1.5200e-003** | **3.4600e-003** | **66.9416** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.4099 | 0.0000 | 0.4099 | 0.1626 | 0.0000 | 0.1626 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1959 | 1.9315 | 1.7853 | 3.6300e-003 | | 0.0864 | 0.0864 | | 0.0803 | 0.0803 | 0.0000 | 318.1433 | 318.1433 | 0.0887 | 0.0000 | 320.3598 |
| **Total** | **0.1959** | **1.9315** | **1.7853** | **3.6300e-003** | **0.4099** | **0.0864** | **0.4963** | **0.1626** | **0.0803** | **0.2429** | **0.0000** | **318.1433** | **318.1433** | **0.0887** | **0.0000** | **320.3598** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Plant Grading/Site Prep - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 6.0000e-004 | 0.0376 | 7.5000e-003 | 1.4000e-004 | 3.9200e-003 | 3.0000e-004 | 4.2200e-003 | 1.0800e-003 | 2.9000e-004 | 1.3600e-003 | 0.0000 | 13.8499 | 13.8499 | 5.0000e-004 | 2.2000e-003 | 14.5168 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0184 | 0.0135 | 0.1620 | 5.6000e-004 | 0.0692 | 3.1000e-004 | 0.0695 | 0.0184 | 2.9000e-004 | 0.0187 | 0.0000 | 52.0230 | 52.0230 | 1.0200e-003 | 1.2600e-003 | 52.4248 |
| **Total** | **0.0190** | **0.0511** | **0.1695** | **7.0000e-004** | **0.0731** | **6.1000e-004** | **0.0737** | **0.0195** | **5.8000e-004** | **0.0200** | **0.0000** | **65.8728** | **65.8728** | **1.5200e-003** | **3.4600e-003** | **66.9416** |

## 3.3 Building Grading/Site Prep - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.4005 | 0.0000 | 0.4005 | 0.1590 | 0.0000 | 0.1590 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1820 | 1.7231 | 1.8280 | 3.7800e-003 | | 0.0754 | 0.0754 | | 0.0700 | 0.0700 | 0.0000 | 331.0139 | 331.0139 | 0.0930 | 0.0000 | 333.3381 |
| **Total** | **0.1820** | **1.7231** | **1.8280** | **3.7800e-003** | **0.4005** | **0.0754** | **0.4759** | **0.1590** | **0.0700** | **0.2290** | **0.0000** | **331.0139** | **331.0139** | **0.0930** | **0.0000** | **333.3381** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Building Grading/Site Prep - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 2.9000e-004 | 0.0179 | 3.7400e-003 | 7.0000e-005 | 1.9300e-003 | 1.4000e-004 | 2.0800e-003 | 5.3000e-004 | 1.4000e-004 | 6.7000e-004 | 0.0000 | 6.6799 | 6.6799 | 2.5000e-004 | 1.0600e-003 | 7.0019 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0171 | 0.0118 | 0.1479 | 5.3000e-004 | 0.0676 | 2.9000e-004 | 0.0679 | 0.0180 | 2.7000e-004 | 0.0182 | 0.0000 | 49.6886 | 49.6886 | 9.1000e-004 | 1.1500e-003 | 50.0541 |
| **Total** | **0.0173** | **0.0297** | **0.1517** | **6.0000e-004** | **0.0696** | **4.3000e-004** | **0.0700** | **0.0185** | **4.1000e-004** | **0.0189** | **0.0000** | **56.3685** | **56.3685** | **1.1600e-003** | **2.2100e-003** | **57.0560** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.4005 | 0.0000 | 0.4005 | 0.1590 | 0.0000 | 0.1590 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1820 | 1.7231 | 1.8280 | 3.7800e-003 | | 0.0754 | 0.0754 | | 0.0700 | 0.0700 | 0.0000 | 331.0135 | 331.0135 | 0.0930 | 0.0000 | 333.3377 |
| **Total** | **0.1820** | **1.7231** | **1.8280** | **3.7800e-003** | **0.4005** | **0.0754** | **0.4759** | **0.1590** | **0.0700** | **0.2290** | **0.0000** | **331.0135** | **331.0135** | **0.0930** | **0.0000** | **333.3377** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Building Grading/Site Prep - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 2.9000e-004 | 0.0179 | 3.7400e-003 | 7.0000e-005 | 1.9300e-003 | 1.4000e-004 | 2.0800e-003 | 5.3000e-004 | 1.4000e-004 | 6.7000e-004 | 0.0000 | 6.6799 | 6.6799 | 2.5000e-004 | 1.0600e-003 | 7.0019 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0171 | 0.0118 | 0.1479 | 5.3000e-004 | 0.0676 | 2.9000e-004 | 0.0679 | 0.0180 | 2.7000e-004 | 0.0182 | 0.0000 | 49.6886 | 49.6886 | 9.1000e-004 | 1.1500e-003 | 50.0541 |
| **Total** | **0.0173** | **0.0297** | **0.1517** | **6.0000e-004** | **0.0696** | **4.3000e-004** | **0.0700** | **0.0185** | **4.1000e-004** | **0.0189** | **0.0000** | **56.3685** | **56.3685** | **1.1600e-003** | **2.2100e-003** | **57.0560** |

## 3.4 Plant Installation - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1484 | 1.5008 | 1.1277 | 2.6000e-003 | | 0.0626 | 0.0626 | | 0.0578 | 0.0578 | 0.0000 | 228.5175 | 228.5175 | 0.0705 | 0.0000 | 230.2787 |
| **Total** | **0.1484** | **1.5008** | **1.1277** | **2.6000e-003** | | **0.0626** | **0.0626** | | **0.0578** | **0.0578** | **0.0000** | **228.5175** | **228.5175** | **0.0705** | **0.0000** | **230.2787** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.4100e-003 | 0.0506 | 0.0162 | 1.8000e-004 | 5.6700e-003 | 2.9000e-004 | 5.9600e-003 | 1.6400e-003 | 2.7000e-004 | 1.9100e-003 | 0.0000 | 17.7142 | 17.7142 | 4.0000e-004 | 2.6000e-003 | 18.4994 |
| Worker | 6.4500e-003 | 4.4500e-003 | 0.0530 | 1.7000e-004 | 0.0207 | 1.0000e-004 | 0.0208 | 5.5000e-003 | 9.0000e-005 | 5.5900e-003 | 0.0000 | 15.7024 | 15.7024 | 4.0000e-004 | 4.2000e-004 | 15.8388 |
| **Total** | **7.8600e-003** | **0.0550** | **0.0692** | **3.5000e-004** | **0.0264** | **3.9000e-004** | **0.0268** | **7.1400e-003** | **3.6000e-004** | **7.5000e-003** | **0.0000** | **33.4165** | **33.4165** | **8.0000e-004** | **3.0200e-003** | **34.3382** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1484 | 1.5008 | 1.1277 | 2.6000e-003 | | 0.0626 | 0.0626 | | 0.0578 | 0.0578 | 0.0000 | 228.5173 | 228.5173 | 0.0704 | 0.0000 | 230.2784 |
| **Total** | **0.1484** | **1.5008** | **1.1277** | **2.6000e-003** | | **0.0626** | **0.0626** | | **0.0578** | **0.0578** | **0.0000** | **228.5173** | **228.5173** | **0.0704** | **0.0000** | **230.2784** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.4100e-003 | 0.0506 | 0.0162 | 1.8000e-004 | 5.6700e-003 | 2.9000e-004 | 5.9600e-003 | 1.6400e-003 | 2.7000e-004 | 1.9100e-003 | 0.0000 | 17.7142 | 17.7142 | 4.0000e-004 | 2.6000e-003 | 18.4994 |
| Worker | 6.4500e-003 | 4.4500e-003 | 0.0530 | 1.7000e-004 | 0.0207 | 1.0000e-004 | 0.0208 | 5.5000e-003 | 9.0000e-005 | 5.5900e-003 | 0.0000 | 15.7024 | 15.7024 | 4.0000e-004 | 4.2000e-004 | 15.8388 |
| **Total** | **7.8600e-003** | **0.0550** | **0.0692** | **3.5000e-004** | **0.0264** | **3.9000e-004** | **0.0268** | **7.1400e-003** | **3.6000e-004** | **7.5000e-003** | **0.0000** | **33.4165** | **33.4165** | **8.0000e-004** | **3.0200e-003** | **34.3382** |

## 3.4 Plant Installation - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2702 | 2.6375 | 2.1540 | 5.2100e-003 | | 0.1078 | 0.1078 | | 0.0995 | 0.0995 | 0.0000 | 456.9176 | 456.9176 | 0.1408 | 0.0000 | 460.4378 |
| **Total** | **0.2702** | **2.6375** | **2.1540** | **5.2100e-003** | | **0.1078** | **0.1078** | | **0.0995** | **0.0995** | **0.0000** | **456.9176** | **456.9176** | **0.1408** | **0.0000** | **460.4378** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.7300e-003 | 0.0990 | 0.0319 | 3.6000e-004 | 0.0113 | 5.6000e-004 | 0.0119 | 3.2800e-003 | 5.4000e-004 | 3.8100e-003 | 0.0000 | 34.8148 | 34.8148 | 8.2000e-004 | 5.1100e-003 | 36.3577 |
| Worker | 0.0122 | 7.9900e-003 | 0.0992 | 3.2000e-004 | 0.0414 | 1.9000e-004 | 0.0416 | 0.0110 | 1.7000e-004 | 0.0112 | 0.0000 | 30.6853 | 30.6853 | 7.4000e-004 | 7.9000e-004 | 30.9399 |
| **Total** | **0.0149** | **0.1070** | **0.1312** | **6.8000e-004** | **0.0527** | **7.5000e-004** | **0.0535** | **0.0143** | **7.1000e-004** | **0.0150** | **0.0000** | **65.5002** | **65.5002** | **1.5600e-003** | **5.9000e-003** | **67.2976** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2702 | 2.6375 | 2.1540 | 5.2100e-003 | | 0.1078 | 0.1078 | | 0.0995 | 0.0995 | 0.0000 | 456.9171 | 456.9171 | 0.1408 | 0.0000 | 460.4372 |
| **Total** | **0.2702** | **2.6375** | **2.1540** | **5.2100e-003** | | **0.1078** | **0.1078** | | **0.0995** | **0.0995** | **0.0000** | **456.9171** | **456.9171** | **0.1408** | **0.0000** | **460.4372** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.7300e-003 | 0.0990 | 0.0319 | 3.6000e-004 | 0.0113 | 5.6000e-004 | 0.0119 | 3.2800e-003 | 5.4000e-004 | 3.8100e-003 | 0.0000 | 34.8148 | 34.8148 | 8.2000e-004 | 5.1100e-003 | 36.3577 |
| Worker | 0.0122 | 7.9900e-003 | 0.0992 | 3.2000e-004 | 0.0414 | 1.9000e-004 | 0.0416 | 0.0110 | 1.7000e-004 | 0.0112 | 0.0000 | 30.6853 | 30.6853 | 7.4000e-004 | 7.9000e-004 | 30.9399 |
| **Total** | **0.0149** | **0.1070** | **0.1312** | **6.8000e-004** | **0.0527** | **7.5000e-004** | **0.0535** | **0.0143** | **7.1000e-004** | **0.0150** | **0.0000** | **65.5002** | **65.5002** | **1.5600e-003** | **5.9000e-003** | **67.2976** |

## 3.5 Building Construction - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2079 | 1.8572 | 1.6360 | 4.7000e-003 | | 0.0713 | 0.0713 | | 0.0660 | 0.0660 | 0.0000 | 412.3467 | 412.3467 | 0.1262 | 0.0000 | 415.5024 |
| **Total** | **0.2079** | **1.8572** | **1.6360** | **4.7000e-003** | | **0.0713** | **0.0713** | | **0.0660** | **0.0660** | **0.0000** | **412.3467** | **412.3467** | **0.1262** | **0.0000** | **415.5024** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.7900e-003 | 0.1013 | 0.0327 | 3.7000e-004 | 0.0116 | 5.7000e-004 | 0.0122 | 3.3500e-003 | 5.5000e-004 | 3.9000e-003 | 0.0000 | 35.6245 | 35.6245 | 8.4000e-004 | 5.2300e-003 | 37.2032 |
| Worker | 0.0125 | 8.1700e-003 | 0.1016 | 3.3000e-004 | 0.0424 | 1.9000e-004 | 0.0426 | 0.0113 | 1.7000e-004 | 0.0114 | 0.0000 | 31.3990 | 31.3990 | 7.5000e-004 | 8.1000e-004 | 31.6594 |
| **Total** | **0.0153** | **0.1094** | **0.1342** | **7.0000e-004** | **0.0540** | **7.6000e-004** | **0.0547** | **0.0146** | **7.2000e-004** | **0.0153** | **0.0000** | **67.0234** | **67.0234** | **1.5900e-003** | **6.0400e-003** | **68.8626** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.2079 | 1.8572 | 1.6360 | 4.7000e-003 | | 0.0713 | 0.0713 | | 0.0660 | 0.0660 | 0.0000 | 412.3462 | 412.3462 | 0.1262 | 0.0000 | 415.5020 |
| **Total** | **0.2079** | **1.8572** | **1.6360** | **4.7000e-003** | | **0.0713** | **0.0713** | | **0.0660** | **0.0660** | **0.0000** | **412.3462** | **412.3462** | **0.1262** | **0.0000** | **415.5020** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 2.7900e-003 | 0.1013 | 0.0327 | 3.7000e-004 | 0.0116 | 5.7000e-004 | 0.0122 | 3.3500e-003 | 5.5000e-004 | 3.9000e-003 | 0.0000 | 35.6245 | 35.6245 | 8.4000e-004 | 5.2300e-003 | 37.2032 |
| Worker | 0.0125 | 8.1700e-003 | 0.1016 | 3.3000e-004 | 0.0424 | 1.9000e-004 | 0.0426 | 0.0113 | 1.7000e-004 | 0.0114 | 0.0000 | 31.3990 | 31.3990 | 7.5000e-004 | 8.1000e-004 | 31.6594 |
| **Total** | **0.0153** | **0.1094** | **0.1342** | **7.0000e-004** | **0.0540** | **7.6000e-004** | **0.0547** | **0.0146** | **7.2000e-004** | **0.0153** | **0.0000** | **67.0234** | **67.0234** | **1.5900e-003** | **6.0400e-003** | **68.8626** |

## 3.5 Building Construction - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0992 | 0.8864 | 0.7808 | 2.2400e-003 | | 0.0340 | 0.0340 | | 0.0315 | 0.0315 | 0.0000 | 196.8018 | 196.8018 | 0.0603 | 0.0000 | 198.3080 |
| **Total** | **0.0992** | **0.8864** | **0.7808** | **2.2400e-003** | | **0.0340** | **0.0340** | | **0.0315** | **0.0315** | **0.0000** | **196.8018** | **196.8018** | **0.0603** | **0.0000** | **198.3080** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.2900e-003 | 0.0473 | 0.0154 | 1.7000e-004 | 5.5400e-003 | 2.7000e-004 | 5.8100e-003 | 1.6000e-003 | 2.6000e-004 | 1.8600e-003 | 0.0000 | 16.6978 | 16.6978 | 4.1000e-004 | 2.4500e-003 | 17.4376 |
| Worker | 5.6600e-003 | 3.5400e-003 | 0.0457 | 1.5000e-004 | 0.0202 | 9.0000e-005 | 0.0203 | 5.3700e-003 | 8.0000e-005 | 5.4500e-003 | 0.0000 | 14.6482 | 14.6482 | 3.3000e-004 | 3.6000e-004 | 14.7650 |
| **Total** | **6.9500e-003** | **0.0508** | **0.0611** | **3.2000e-004** | **0.0258** | **3.6000e-004** | **0.0261** | **6.9700e-003** | **3.4000e-004** | **7.3100e-003** | **0.0000** | **31.3460** | **31.3460** | **7.4000e-004** | **2.8100e-003** | **32.2025** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0992 | 0.8864 | 0.7808 | 2.2400e-003 | | 0.0340 | 0.0340 | | 0.0315 | 0.0315 | 0.0000 | 196.8016 | 196.8016 | 0.0603 | 0.0000 | 198.3078 |
| **Total** | **0.0992** | **0.8864** | **0.7808** | **2.2400e-003** | | **0.0340** | **0.0340** | | **0.0315** | **0.0315** | **0.0000** | **196.8016** | **196.8016** | **0.0603** | **0.0000** | **198.3078** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.2900e-003 | 0.0473 | 0.0154 | 1.7000e-004 | 5.5400e-003 | 2.7000e-004 | 5.8100e-003 | 1.6000e-003 | 2.6000e-004 | 1.8600e-003 | 0.0000 | 16.6978 | 16.6978 | 4.1000e-004 | 2.4500e-003 | 17.4376 |
| Worker | 5.6600e-003 | 3.5400e-003 | 0.0457 | 1.5000e-004 | 0.0202 | 9.0000e-005 | 0.0203 | 5.3700e-003 | 8.0000e-005 | 5.4500e-003 | 0.0000 | 14.6482 | 14.6482 | 3.3000e-004 | 3.6000e-004 | 14.7650 |
| **Total** | **6.9500e-003** | **0.0508** | **0.0611** | **3.2000e-004** | **0.0258** | **3.6000e-004** | **0.0261** | **6.9700e-003** | **3.4000e-004** | **7.3100e-003** | **0.0000** | **31.3460** | **31.3460** | **7.4000e-004** | **2.8100e-003** | **32.2025** |

## 3.6 Demobilization - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Demobilization - 2026

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.3600e-003 | 0.0495 | 0.0162 | 1.8000e-004 | 5.8000e-003 | 2.8000e-004 | 6.0800e-003 | 1.6800e-003 | 2.7000e-004 | 1.9400e-003 | 0.0000 | 17.4930 | 17.4930 | 4.3000e-004 | 2.5600e-003 | 18.2680 |
| Worker | 2.3700e-003 | 1.4800e-003 | 0.0191 | 6.0000e-005 | 8.4700e-003 | 4.0000e-005 | 8.5100e-003 | 2.2500e-003 | 3.0000e-005 | 2.2800e-003 | 0.0000 | 6.1383 | 6.1383 | 1.4000e-004 | 1.5000e-004 | 6.1872 |
| **Total** | **3.7300e-003** | **0.0510** | **0.0353** | **2.4000e-004** | **0.0143** | **3.2000e-004** | **0.0146** | **3.9300e-003** | **3.0000e-004** | **4.2200e-003** | **0.0000** | **23.6313** | **23.6313** | **5.7000e-004** | **2.7100e-003** | **24.4552** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 3.6 Demobilization - 2026

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.3600e-003 | 0.0495 | 0.0162 | 1.8000e-004 | 5.8000e-003 | 2.8000e-004 | 6.0800e-003 | 1.6800e-003 | 2.7000e-004 | 1.9400e-003 | 0.0000 | 17.4930 | 17.4930 | 4.3000e-004 | 2.5600e-003 | 18.2680 |
| Worker | 2.3700e-003 | 1.4800e-003 | 0.0191 | 6.0000e-005 | 8.4700e-003 | 4.0000e-005 | 8.5100e-003 | 2.2500e-003 | 3.0000e-005 | 2.2800e-003 | 0.0000 | 6.1383 | 6.1383 | 1.4000e-004 | 1.5000e-004 | 6.1872 |
| **Total** | **3.7300e-003** | **0.0510** | **0.0353** | **2.4000e-004** | **0.0143** | **3.2000e-004** | **0.0146** | **3.9300e-003** | **3.0000e-004** | **4.2200e-003** | **0.0000** | **23.6313** | **23.6313** | **5.7000e-004** | **2.7100e-003** | **24.4552** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.9600e-003 | 2.5500e-003 | 0.0169 | 3.0000e-005 | 3.5700e-003 | 3.0000e-005 | 3.6000e-003 | 9.5000e-004 | 3.0000e-005 | 9.8000e-004 | 0.0000 | 3.0933 | 3.0933 | 2.1000e-004 | 1.6000e-004 | 3.1458 |
| Unmitigated | 1.9600e-003 | 2.5500e-003 | 0.0169 | 3.0000e-005 | 3.5700e-003 | 3.0000e-005 | 3.6000e-003 | 9.5000e-004 | 3.0000e-005 | 9.8000e-004 | 0.0000 | 3.0933 | 3.0933 | 2.1000e-004 | 1.6000e-004 | 3.1458 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Office Building | 0.00 | 0.00 | 0.00 | | |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Research & Development | 4.00 | 4.00 | 4.00 | 9,551 | 9,551 |
| Unrefrigerated Warehouse-No Rail | 0.00 | 0.00 | 0.00 | | |
| User Defined Industrial | 0.00 | 0.00 | 0.00 | | |
| User Defined Parking | 0.00 | 0.00 | 0.00 | | |
| Total | 4.00 | 4.00 | 4.00 | 9,551 | 9,551 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| General Office Building | 13.00 | 5.00 | 5.00 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| Other Non-Asphalt Surfaces | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Research & Development | 13.00 | 5.00 | 5.00 | 33.00 | 48.00 | 19.00 | 82 | 15 | 3 |
| Unrefrigerated Warehouse-No | 13.00 | 5.00 | 5.00 | 59.00 | 0.00 | 41.00 | 92 | 5 | 3 |
| User Defined Industrial | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| User Defined Parking | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Other Non-Asphalt Surfaces | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Research & Development | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Unrefrigerated Warehouse-No Rail | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| User Defined Industrial | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| User Defined Parking | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 132.7749 | 132.7749 | 0.0215 | 2.6000e-003 | 134.0878 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 132.7749 | 132.7749 | 0.0215 | 2.6000e-003 | 134.0878 |
| NaturalGas Mitigated | 6.2800e-003 | 0.0571 | 0.0480 | 3.4000e-004 | | 4.3400e-003 | 4.3400e-003 | | 4.3400e-003 | 4.3400e-003 | 0.0000 | 62.1706 | 62.1706 | 1.1900e-003 | 1.1400e-003 | 62.5400 |
| NaturalGas Unmitigated | 6.2800e-003 | 0.0571 | 0.0480 | 3.4000e-004 | | 4.3400e-003 | 4.3400e-003 | | 4.3400e-003 | 4.3400e-003 | 0.0000 | 62.1706 | 62.1706 | 1.1900e-003 | 1.1400e-003 | 62.5400 |

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## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| General Office Building | 127197 | 6.9000e-004 | 6.2400e-003 | 5.2400e-003 | 4.0000e-005 | | 4.7000e-004 | 4.7000e-004 | | 4.7000e-004 | 4.7000e-004 | 0.0000 | 6.7877 | 6.7877 | 1.3000e-004 | 1.2000e-004 | 6.8281 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 52785 | 2.8000e-004 | 2.5900e-003 | 2.1700e-003 | 2.0000e-005 | | 2.0000e-004 | 2.0000e-004 | | 2.0000e-004 | 2.0000e-004 | 0.0000 | 2.8168 | 2.8168 | 5.0000e-005 | 5.0000e-005 | 2.8336 |
| Unrefrigerated Warehouse-No Rail | 985050 | 5.3100e-003 | 0.0483 | 0.0406 | 2.9000e-004 | | 3.6700e-003 | 3.6700e-003 | | 3.6700e-003 | 3.6700e-003 | 0.0000 | 52.5660 | 52.5660 | 1.0100e-003 | 9.6000e-004 | 52.8784 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **6.2800e-003** | **0.0571** | **0.0480** | **3.5000e-004** | | **4.3400e-003** | **4.3400e-003** | | **4.3400e-003** | **4.3400e-003** | **0.0000** | **62.1706** | **62.1706** | **1.1900e-003** | **1.1300e-003** | **62.5400** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| General Office Building | 127197 | 6.9000e-004 | 6.2400e-003 | 5.2400e-003 | 4.0000e-005 | | 4.7000e-004 | 4.7000e-004 | | 4.7000e-004 | 4.7000e-004 | 0.0000 | 6.7877 | 6.7877 | 1.3000e-004 | 1.2000e-004 | 6.8281 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 52785 | 2.8000e-004 | 2.5900e-003 | 2.1700e-003 | 2.0000e-005 | | 2.0000e-004 | 2.0000e-004 | | 2.0000e-004 | 2.0000e-004 | 0.0000 | 2.8168 | 2.8168 | 5.0000e-005 | 5.0000e-005 | 2.8336 |
| Unrefrigerated Warehouse-No Rail | 985050 | 5.3100e-003 | 0.0483 | 0.0406 | 2.9000e-004 | | 3.6700e-003 | 3.6700e-003 | | 3.6700e-003 | 3.6700e-003 | 0.0000 | 52.5660 | 52.5660 | 1.0100e-003 | 9.6000e-004 | 52.8784 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **6.2800e-003** | **0.0571** | **0.0480** | **3.5000e-004** | | **4.3400e-003** | **4.3400e-003** | | **4.3400e-003** | **4.3400e-003** | **0.0000** | **62.1706** | **62.1706** | **1.1900e-003** | **1.1300e-003** | **62.5400** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| General Office Building | 87029.8 | 8.0523 | 1.3000e-003 | 1.6000e-004 | 8.1320 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 21955.5 | 2.0314 | 3.3000e-004 | 4.0000e-005 | 2.0515 |
| Unrefrigerated Warehouse-No Rail | 1.32605e+006 | 122.6912 | 0.0199 | 2.4100e-003 | 123.9043 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **132.7749** | **0.0215** | **2.6100e-003** | **134.0878** |

## 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| General Office Building | 87029.8 | 8.0523 | 1.3000e-003 | 1.6000e-004 | 8.1320 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 21955.5 | 2.0314 | 3.3000e-004 | 4.0000e-005 | 2.0515 |
| Unrefrigerated Warehouse-No Rail | 1.32605e+006 | 122.6912 | 0.0199 | 2.4100e-003 | 123.9043 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **132.7749** | **0.0215** | **2.6100e-003** | **134.0878** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 0.7236 | 2.0000e-005 | 2.4200e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 4.7200e-003 | 4.7200e-003 | 1.0000e-005 | 0.0000 | 5.0300e-003 |
| Unmitigated | 0.7236 | 2.0000e-005 | 2.4200e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 4.7200e-003 | 4.7200e-003 | 1.0000e-005 | 0.0000 | 5.0300e-003 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.1658 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.5576 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 2.2000e-004 | 2.0000e-005 | 2.4200e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 4.7200e-003 | 4.7200e-003 | 1.0000e-005 | 0.0000 | 5.0300e-003 |
| **Total** | **0.7236** | **2.0000e-005** | **2.4200e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | **0.0000** | **4.7200e-003** | **4.7200e-003** | **1.0000e-005** | **0.0000** | **5.0300e-003** |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.1658 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.5576 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 2.2000e-004 | 2.0000e-005 | 2.4200e-003 | 0.0000 | | 1.0000e-005 | 1.0000e-005 | | 1.0000e-005 | 1.0000e-005 | 0.0000 | 4.7200e-003 | 4.7200e-003 | 1.0000e-005 | 0.0000 | 5.0300e-003 |
| **Total** | **0.7236** | **2.0000e-005** | **2.4200e-003** | **0.0000** | | **1.0000e-005** | **1.0000e-005** | | **1.0000e-005** | **1.0000e-005** | **0.0000** | **4.7200e-003** | **4.7200e-003** | **1.0000e-005** | **0.0000** | **5.0300e-003** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 2.8049 | 0.0982 | 2.3500e-003 | 5.9596 |
| Unmitigated | 2.8049 | 0.0982 | 2.3500e-003 | 5.9596 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Office Building | 1.75068 / 1.073 | 1.7794 | 0.0572 | 1.3700e-003 | 3.6190 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 1.25382 / 0 | 1.0255 | 0.0410 | 9.8000e-004 | 2.3406 |
| Unrefrigerated Warehouse-No Rail | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Industrial | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **2.8049** | **0.0982** | **2.3500e-003** | **5.9596** |

## 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| General Office Building | 1.75068 / 1.073 | 1.7794 | 0.0572 | 1.3700e-003 | 3.6190 |
| Other Non-Asphalt Surfaces | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 1.25382 / 0 | 1.0255 | 0.0410 | 9.8000e-004 | 2.3406 |
| Unrefrigerated Warehouse-No Rail | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Industrial | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **2.8049** | **0.0982** | **2.3500e-003** | **5.9596** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 12.3926 | 0.7324 | 0.0000 | 30.7021 |
| Unmitigated | 12.3926 | 0.7324 | 0.0000 | 30.7021 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Office Building | 9.16 | 1.8594 | 0.1099 | 0.0000 | 4.6066 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 0.19 | 0.0386 | 2.2800e-003 | 0.0000 | 0.0956 |
| Unrefrigerated Warehouse-No Rail | 51.7 | 10.4946 | 0.6202 | 0.0000 | 26.0000 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **12.3926** | **0.7324** | **0.0000** | **30.7021** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| General Office Building | 9.16 | 1.8594 | 0.1099 | 0.0000 | 4.6066 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 0.19 | 0.0386 | 2.2800e-003 | 0.0000 | 0.0956 |
| Unrefrigerated Warehouse-No Rail | 51.7 | 10.4946 | 0.6202 | 0.0000 | 26.0000 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **12.3926** | **0.7324** | **0.0000** | **30.7021** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|
| Emergency Generator | 1 | 1 | 100 | 500 | 0.73 | CNG |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 10.1 Stationary Sources

**Unmitigated/Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Type | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Emergency Generator - CNG (500 - 9999 HP) | 0.2200 | 0.0169 | 0.5729 | 8.0000e-005 | | 1.2100e-003 | 1.2100e-003 | | 1.2100e-003 | 1.2100e-003 | 0.0000 | 12.7484 | 12.7484 | 0.0267 | 0.0000 | 13.4148 |
| **Total** | **0.2200** | **0.0169** | **0.5729** | **8.0000e-005** | | **1.2100e-003** | **1.2100e-003** | | **1.2100e-003** | **1.2100e-003** | **0.0000** | **12.7484** | **12.7484** | **0.0267** | **0.0000** | **13.4148** |

## 11.0 Vegetation

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# San Miguel WWTP Upgrade/Expansion Project

**San Luis Obispo County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 9.85 | 1000sqft | 0.00 | 9,845.00 | 0 |
| Research & Development | 2.55 | 1000sqft | 0.00 | 2,550.00 | 0 |
| Unrefrigerated Warehouse-No Rail | 55.00 | 1000sqft | 18.64 | 55,000.00 | 0 |
| User Defined Industrial | 71.83 | User Defined Unit | 1.65 | 71,825.64 | 0 |
| Other Non-Asphalt Surfaces | 3.80 | Acre | 3.80 | 165,528.00 | 0 |
| User Defined Parking | 1.12 | User Defined Unit | 1.12 | 48,784.70 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 3.2 | **Precipitation Freq (Days)** | 44 |
| **Climate Zone** | 3 | | | **Operational Year** | 2026 |
| **Utility Company** | Pacific Gas and Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 203.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on Project Description.

Land Use - WWTF: 18.64-acres
Percolation Pond: 1.65-acres
Tranmission Line: 1.12-acres

Construction Phase - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Trips and VMT - 50 workers for first four phases, then 20 workers for Demobilization phase. Per SMCSD Updated Contruction Schedule. Hauling trip length based on information from SMCSD.

Grading - From Project Description.

Vehicle Trips - Per Project Description, only 2 additional employees.

Energy Use - Pump energy use added to warehouse.

Water And Wastewater - Based on information from SMCSD.

Construction Off-road Equipment Mitigation - In accordance with SLOCAPCD Rule 401.

Energy Mitigation - Based on information provided by SMCSD.

Stationary Sources - Emergency Generators and Fire Pumps - Based on information provided by SMCSD.

Operational Off-Road Equipment -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 45.00 | 89.00 |
| tblConstructionPhase | NumDays | 45.00 | 87.00 |
| tblConstructionPhase | NumDays | 440.00 | 129.00 |
| tblConstructionPhase | NumDays | 440.00 | 130.00 |
| tblConstructionPhase | NumDays | 440.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 8/30/2024 | 10/31/2024 |
| tblConstructionPhase | PhaseEndDate | 11/1/2024 | 8/31/2025 |
| tblConstructionPhase | PhaseEndDate | 7/10/2026 | 4/30/2025 |
| tblConstructionPhase | PhaseEndDate | 3/17/2028 | 2/28/2026 |
| tblConstructionPhase | PhaseEndDate | 11/23/2029 | 4/30/2026 |
| tblConstructionPhase | PhaseStartDate | 8/31/2024 | 5/1/2025 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseStartDate | 11/2/2024 | 11/1/2024 |
| tblConstructionPhase | PhaseStartDate | 7/11/2026 | 9/1/2025 |
| tblConstructionPhase | PhaseStartDate | 3/18/2028 | 3/1/2026 |
| tblEnergyUse | LightingElect | 3.22 | 0.00 |
| tblEnergyUse | NT24E | 5.13 | 0.00 |
| tblEnergyUse | T24E | 0.93 | 24.11 |
| tblGrading | MaterialExported | 0.00 | 3,675.00 |
| tblGrading | MaterialExported | 0.00 | 1,810.00 |
| tblLandUse | LandUseSquareFeet | 9,850.00 | 9,845.00 |
| tblLandUse | LandUseSquareFeet | 0.00 | 71,825.64 |
| tblLandUse | LandUseSquareFeet | 0.00 | 48,784.70 |
| tblLandUse | LotAcreage | 0.23 | 0.00 |
| tblLandUse | LotAcreage | 0.06 | 0.00 |
| tblLandUse | LotAcreage | 1.26 | 18.64 |
| tblLandUse | LotAcreage | 0.00 | 1.65 |
| tblLandUse | LotAcreage | 0.00 | 1.12 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.37 | 0.37 |
| tblOffRoadEquipment | LoadFactor | 0.41 | 0.41 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.50 | 0.50 |
| tblOffRoadEquipment | LoadFactor | 0.48 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.20 | 0.20 |
| tblOffRoadEquipment | LoadFactor | 0.44 | 0.44 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.50 | 0.50 |
| tblOffRoadEquipment | LoadFactor | 0.41 | 0.41 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | LoadFactor | 0.44 | 0.44 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.40 | 0.40 |
| tblOffRoadEquipment | LoadFactor | 0.48 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.37 | 0.37 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Tractors/Loaders/Backhoes |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Trenchers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Generator Sets |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | | Crushing/Proc. Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType | | Generator Sets |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Trenchers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Crushing/Proc. Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Tractors/Loaders/Backhoes |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 2.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblStationaryGeneratorsPumpsUse | HorsePowerValue | 0.00 | 500.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerDay | 0.00 | 1.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerYear | 0.00 | 100.00 |
| tblStationaryGeneratorsPumpsUse | NumberOfEquipment | 0.00 | 1.00 |
| tblTripsAndVMT | WorkerTripLength | 13.00 | 21.00 |
| tblTripsAndVMT | WorkerTripLength | 13.00 | 21.00 |
| tblTripsAndVMT | WorkerTripNumber | 35.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 38.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 40.00 |
| tblVehicleTrips | ST_TR | 2.21 | 0.00 |
| tblVehicleTrips | ST_TR | 1.90 | 1.57 |
| tblVehicleTrips | ST_TR | 1.74 | 0.00 |
| tblVehicleTrips | SU_TR | 0.70 | 0.00 |
| tblVehicleTrips | SU_TR | 1.11 | 1.57 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 1.74 | 0.00 |
| tblVehicleTrips | WD_TR | 9.74 | 0.00 |
| tblVehicleTrips | WD_TR | 11.26 | 1.57 |
| tblVehicleTrips | WD_TR | 1.74 | 0.00 |
| tblWater | IndoorWaterUseRate | 12,718,750.00 | 0.00 |

## 2.0 Emissions Summary

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2024 | 7.2680 | 72.2706 | 55.7254 | 0.1377 | 10.8978 | 2.9286 | 12.8530 | 4.1029 | 2.7053 | 5.9198 | 0.0000 | 13,457.8890 | 13,457.8890 | 3.6522 | 0.1535 | 13,594.9251 |
| 2025 | 6.6284 | 63.7346 | 53.1932 | 0.1373 | 10.8492 | 2.5232 | 12.5916 | 4.0901 | 2.3308 | 5.7084 | 0.0000 | 13,419.9585 | 13,419.9585 | 3.6486 | 0.1497 | 13,555.7925 |
| 2026 | 5.0539 | 44.5434 | 40.1342 | 0.1226 | 1.2582 | 1.6375 | 2.8957 | 0.3399 | 1.5158 | 1.8557 | 0.0000 | 12,002.7117 | 12,002.7117 | 3.2001 | 0.1462 | 12,126.2756 |
| **Maximum** | **7.2680** | **72.2706** | **55.7254** | **0.1377** | **10.8978** | **2.9286** | **12.8530** | **4.1029** | **2.7053** | **5.9198** | **0.0000** | **13,457.8890** | **13,457.8890** | **3.6522** | **0.1535** | **13,594.9251** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2024 | 7.2680 | 72.2706 | 55.7254 | 0.1377 | 10.8978 | 2.9286 | 12.8530 | 4.1029 | 2.7053 | 5.9198 | 0.0000 | 13,457.8890 | 13,457.8890 | 3.6522 | 0.1535 | 13,594.9251 |
| 2025 | 6.6284 | 63.7346 | 53.1932 | 0.1373 | 10.8492 | 2.5232 | 12.5916 | 4.0901 | 2.3308 | 5.7084 | 0.0000 | 13,419.9585 | 13,419.9585 | 3.6486 | 0.1497 | 13,555.7925 |
| 2026 | 5.0539 | 44.5434 | 40.1342 | 0.1226 | 1.2582 | 1.6375 | 2.8957 | 0.3399 | 1.5158 | 1.8557 | 0.0000 | 12,002.7117 | 12,002.7117 | 3.2001 | 0.1462 | 12,126.2756 |
| **Maximum** | **7.2680** | **72.2706** | **55.7254** | **0.1377** | **10.8978** | **2.9286** | **12.8530** | **4.1029** | **2.7053** | **5.9198** | **0.0000** | **13,457.8890** | **13,457.8890** | **3.6522** | **0.1535** | **13,594.9251** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 3.9650 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| Energy | 0.0344 | 0.3129 | 0.2629 | 1.8800e-003 | | 0.0238 | 0.0238 | | 0.0238 | 0.0238 | | 375.5141 | 375.5141 | 7.2000e-003 | 6.8800e-003 | 377.7456 |
| Mobile | 0.0113 | 0.0131 | 0.0899 | 1.8000e-004 | 0.0201 | 1.7000e-004 | 0.0203 | 5.3700e-003 | 1.6000e-004 | 5.5300e-003 | | 19.2471 | 19.2471 | 1.2000e-003 | 9.2000e-004 | 19.5512 |
| Stationary | 4.3990 | 0.3388 | 11.4571 | 1.5300e-003 | | 0.0243 | 0.0243 | | 0.0243 | 0.0243 | | 281.0547 | 281.0547 | 0.5877 | | 295.7462 |
| **Total** | **8.4097** | **0.6650** | **11.8246** | **3.5900e-003** | **0.0201** | **0.0483** | **0.0684** | **5.3700e-003** | **0.0483** | **0.0536** | | **675.8474** | **675.8474** | **0.5961** | **7.8000e-003** | **693.0765** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.2 Overall Operational

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 3.9650 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| Energy | 0.0344 | 0.3129 | 0.2629 | 1.8800e-003 | | 0.0238 | 0.0238 | | 0.0238 | 0.0238 | | 375.5141 | 375.5141 | 7.2000e-003 | 6.8800e-003 | 377.7456 |
| Mobile | 0.0113 | 0.0131 | 0.0899 | 1.8000e-004 | 0.0201 | 1.7000e-004 | 0.0203 | 5.3700e-003 | 1.6000e-004 | 5.5300e-003 | | 19.2471 | 19.2471 | 1.2000e-003 | 9.2000e-004 | 19.5512 |
| Stationary | 4.3990 | 0.3388 | 11.4571 | 1.5300e-003 | | 0.0243 | 0.0243 | | 0.0243 | 0.0243 | | 281.0547 | 281.0547 | 0.5877 | | 295.7462 |
| **Total** | **8.4097** | **0.6650** | **11.8246** | **3.5900e-003** | **0.0201** | **0.0483** | **0.0684** | **5.3700e-003** | **0.0483** | **0.0536** | | **675.8474** | **675.8474** | **0.5961** | **7.8000e-003** | **693.0765** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Plant Grading/Site Prep | Grading | 7/1/2024 | 10/31/2024 | 5 | 89 | |
| 2 | Building Grading/Site Prep | Grading | 5/1/2025 | 8/31/2025 | 5 | 87 | |
| 3 | Plant Installation | Building Construction | 11/1/2024 | 4/30/2025 | 5 | 129 | |
| 4 | Building Construction | Building Construction | 9/1/2025 | 2/28/2026 | 5 | 130 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | Demobilization | Building Construction | 3/1/2026 | 4/30/2026 | 5 | 44 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 267**

**Acres of Paving: 4.92**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Building Grading/Site Prep | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Grading/Site Prep | Graders | 1 | 8.00 | 187 | 0.41 |
| Plant Grading/Site Prep | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Plant Grading/Site Prep | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Plant Grading/Site Prep | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Construction | Off-Highway Trucks | 2 | 8.00 | 402 | 0.38 |
| Building Construction | Graders | 3 | 8.00 | 187 | 0.41 |
| Building Construction | Rollers | 3 | 8.00 | 80 | 0.38 |
| Building Construction | Scrapers | 3 | 8.00 | 367 | 0.48 |
| Building Construction | Crushing/Proc. Equipment | 1 | 8.00 | 85 | 0.78 |
| Building Grading/Site Prep | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Grading/Site Prep | Rollers | 1 | 8.00 | 80 | 0.38 |
| Building Grading/Site Prep | Trenchers | 1 | 8.00 | 78 | 0.50 |
| Building Grading/Site Prep | Generator Sets | 2 | 8.00 | 84 | 0.74 |
| Building Grading/Site Prep | Excavators | 1 | 8.00 | 158 | 0.38 |
| Demobilization | Cranes | 0 | 7.00 | 231 | 0.29 |
| Demobilization | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Demobilization | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Demobilization | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | |
|---|---|---|---|---|---|
| Demobilization | Welders | 0 | 8.00 | 46 | 0.45 |
| Plant Grading/Site Prep | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Plant Grading/Site Prep | Generator Sets | 2 | 8.00 | 84 | 0.74 |
| Plant Grading/Site Prep | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Grading/Site Prep | Rollers | 1 | 8.00 | 80 | 0.38 |
| Plant Grading/Site Prep | Trenchers | 1 | 8.00 | 78 | 0.50 |
| Building Grading/Site Prep | Graders | 1 | 8.00 | 187 | 0.41 |
| Building Grading/Site Prep | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Grading/Site Prep | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Grading/Site Prep | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Plant Installation | Crushing/Proc. Equipment | 1 | 8.00 | 85 | 0.78 |
| Plant Installation | Graders | 3 | 8.00 | 187 | 0.41 |
| Plant Installation | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Installation | Rollers | 3 | 8.00 | 80 | 0.38 |
| Plant Installation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Plant Installation | Scrapers | 3 | 8.00 | 367 | 0.48 |
| Plant Installation | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Plant Grading/Site Prep | 14 | 100.00 | 0.00 | 459.00 | 21.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Plant Installation | 17 | 100.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Grading/Site Prep | 15 | 100.00 | 0.00 | 226.00 | 21.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 12 | 100.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Demobilization | 0 | 40.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Plant Grading/Site Prep - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2112 | 0.0000 | 9.2112 | 3.6549 | 0.0000 | 3.6549 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.4012 | 43.4055 | 40.1193 | 0.0817 | | 1.9415 | 1.9415 | | 1.8039 | 1.8039 | | 7,880.7503 | 7,880.7503 | 2.1962 | | 7,935.6558 |
| **Total** | **4.4012** | **43.4055** | **40.1193** | **0.0817** | **9.2112** | **1.9415** | **11.1527** | **3.6549** | **1.8039** | **5.4588** | | **7,880.7503** | **7,880.7503** | **2.1962** | | **7,935.6558** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Plant Grading/Site Prep - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0138 | 0.8191 | 0.1676 | 3.1400e-003 | 0.0902 | 6.7200e-003 | 0.0969 | 0.0247 | 6.4300e-003 | 0.0312 | | 342.9558 | 342.9558 | 0.0125 | 0.0544 | 359.4691 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.4024 | 0.2722 | 3.8108 | 0.0130 | 1.5964 | 7.0000e-003 | 1.6034 | 0.4233 | 6.4500e-003 | 0.4298 | | 1,335.6634 | 1,335.6634 | 0.0246 | 0.0292 | 1,344.9734 |
| **Total** | **0.4161** | **1.0913** | **3.9784** | **0.0161** | **1.6866** | **0.0137** | **1.7003** | **0.4480** | **0.0129** | **0.4609** | | **1,678.6191** | **1,678.6191** | **0.0371** | **0.0836** | **1,704.4424** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2112 | 0.0000 | 9.2112 | 3.6549 | 0.0000 | 3.6549 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.4012 | 43.4055 | 40.1193 | 0.0817 | | 1.9415 | 1.9415 | | 1.8039 | 1.8039 | 0.0000 | 7,880.7503 | 7,880.7503 | 2.1962 | | 7,935.6558 |
| **Total** | **4.4012** | **43.4055** | **40.1193** | **0.0817** | **9.2112** | **1.9415** | **11.1527** | **3.6549** | **1.8039** | **5.4588** | **0.0000** | **7,880.7503** | **7,880.7503** | **2.1962** | | **7,935.6558** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Plant Grading/Site Prep - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0138 | 0.8191 | 0.1676 | 3.1400e-003 | 0.0902 | 6.7200e-003 | 0.0969 | 0.0247 | 6.4300e-003 | 0.0312 | | 342.9558 | 342.9558 | 0.0125 | 0.0544 | 359.4691 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.4024 | 0.2722 | 3.8108 | 0.0130 | 1.5964 | 7.0000e-003 | 1.6034 | 0.4233 | 6.4500e-003 | 0.4298 | | 1,335.6634 | 1,335.6634 | 0.0246 | 0.0292 | 1,344.9734 |
| **Total** | **0.4161** | **1.0913** | **3.9784** | **0.0161** | **1.6866** | **0.0137** | **1.7003** | **0.4480** | **0.0129** | **0.4609** | | **1,678.6191** | **1,678.6191** | **0.0371** | **0.0836** | **1,704.4424** |

## 3.3 Building Grading/Site Prep - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2074 | 0.0000 | 9.2074 | 3.6543 | 0.0000 | 3.6543 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1838 | 39.6116 | 42.0223 | 0.0869 | | 1.7323 | 1.7323 | | 1.6090 | 1.6090 | | 8,388.0534 | 8,388.0534 | 2.3559 | | 8,446.9511 |
| **Total** | **4.1838** | **39.6116** | **42.0223** | **0.0869** | **9.2074** | **1.7323** | **10.9397** | **3.6543** | **1.6090** | **5.2633** | | **8,388.0534** | **8,388.0534** | **2.3559** | | **8,446.9511** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Building Grading/Site Prep - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 6.7500e-003 | 0.3990 | 0.0854 | 1.5500e-003 | 0.0454 | 3.3100e-003 | 0.0488 | 0.0125 | 3.1600e-003 | 0.0156 | | 169.2093 | 169.2093 | 6.4400e-003 | 0.0268 | 177.3674 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.3809 | 0.2435 | 3.5558 | 0.0125 | 1.5964 | 6.6900e-003 | 1.6031 | 0.4233 | 6.1600e-003 | 0.4295 | | 1,304.9496 | 1,304.9496 | 0.0223 | 0.0272 | 1,313.6112 |
| **Total** | **0.3877** | **0.6425** | **3.6412** | **0.0141** | **1.6418** | **0.0100** | **1.6518** | **0.4358** | **9.3200e-003** | **0.4451** | | **1,474.1589** | **1,474.1589** | **0.0287** | **0.0540** | **1,490.9786** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2074 | 0.0000 | 9.2074 | 3.6543 | 0.0000 | 3.6543 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1838 | 39.6116 | 42.0223 | 0.0869 | | 1.7323 | 1.7323 | | 1.6090 | 1.6090 | 0.0000 | 8,388.0534 | 8,388.0534 | 2.3559 | | 8,446.9511 |
| **Total** | **4.1838** | **39.6116** | **42.0223** | **0.0869** | **9.2074** | **1.7323** | **10.9397** | **3.6543** | **1.6090** | **5.2633** | **0.0000** | **8,388.0534** | **8,388.0534** | **2.3559** | | **8,446.9511** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Building Grading/Site Prep - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 6.7500e-003 | 0.3990 | 0.0854 | 1.5500e-003 | 0.0454 | 3.3100e-003 | 0.0488 | 0.0125 | 3.1600e-003 | 0.0156 | | 169.2093 | 169.2093 | 6.4400e-003 | 0.0268 | 177.3674 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.3809 | 0.2435 | 3.5558 | 0.0125 | 1.5964 | 6.6900e-003 | 1.6031 | 0.4233 | 6.1600e-003 | 0.4295 | | 1,304.9496 | 1,304.9496 | 0.0223 | 0.0272 | 1,313.6112 |
| **Total** | **0.3877** | **0.6425** | **3.6412** | **0.0141** | **1.6418** | **0.0100** | **1.6518** | **0.4358** | **9.3200e-003** | **0.4451** | | **1,474.1589** | **1,474.1589** | **0.0287** | **0.0540** | **1,490.9786** |

## 3.4 Plant Installation - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 6.9044 | 69.8046 | 52.4507 | 0.1212 | | 2.9108 | 2.9108 | | 2.6884 | 2.6884 | | 11,716.1610 | 11,716.1610 | 3.6117 | | 11,806.4545 |
| **Total** | **6.9044** | **69.8046** | **52.4507** | **0.1212** | | **2.9108** | **2.9108** | | **2.6884** | **2.6884** | | **11,716.1610** | **11,716.1610** | **3.6117** | | **11,806.4545** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0666 | 2.2797 | 0.7395 | 8.4600e-003 | 0.2695 | 0.0133 | 0.2828 | 0.0776 | 0.0128 | 0.0904 | | 907.5502 | 907.5502 | 0.0208 | 0.1332 | 947.7566 |
| Worker | 0.2971 | 0.1863 | 2.5352 | 8.0900e-003 | 0.9886 | 4.5100e-003 | 0.9931 | 0.2622 | 4.1500e-003 | 0.2664 | | 834.1779 | 834.1779 | 0.0197 | 0.0203 | 840.7141 |
| **Total** | **0.3636** | **2.4660** | **3.2747** | **0.0166** | **1.2581** | **0.0178** | **1.2760** | **0.3398** | **0.0169** | **0.3567** | | **1,741.7280** | **1,741.7280** | **0.0405** | **0.1535** | **1,788.4706** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 6.9044 | 69.8046 | 52.4507 | 0.1212 | | 2.9108 | 2.9108 | | 2.6884 | 2.6884 | 0.0000 | 11,716.1610 | 11,716.1610 | 3.6117 | | 11,806.4545 |
| **Total** | **6.9044** | **69.8046** | **52.4507** | **0.1212** | | **2.9108** | **2.9108** | | **2.6884** | **2.6884** | **0.0000** | **11,716.1610** | **11,716.1610** | **3.6117** | | **11,806.4545** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0666 | 2.2797 | 0.7395 | 8.4600e-003 | 0.2695 | 0.0133 | 0.2828 | 0.0776 | 0.0128 | 0.0904 | | 907.5502 | 907.5502 | 0.0208 | 0.1332 | 947.7566 |
| Worker | 0.2971 | 0.1863 | 2.5352 | 8.0900e-003 | 0.9886 | 4.5100e-003 | 0.9931 | 0.2622 | 4.1500e-003 | 0.2664 | | 834.1779 | 834.1779 | 0.0197 | 0.0203 | 840.7141 |
| **Total** | **0.3636** | **2.4660** | **3.2747** | **0.0166** | **1.2581** | **0.0178** | **1.2760** | **0.3398** | **0.0169** | **0.3567** | | **1,741.7280** | **1,741.7280** | **0.0405** | **0.1535** | **1,788.4706** |

## 3.4 Plant Installation - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 6.2832 | 61.3361 | 50.0940 | 0.1211 | | 2.5059 | 2.5059 | | 2.3143 | 2.3143 | | 11,713.1497 | 11,713.1497 | 3.6096 | | 11,803.3896 |
| **Total** | **6.2832** | **61.3361** | **50.0940** | **0.1211** | | **2.5059** | **2.5059** | | **2.3143** | **2.3143** | | **11,713.1497** | **11,713.1497** | **3.6096** | | **11,803.3896** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0645 | 2.2312 | 0.7282 | 8.3100e-003 | 0.2696 | 0.0130 | 0.2826 | 0.0777 | 0.0125 | 0.0901 | | 891.8046 | 891.8046 | 0.0211 | 0.1308 | 931.3016 |
| Worker | 0.2807 | 0.1674 | 2.3710 | 7.8200e-003 | 0.9886 | 4.3000e-003 | 0.9929 | 0.2622 | 3.9700e-003 | 0.2662 | | 815.0043 | 815.0043 | 0.0179 | 0.0190 | 821.1014 |
| **Total** | **0.3452** | **2.3986** | **3.0992** | **0.0161** | **1.2582** | **0.0173** | **1.2755** | **0.3399** | **0.0164** | **0.3563** | | **1,706.8088** | **1,706.8088** | **0.0390** | **0.1497** | **1,752.4029** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 6.2832 | 61.3361 | 50.0940 | 0.1211 | | 2.5059 | 2.5059 | | 2.3143 | 2.3143 | 0.0000 | 11,713.1497 | 11,713.1497 | 3.6096 | | 11,803.3896 |
| **Total** | **6.2832** | **61.3361** | **50.0940** | **0.1211** | | **2.5059** | **2.5059** | | **2.3143** | **2.3143** | **0.0000** | **11,713.1497** | **11,713.1497** | **3.6096** | | **11,803.3896** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0645 | 2.2312 | 0.7282 | 8.3100e-003 | 0.2696 | 0.0130 | 0.2826 | 0.0777 | 0.0125 | 0.0901 | | 891.8046 | 891.8046 | 0.0211 | 0.1308 | 931.3016 |
| Worker | 0.2807 | 0.1674 | 2.3710 | 7.8200e-003 | 0.9886 | 4.3000e-003 | 0.9929 | 0.2622 | 3.9700e-003 | 0.2662 | | 815.0043 | 815.0043 | 0.0179 | 0.0190 | 821.1014 |
| **Total** | **0.3452** | **2.3986** | **3.0992** | **0.0161** | **1.2582** | **0.0173** | **1.2755** | **0.3399** | **0.0164** | **0.3563** | | **1,706.8088** | **1,706.8088** | **0.0390** | **0.1497** | **1,752.4029** |

## 3.5 Building Construction - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 4.7248 | 42.2089 | 37.1822 | 0.1069 | | 1.6207 | 1.6207 | | 1.4999 | 1.4999 | | 10,330.3282 | 10,330.3282 | 3.1624 | | 10,409.3874 |
| **Total** | **4.7248** | **42.2089** | **37.1822** | **0.1069** | | **1.6207** | **1.6207** | | **1.4999** | **1.4999** | | **10,330.3282** | **10,330.3282** | **3.1624** | | **10,409.3874** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0645 | 2.2312 | 0.7282 | 8.3100e-003 | 0.2696 | 0.0130 | 0.2826 | 0.0777 | 0.0125 | 0.0901 | | 891.8046 | 891.8046 | 0.0211 | 0.1308 | 931.3016 |
| Worker | 0.2807 | 0.1674 | 2.3710 | 7.8200e-003 | 0.9886 | 4.3000e-003 | 0.9929 | 0.2622 | 3.9700e-003 | 0.2662 | | 815.0043 | 815.0043 | 0.0179 | 0.0190 | 821.1014 |
| **Total** | **0.3452** | **2.3986** | **3.0992** | **0.0161** | **1.2582** | **0.0173** | **1.2755** | **0.3399** | **0.0164** | **0.3563** | | **1,706.8088** | **1,706.8088** | **0.0390** | **0.1497** | **1,752.4029** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 4.7248 | 42.2089 | 37.1822 | 0.1069 | | 1.6207 | 1.6207 | | 1.4999 | 1.4999 | 0.0000 | 10,330.3282 | 10,330.3282 | 3.1624 | | 10,409.3873 |
| **Total** | **4.7248** | **42.2089** | **37.1822** | **0.1069** | | **1.6207** | **1.6207** | | **1.4999** | **1.4999** | **0.0000** | **10,330.3282** | **10,330.3282** | **3.1624** | | **10,409.3873** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0645 | 2.2312 | 0.7282 | 8.3100e-003 | 0.2696 | 0.0130 | 0.2826 | 0.0777 | 0.0125 | 0.0901 | | 891.8046 | 891.8046 | 0.0211 | 0.1308 | 931.3016 |
| Worker | 0.2807 | 0.1674 | 2.3710 | 7.8200e-003 | 0.9886 | 4.3000e-003 | 0.9929 | 0.2622 | 3.9700e-003 | 0.2662 | | 815.0043 | 815.0043 | 0.0179 | 0.0190 | 821.1014 |
| **Total** | **0.3452** | **2.3986** | **3.0992** | **0.0161** | **1.2582** | **0.0173** | **1.2755** | **0.3399** | **0.0164** | **0.3563** | | **1,706.8088** | **1,706.8088** | **0.0390** | **0.1497** | **1,752.4029** |

## 3.5 Building Construction - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 4.7248 | 42.2089 | 37.1822 | 0.1069 | | 1.6207 | 1.6207 | | 1.4999 | 1.4999 | | 10,330.3282 | 10,330.3282 | 3.1624 | | 10,409.3874 |
| **Total** | **4.7248** | **42.2089** | **37.1822** | **0.1069** | | **1.6207** | **1.6207** | | **1.4999** | **1.4999** | | **10,330.3282** | **10,330.3282** | **3.1624** | | **10,409.3874** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0626 | 2.1828 | 0.7196 | 8.1500e-003 | 0.2696 | 0.0127 | 0.2822 | 0.0777 | 0.0121 | 0.0898 | | 875.7938 | 875.7938 | 0.0214 | 0.1283 | 914.5704 |
| Worker | 0.2664 | 0.1517 | 2.2324 | 7.5800e-003 | 0.9886 | 4.1000e-003 | 0.9927 | 0.2622 | 3.7800e-003 | 0.2660 | | 796.5897 | 796.5897 | 0.0163 | 0.0179 | 802.3179 |
| **Total** | **0.3290** | **2.3345** | **2.9520** | **0.0157** | **1.2582** | **0.0168** | **1.2750** | **0.3399** | **0.0159** | **0.3558** | | **1,672.3835** | **1,672.3835** | **0.0378** | **0.1462** | **1,716.8883** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 4.7248 | 42.2089 | 37.1822 | 0.1069 | | 1.6207 | 1.6207 | | 1.4999 | 1.4999 | 0.0000 | 10,330.3282 | 10,330.3282 | 3.1624 | | 10,409.3873 |
| **Total** | **4.7248** | **42.2089** | **37.1822** | **0.1069** | | **1.6207** | **1.6207** | | **1.4999** | **1.4999** | **0.0000** | **10,330.3282** | **10,330.3282** | **3.1624** | | **10,409.3873** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0626 | 2.1828 | 0.7196 | 8.1500e-003 | 0.2696 | 0.0127 | 0.2822 | 0.0777 | 0.0121 | 0.0898 | | 875.7938 | 875.7938 | 0.0214 | 0.1283 | 914.5704 |
| Worker | 0.2664 | 0.1517 | 2.2324 | 7.5800e-003 | 0.9886 | 4.1000e-003 | 0.9927 | 0.2622 | 3.7800e-003 | 0.2660 | | 796.5897 | 796.5897 | 0.0163 | 0.0179 | 802.3179 |
| **Total** | **0.3290** | **2.3345** | **2.9520** | **0.0157** | **1.2582** | **0.0168** | **1.2750** | **0.3399** | **0.0159** | **0.3558** | | **1,672.3835** | **1,672.3835** | **0.0378** | **0.1462** | **1,716.8883** |

## 3.6 Demobilization - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | | **0.0000** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Demobilization - 2026

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0626 | 2.1828 | 0.7196 | 8.1500e-003 | 0.2696 | 0.0127 | 0.2822 | 0.0777 | 0.0121 | 0.0898 | | 875.7938 | 875.7938 | 0.0214 | 0.1283 | 914.5704 |
| Worker | 0.1066 | 0.0607 | 0.8930 | 3.0300e-003 | 0.3955 | 1.6400e-003 | 0.3971 | 0.1049 | 1.5100e-003 | 0.1064 | | 318.6359 | 318.6359 | 6.5400e-003 | 7.1400e-003 | 320.9272 |
| **Total** | **0.1692** | **2.2435** | **1.6126** | **0.0112** | **0.6650** | **0.0143** | **0.6793** | **0.1825** | **0.0136** | **0.1962** | | **1,194.4297** | **1,194.4297** | **0.0280** | **0.1355** | **1,235.4976** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 3.6 Demobilization - 2026

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0626 | 2.1828 | 0.7196 | 8.1500e-003 | 0.2696 | 0.0127 | 0.2822 | 0.0777 | 0.0121 | 0.0898 | | 875.7938 | 875.7938 | 0.0214 | 0.1283 | 914.5704 |
| Worker | 0.1066 | 0.0607 | 0.8930 | 3.0300e-003 | 0.3955 | 1.6400e-003 | 0.3971 | 0.1049 | 1.5100e-003 | 0.1064 | | 318.6359 | 318.6359 | 6.5400e-003 | 7.1400e-003 | 320.9272 |
| **Total** | **0.1692** | **2.2435** | **1.6126** | **0.0112** | **0.6650** | **0.0143** | **0.6793** | **0.1825** | **0.0136** | **0.1962** | | **1,194.4297** | **1,194.4297** | **0.0280** | **0.1355** | **1,235.4976** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0113 | 0.0131 | 0.0899 | 1.8000e-004 | 0.0201 | 1.7000e-004 | 0.0203 | 5.3700e-003 | 1.6000e-004 | 5.5300e-003 | | 19.2471 | 19.2471 | 1.2000e-003 | 9.2000e-004 | 19.5512 |
| Unmitigated | 0.0113 | 0.0131 | 0.0899 | 1.8000e-004 | 0.0201 | 1.7000e-004 | 0.0203 | 5.3700e-003 | 1.6000e-004 | 5.5300e-003 | | 19.2471 | 19.2471 | 1.2000e-003 | 9.2000e-004 | 19.5512 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Office Building | 0.00 | 0.00 | 0.00 | | |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Research & Development | 4.00 | 4.00 | 4.00 | 9,551 | 9,551 |
| Unrefrigerated Warehouse-No Rail | 0.00 | 0.00 | 0.00 | | |
| User Defined Industrial | 0.00 | 0.00 | 0.00 | | |
| User Defined Parking | 0.00 | 0.00 | 0.00 | | |
| Total | 4.00 | 4.00 | 4.00 | 9,551 | 9,551 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| General Office Building | 13.00 | 5.00 | 5.00 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| Other Non-Asphalt Surfaces | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Research & Development | 13.00 | 5.00 | 5.00 | 33.00 | 48.00 | 19.00 | 82 | 15 | 3 |
| Unrefrigerated Warehouse-No | 13.00 | 5.00 | 5.00 | 59.00 | 0.00 | 41.00 | 92 | 5 | 3 |
| User Defined Industrial | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| User Defined Parking | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Other Non-Asphalt Surfaces | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Research & Development | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Unrefrigerated Warehouse-No Rail | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| User Defined Industrial | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| User Defined Parking | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0344 | 0.3129 | 0.2629 | 1.8800e-003 | | 0.0238 | 0.0238 | | 0.0238 | 0.0238 | | 375.5141 | 375.5141 | 7.2000e-003 | 6.8800e-003 | 377.7456 |
| NaturalGas Unmitigated | 0.0344 | 0.3129 | 0.2629 | 1.8800e-003 | | 0.0238 | 0.0238 | | 0.0238 | 0.0238 | | 375.5141 | 375.5141 | 7.2000e-003 | 6.8800e-003 | 377.7456 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| General Office Building | 348.486 | 3.7600e-003 | 0.0342 | 0.0287 | 2.0000e-004 | | 2.6000e-003 | 2.6000e-003 | | 2.6000e-003 | 2.6000e-003 | | 40.9984 | 40.9984 | 7.9000e-004 | 7.5000e-004 | 41.2420 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 144.616 | 1.5600e-003 | 0.0142 | 0.0119 | 9.0000e-005 | | 1.0800e-003 | 1.0800e-003 | | 1.0800e-003 | 1.0800e-003 | | 17.0137 | 17.0137 | 3.3000e-004 | 3.1000e-004 | 17.1148 |
| Unrefrigerated Warehouse-No Rail | 2698.77 | 0.0291 | 0.2646 | 0.2223 | 1.5900e-003 | | 0.0201 | 0.0201 | | 0.0201 | 0.0201 | | 317.5020 | 317.5020 | 6.0900e-003 | 5.8200e-003 | 319.3888 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0344** | **0.3129** | **0.2629** | **1.8800e-003** | | **0.0238** | **0.0238** | | **0.0238** | **0.0238** | | **375.5141** | **375.5141** | **7.2100e-003** | **6.8800e-003** | **377.7456** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| General Office Building | 0.348486 | 3.7600e-003 | 0.0342 | 0.0287 | 2.0000e-004 | | 2.6000e-003 | 2.6000e-003 | | 2.6000e-003 | 2.6000e-003 | | 40.9984 | 40.9984 | 7.9000e-004 | 7.5000e-004 | 41.2420 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 0.144616 | 1.5600e-003 | 0.0142 | 0.0119 | 9.0000e-005 | | 1.0800e-003 | 1.0800e-003 | | 1.0800e-003 | 1.0800e-003 | | 17.0137 | 17.0137 | 3.3000e-004 | 3.1000e-004 | 17.1148 |
| Unrefrigerated Warehouse-No Rail | 2.69877 | 0.0291 | 0.2646 | 0.2223 | 1.5900e-003 | | 0.0201 | 0.0201 | | 0.0201 | 0.0201 | | 317.5020 | 317.5020 | 6.0900e-003 | 5.8200e-003 | 319.3888 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0344** | **0.3129** | **0.2629** | **1.8800e-003** | | **0.0238** | **0.0238** | | **0.0238** | **0.0238** | | **375.5141** | **375.5141** | **7.2100e-003** | **6.8800e-003** | **377.7456** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 3.9650 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| Unmitigated | 3.9650 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.9085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.0552 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.3500e-003 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| **Total** | **3.9650** | **1.3000e-004** | **0.0147** | **0.0000** | | **5.0000e-005** | **5.0000e-005** | | **5.0000e-005** | **5.0000e-005** | | **0.0316** | **0.0316** | **8.0000e-005** | | **0.0336** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.9085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.0552 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.3500e-003 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| **Total** | **3.9650** | **1.3000e-004** | **0.0147** | **0.0000** | | **5.0000e-005** | **5.0000e-005** | | **5.0000e-005** | **5.0000e-005** | | **0.0316** | **0.0316** | **8.0000e-005** | | **0.0336** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|
| Emergency Generator | 1 | 1 | 100 | 500 | 0.73 | CNG |

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 10.1 Stationary Sources

**Unmitigated/Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Type | lb/day | | | | | | | | | | lb/day | | | | | |
| Emergency Generator - CNG (500 - 9999 HP) | 4.3990 | 0.3388 | 11.4571 | 1.5300e-003 | | 0.0243 | 0.0243 | | 0.0243 | 0.0243 | | 281.0547 | 281.0547 | 0.5877 | | 295.7462 |
| **Total** | **4.3990** | **0.3388** | **11.4571** | **1.5300e-003** | | **0.0243** | **0.0243** | | **0.0243** | **0.0243** | | **281.0547** | **281.0547** | **0.5877** | | **295.7462** |

## 11.0 Vegetation

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

# San Miguel WWTP Upgrade/Expansion Project

**San Luis Obispo County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| General Office Building | 9.85 | 1000sqft | 0.00 | 9,845.00 | 0 |
| Research & Development | 2.55 | 1000sqft | 0.00 | 2,550.00 | 0 |
| Unrefrigerated Warehouse-No Rail | 55.00 | 1000sqft | 18.64 | 55,000.00 | 0 |
| User Defined Industrial | 71.83 | User Defined Unit | 1.65 | 71,825.64 | 0 |
| Other Non-Asphalt Surfaces | 3.80 | Acre | 3.80 | 165,528.00 | 0 |
| User Defined Parking | 1.12 | User Defined Unit | 1.12 | 48,784.70 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 3.2 | **Precipitation Freq (Days)** | 44 |
| **Climate Zone** | 3 | | | **Operational Year** | 2026 |
| **Utility Company** | Pacific Gas and Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 203.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on Project Description.

Land Use - WWTF: 18.64-acres
Percolation Pond: 1.65-acres
Tranmission Line: 1.12-acres

Construction Phase - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Off-road Equipment - See SMCSD Construction Schedule.

Trips and VMT - 50 workers for first four phases, then 20 workers for Demobilization phase. Per SMCSD Updated Contruction Schedule. Hauling trip length based on information from SMCSD.

Grading - From Project Description.

Vehicle Trips - Per Project Description, only 2 additional employees.

Energy Use - Pump energy use added to warehouse.

Water And Wastewater - Based on information from SMCSD.

Construction Off-road Equipment Mitigation - In accordance with SLOCAPCD Rule 401.

Energy Mitigation - Based on information provided by SMCSD.

Stationary Sources - Emergency Generators and Fire Pumps - Based on information provided by SMCSD.

Operational Off-Road Equipment -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 45.00 | 89.00 |
| tblConstructionPhase | NumDays | 45.00 | 87.00 |
| tblConstructionPhase | NumDays | 440.00 | 129.00 |
| tblConstructionPhase | NumDays | 440.00 | 130.00 |
| tblConstructionPhase | NumDays | 440.00 | 44.00 |
| tblConstructionPhase | PhaseEndDate | 8/30/2024 | 10/31/2024 |
| tblConstructionPhase | PhaseEndDate | 11/1/2024 | 8/31/2025 |
| tblConstructionPhase | PhaseEndDate | 7/10/2026 | 4/30/2025 |
| tblConstructionPhase | PhaseEndDate | 3/17/2028 | 2/28/2026 |
| tblConstructionPhase | PhaseEndDate | 11/23/2029 | 4/30/2026 |
| tblConstructionPhase | PhaseStartDate | 8/31/2024 | 5/1/2025 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblConstructionPhase | PhaseStartDate | 11/2/2024 | 11/1/2024 |
| tblConstructionPhase | PhaseStartDate | 7/11/2026 | 9/1/2025 |
| tblConstructionPhase | PhaseStartDate | 3/18/2028 | 3/1/2026 |
| tblEnergyUse | LightingElect | 3.22 | 0.00 |
| tblEnergyUse | NT24E | 5.13 | 0.00 |
| tblEnergyUse | T24E | 0.93 | 24.11 |
| tblGrading | MaterialExported | 0.00 | 3,675.00 |
| tblGrading | MaterialExported | 0.00 | 1,810.00 |
| tblLandUse | LandUseSquareFeet | 9,850.00 | 9,845.00 |
| tblLandUse | LandUseSquareFeet | 0.00 | 71,825.64 |
| tblLandUse | LandUseSquareFeet | 0.00 | 48,784.70 |
| tblLandUse | LotAcreage | 0.23 | 0.00 |
| tblLandUse | LotAcreage | 0.06 | 0.00 |
| tblLandUse | LotAcreage | 1.26 | 18.64 |
| tblLandUse | LotAcreage | 0.00 | 1.65 |
| tblLandUse | LotAcreage | 0.00 | 1.12 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.37 | 0.37 |
| tblOffRoadEquipment | LoadFactor | 0.41 | 0.41 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.50 | 0.50 |
| tblOffRoadEquipment | LoadFactor | 0.48 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.20 | 0.20 |
| tblOffRoadEquipment | LoadFactor | 0.44 | 0.44 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.50 | 0.50 |
| tblOffRoadEquipment | LoadFactor | 0.41 | 0.41 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | LoadFactor | 0.44 | 0.44 |
| tblOffRoadEquipment | LoadFactor | 0.38 | 0.38 |
| tblOffRoadEquipment | LoadFactor | 0.40 | 0.40 |
| tblOffRoadEquipment | LoadFactor | 0.48 | 0.48 |
| tblOffRoadEquipment | LoadFactor | 0.37 | 0.37 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Tractors/Loaders/Backhoes |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Trenchers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Generator Sets |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Excavators |
| tblOffRoadEquipment | OffRoadEquipmentType | | Crushing/Proc. Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType | | Generator Sets |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Trenchers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Crushing/Proc. Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Tractors |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rollers |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Dozers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | | Tractors/Loaders/Backhoes |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 2.00 |
| tblOffRoadEquipment | UsageHours | 7.00 | 8.00 |
| tblStationaryGeneratorsPumpsUse | HorsePowerValue | 0.00 | 500.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerDay | 0.00 | 1.00 |
| tblStationaryGeneratorsPumpsUse | HoursPerYear | 0.00 | 100.00 |
| tblStationaryGeneratorsPumpsUse | NumberOfEquipment | 0.00 | 1.00 |
| tblTripsAndVMT | WorkerTripLength | 13.00 | 21.00 |
| tblTripsAndVMT | WorkerTripLength | 13.00 | 21.00 |
| tblTripsAndVMT | WorkerTripNumber | 35.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 38.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 100.00 |
| tblTripsAndVMT | WorkerTripNumber | 147.00 | 40.00 |
| tblVehicleTrips | ST_TR | 2.21 | 0.00 |
| tblVehicleTrips | ST_TR | 1.90 | 1.57 |
| tblVehicleTrips | ST_TR | 1.74 | 0.00 |
| tblVehicleTrips | SU_TR | 0.70 | 0.00 |
| tblVehicleTrips | SU_TR | 1.11 | 1.57 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | |
|---|---|---|---|
| tblVehicleTrips | SU_TR | 1.74 | 0.00 |
| tblVehicleTrips | WD_TR | 9.74 | 0.00 |
| tblVehicleTrips | WD_TR | 11.26 | 1.57 |
| tblVehicleTrips | WD_TR | 1.74 | 0.00 |
| tblWater | IndoorWaterUseRate | 12,718,750.00 | 0.00 |

## 2.0 Emissions Summary

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2024 | 7.2983 | 72.3730 | 55.6990 | 0.1374 | 10.8978 | 2.9287 | 12.8530 | 4.1029 | 2.7053 | 5.9198 | 0.0000 | 13,424.6147 | 13,424.6147 | 3.6536 | 0.1556 | 13,562.3245 |
| 2025 | 6.6576 | 63.8340 | 53.1741 | 0.1370 | 10.8492 | 2.5233 | 12.5916 | 4.0901 | 2.3308 | 5.7084 | 0.0000 | 13,387.6049 | 13,387.6049 | 3.6499 | 0.1518 | 13,524.0741 |
| 2026 | 5.0822 | 44.6400 | 40.1204 | 0.1223 | 1.2582 | 1.6375 | 2.8957 | 0.3399 | 1.5159 | 1.8558 | 0.0000 | 11,971.2158 | 11,971.2158 | 3.2014 | 0.1481 | 12,095.3826 |
| **Maximum** | **7.2983** | **72.3730** | **55.6990** | **0.1374** | **10.8978** | **2.9287** | **12.8530** | **4.1029** | **2.7053** | **5.9198** | **0.0000** | **13,424.6147** | **13,424.6147** | **3.6536** | **0.1556** | **13,562.3245** |

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2024 | 7.2983 | 72.3730 | 55.6990 | 0.1374 | 10.8978 | 2.9287 | 12.8530 | 4.1029 | 2.7053 | 5.9198 | 0.0000 | 13,424.6147 | 13,424.6147 | 3.6536 | 0.1556 | 13,562.3245 |
| 2025 | 6.6576 | 63.8340 | 53.1741 | 0.1370 | 10.8492 | 2.5233 | 12.5916 | 4.0901 | 2.3308 | 5.7084 | 0.0000 | 13,387.6048 | 13,387.6048 | 3.6499 | 0.1518 | 13,524.0741 |
| 2026 | 5.0822 | 44.6400 | 40.1204 | 0.1223 | 1.2582 | 1.6375 | 2.8957 | 0.3399 | 1.5159 | 1.8558 | 0.0000 | 11,971.2158 | 11,971.2158 | 3.2014 | 0.1481 | 12,095.3826 |
| **Maximum** | **7.2983** | **72.3730** | **55.6990** | **0.1374** | **10.8978** | **2.9287** | **12.8530** | **4.1029** | **2.7053** | **5.9198** | **0.0000** | **13,424.6147** | **13,424.6147** | **3.6536** | **0.1556** | **13,562.3245** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 3.9650 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| Energy | 0.0344 | 0.3129 | 0.2629 | 1.8800e-003 | | 0.0238 | 0.0238 | | 0.0238 | 0.0238 | | 375.5141 | 375.5141 | 7.2000e-003 | 6.8800e-003 | 377.7456 |
| Mobile | 0.0110 | 0.0141 | 0.0958 | 1.8000e-004 | 0.0201 | 1.7000e-004 | 0.0203 | 5.3700e-003 | 1.6000e-004 | 5.5300e-003 | | 18.6646 | 18.6646 | 1.3000e-003 | 9.7000e-004 | 18.9866 |
| Stationary | 4.3990 | 0.3388 | 11.4571 | 1.5300e-003 | | 0.0243 | 0.0243 | | 0.0243 | 0.0243 | | 281.0547 | 281.0547 | 0.5877 | | 295.7462 |
| **Total** | **8.4094** | **0.6660** | **11.8305** | **3.5900e-003** | **0.0201** | **0.0483** | **0.0684** | **5.3700e-003** | **0.0483** | **0.0536** | | **675.2650** | **675.2650** | **0.5962** | **7.8500e-003** | **692.5120** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 2.2 Overall Operational

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 3.9650 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| Energy | 0.0344 | 0.3129 | 0.2629 | 1.8800e-003 | | 0.0238 | 0.0238 | | 0.0238 | 0.0238 | | 375.5141 | 375.5141 | 7.2000e-003 | 6.8800e-003 | 377.7456 |
| Mobile | 0.0110 | 0.0141 | 0.0958 | 1.8000e-004 | 0.0201 | 1.7000e-004 | 0.0203 | 5.3700e-003 | 1.6000e-004 | 5.5300e-003 | | 18.6646 | 18.6646 | 1.3000e-003 | 9.7000e-004 | 18.9866 |
| Stationary | 4.3990 | 0.3388 | 11.4571 | 1.5300e-003 | | 0.0243 | 0.0243 | | 0.0243 | 0.0243 | | 281.0547 | 281.0547 | 0.5877 | | 295.7462 |
| **Total** | **8.4094** | **0.6660** | **11.8305** | **3.5900e-003** | **0.0201** | **0.0483** | **0.0684** | **5.3700e-003** | **0.0483** | **0.0536** | | **675.2650** | **675.2650** | **0.5962** | **7.8500e-003** | **692.5120** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

### Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Plant Grading/Site Prep | Grading | 7/1/2024 | 10/31/2024 | 5 | 89 | |
| 2 | Building Grading/Site Prep | Grading | 5/1/2025 | 8/31/2025 | 5 | 87 | |
| 3 | Plant Installation | Building Construction | 11/1/2024 | 4/30/2025 | 5 | 129 | |
| 4 | Building Construction | Building Construction | 9/1/2025 | 2/28/2026 | 5 | 130 | |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | Demobilization | Building Construction | 3/1/2026 | 4/30/2026 | 5 | 44 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 267**

**Acres of Paving: 4.92**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Building Grading/Site Prep | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Grading/Site Prep | Graders | 1 | 8.00 | 187 | 0.41 |
| Plant Grading/Site Prep | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Plant Grading/Site Prep | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Plant Grading/Site Prep | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Construction | Off-Highway Trucks | 2 | 8.00 | 402 | 0.38 |
| Building Construction | Graders | 3 | 8.00 | 187 | 0.41 |
| Building Construction | Rollers | 3 | 8.00 | 80 | 0.38 |
| Building Construction | Scrapers | 3 | 8.00 | 367 | 0.48 |
| Building Construction | Crushing/Proc. Equipment | 1 | 8.00 | 85 | 0.78 |
| Building Grading/Site Prep | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |
| Building Grading/Site Prep | Rollers | 1 | 8.00 | 80 | 0.38 |
| Building Grading/Site Prep | Trenchers | 1 | 8.00 | 78 | 0.50 |
| Building Grading/Site Prep | Generator Sets | 2 | 8.00 | 84 | 0.74 |
| Building Grading/Site Prep | Excavators | 1 | 8.00 | 158 | 0.38 |
| Demobilization | Cranes | 0 | 7.00 | 231 | 0.29 |
| Demobilization | Forklifts | 0 | 8.00 | 89 | 0.20 |
| Demobilization | Generator Sets | 0 | 8.00 | 84 | 0.74 |
| Demobilization | Tractors/Loaders/Backhoes | 0 | 7.00 | 97 | 0.37 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | | | | | |
|---|---|---|---|---|---|
| Demobilization | Welders | 0 | 8.00 | 46 | 0.45 |
| Plant Grading/Site Prep | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Plant Grading/Site Prep | Generator Sets | 2 | 8.00 | 84 | 0.74 |
| Plant Grading/Site Prep | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Grading/Site Prep | Rollers | 1 | 8.00 | 80 | 0.38 |
| Plant Grading/Site Prep | Trenchers | 1 | 8.00 | 78 | 0.50 |
| Building Grading/Site Prep | Graders | 1 | 8.00 | 187 | 0.41 |
| Building Grading/Site Prep | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Building Grading/Site Prep | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Grading/Site Prep | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Plant Installation | Crushing/Proc. Equipment | 1 | 8.00 | 85 | 0.78 |
| Plant Installation | Graders | 3 | 8.00 | 187 | 0.41 |
| Plant Installation | Off-Highway Tractors | 2 | 8.00 | 124 | 0.44 |
| Plant Installation | Rollers | 3 | 8.00 | 80 | 0.38 |
| Plant Installation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Plant Installation | Scrapers | 3 | 8.00 | 367 | 0.48 |
| Plant Installation | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Plant Grading/Site Prep | 14 | 100.00 | 0.00 | 459.00 | 21.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Plant Installation | 17 | 100.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Grading/Site Prep | 15 | 100.00 | 0.00 | 226.00 | 21.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 12 | 100.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Demobilization | 0 | 40.00 | 58.00 | 0.00 | 13.00 | 5.00 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## 3.2 Plant Grading/Site Prep - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2112 | 0.0000 | 9.2112 | 3.6549 | 0.0000 | 3.6549 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.4012 | 43.4055 | 40.1193 | 0.0817 | | 1.9415 | 1.9415 | | 1.8039 | 1.8039 | | 7,880.7503 | 7,880.7503 | 2.1962 | | 7,935.6558 |
| **Total** | **4.4012** | **43.4055** | **40.1193** | **0.0817** | **9.2112** | **1.9415** | **11.1527** | **3.6549** | **1.8039** | **5.4588** | | **7,880.7503** | **7,880.7503** | **2.1962** | | **7,935.6558** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Plant Grading/Site Prep - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0131 | 0.8428 | 0.1701 | 3.1500e-003 | 0.0902 | 6.7300e-003 | 0.0969 | 0.0247 | 6.4400e-003 | 0.0312 | | 343.2425 | 343.2425 | 0.0125 | 0.0544 | 359.7687 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.4597 | 0.3086 | 3.6380 | 0.0124 | 1.5964 | 7.0000e-003 | 1.6034 | 0.4233 | 6.4500e-003 | 0.4298 | | 1,279.3595 | 1,279.3595 | 0.0258 | 0.0317 | 1,289.4434 |
| **Total** | **0.4728** | **1.1514** | **3.8081** | **0.0156** | **1.6866** | **0.0137** | **1.7003** | **0.4480** | **0.0129** | **0.4609** | | **1,622.6020** | **1,622.6020** | **0.0382** | **0.0861** | **1,649.2122** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2112 | 0.0000 | 9.2112 | 3.6549 | 0.0000 | 3.6549 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.4012 | 43.4055 | 40.1193 | 0.0817 | | 1.9415 | 1.9415 | | 1.8039 | 1.8039 | 0.0000 | 7,880.7503 | 7,880.7503 | 2.1962 | | 7,935.6558 |
| **Total** | **4.4012** | **43.4055** | **40.1193** | **0.0817** | **9.2112** | **1.9415** | **11.1527** | **3.6549** | **1.8039** | **5.4588** | **0.0000** | **7,880.7503** | **7,880.7503** | **2.1962** | | **7,935.6558** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.2 Plant Grading/Site Prep - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0131 | 0.8428 | 0.1701 | 3.1500e-003 | 0.0902 | 6.7300e-003 | 0.0969 | 0.0247 | 6.4400e-003 | 0.0312 | | 343.2425 | 343.2425 | 0.0125 | 0.0544 | 359.7687 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.4597 | 0.3086 | 3.6380 | 0.0124 | 1.5964 | 7.0000e-003 | 1.6034 | 0.4233 | 6.4500e-003 | 0.4298 | | 1,279.3595 | 1,279.3595 | 0.0258 | 0.0317 | 1,289.4434 |
| **Total** | **0.4728** | **1.1514** | **3.8081** | **0.0156** | **1.6866** | **0.0137** | **1.7003** | **0.4480** | **0.0129** | **0.4609** | | **1,622.6020** | **1,622.6020** | **0.0382** | **0.0861** | **1,649.2122** |

## 3.3 Building Grading/Site Prep - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2074 | 0.0000 | 9.2074 | 3.6543 | 0.0000 | 3.6543 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1838 | 39.6116 | 42.0223 | 0.0869 | | 1.7323 | 1.7323 | | 1.6090 | 1.6090 | | 8,388.0534 | 8,388.0534 | 2.3559 | | 8,446.9511 |
| **Total** | **4.1838** | **39.6116** | **42.0223** | **0.0869** | **9.2074** | **1.7323** | **10.9397** | **3.6543** | **1.6090** | **5.2633** | | **8,388.0534** | **8,388.0534** | **2.3559** | | **8,446.9511** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Building Grading/Site Prep - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 6.4100e-003 | 0.4106 | 0.0867 | 1.5500e-003 | 0.0454 | 3.3100e-003 | 0.0488 | 0.0125 | 3.1700e-003 | 0.0156 | | 169.3564 | 169.3564 | 6.4300e-003 | 0.0269 | 177.5210 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.4367 | 0.2761 | 3.3983 | 0.0120 | 1.5964 | 6.6900e-003 | 1.6031 | 0.4233 | 6.1600e-003 | 0.4295 | | 1,250.0638 | 1,250.0638 | 0.0234 | 0.0295 | 1,259.4459 |
| **Total** | **0.4432** | **0.6867** | **3.4849** | **0.0136** | **1.6418** | **0.0100** | **1.6518** | **0.4358** | **9.3300e-003** | **0.4451** | | **1,419.4202** | **1,419.4202** | **0.0298** | **0.0564** | **1,436.9670** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 9.2074 | 0.0000 | 9.2074 | 3.6543 | 0.0000 | 3.6543 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1838 | 39.6116 | 42.0223 | 0.0869 | | 1.7323 | 1.7323 | | 1.6090 | 1.6090 | 0.0000 | 8,388.0534 | 8,388.0534 | 2.3559 | | 8,446.9511 |
| **Total** | **4.1838** | **39.6116** | **42.0223** | **0.0869** | **9.2074** | **1.7323** | **10.9397** | **3.6543** | **1.6090** | **5.2633** | **0.0000** | **8,388.0534** | **8,388.0534** | **2.3559** | | **8,446.9511** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.3 Building Grading/Site Prep - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 6.4100e-003 | 0.4106 | 0.0867 | 1.5500e-003 | 0.0454 | 3.3100e-003 | 0.0488 | 0.0125 | 3.1700e-003 | 0.0156 | | 169.3564 | 169.3564 | 6.4300e-003 | 0.0269 | 177.5210 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.4367 | 0.2761 | 3.3983 | 0.0120 | 1.5964 | 6.6900e-003 | 1.6031 | 0.4233 | 6.1600e-003 | 0.4295 | | 1,250.0638 | 1,250.0638 | 0.0234 | 0.0295 | 1,259.4459 |
| **Total** | **0.4432** | **0.6867** | **3.4849** | **0.0136** | **1.6418** | **0.0100** | **1.6518** | **0.4358** | **9.3300e-003** | **0.4451** | | **1,419.4202** | **1,419.4202** | **0.0298** | **0.0564** | **1,436.9670** |

## 3.4 Plant Installation - 2024

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 6.9044 | 69.8046 | 52.4507 | 0.1212 | | 2.9108 | 2.9108 | | 2.6884 | 2.6884 | | 11,716.1610 | 11,716.1610 | 3.6117 | | 11,806.4545 |
| **Total** | **6.9044** | **69.8046** | **52.4507** | **0.1212** | | **2.9108** | **2.9108** | | **2.6884** | **2.6884** | | **11,716.1610** | **11,716.1610** | **3.6117** | | **11,806.4545** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0649 | 2.3569 | 0.7685 | 8.4800e-003 | 0.2695 | 0.0134 | 0.2829 | 0.0776 | 0.0128 | 0.0905 | | 909.1334 | 909.1334 | 0.0206 | 0.1335 | 949.4417 |
| Worker | 0.3290 | 0.2116 | 2.4799 | 7.7500e-003 | 0.9886 | 4.5100e-003 | 0.9931 | 0.2622 | 4.1500e-003 | 0.2664 | | 799.3203 | 799.3203 | 0.0213 | 0.0221 | 806.4282 |
| **Total** | **0.3939** | **2.5684** | **3.2484** | **0.0162** | **1.2581** | **0.0179** | **1.2760** | **0.3398** | **0.0170** | **0.3568** | | **1,708.4537** | **1,708.4537** | **0.0419** | **0.1556** | **1,755.8700** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 6.9044 | 69.8046 | 52.4507 | 0.1212 | | 2.9108 | 2.9108 | | 2.6884 | 2.6884 | 0.0000 | 11,716.1610 | 11,716.1610 | 3.6117 | | 11,806.4545 |
| **Total** | **6.9044** | **69.8046** | **52.4507** | **0.1212** | | **2.9108** | **2.9108** | | **2.6884** | **2.6884** | **0.0000** | **11,716.1610** | **11,716.1610** | **3.6117** | | **11,806.4545** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0649 | 2.3569 | 0.7685 | 8.4800e-003 | 0.2695 | 0.0134 | 0.2829 | 0.0776 | 0.0128 | 0.0905 | | 909.1334 | 909.1334 | 0.0206 | 0.1335 | 949.4417 |
| Worker | 0.3290 | 0.2116 | 2.4799 | 7.7500e-003 | 0.9886 | 4.5100e-003 | 0.9931 | 0.2622 | 4.1500e-003 | 0.2664 | | 799.3203 | 799.3203 | 0.0213 | 0.0221 | 806.4282 |
| **Total** | **0.3939** | **2.5684** | **3.2484** | **0.0162** | **1.2581** | **0.0179** | **1.2760** | **0.3398** | **0.0170** | **0.3568** | | **1,708.4537** | **1,708.4537** | **0.0419** | **0.1556** | **1,755.8700** |

## 3.4 Plant Installation - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 6.2832 | 61.3361 | 50.0940 | 0.1211 | | 2.5059 | 2.5059 | | 2.3143 | 2.3143 | | 11,713.1497 | 11,713.1497 | 3.6096 | | 11,803.3896 |
| **Total** | **6.2832** | **61.3361** | **50.0940** | **0.1211** | | **2.5059** | **2.5059** | | **2.3143** | **2.3143** | | **11,713.1497** | **11,713.1497** | **3.6096** | | **11,803.3896** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0627 | 2.3078 | 0.7569 | 8.3200e-003 | 0.2696 | 0.0131 | 0.2826 | 0.0777 | 0.0125 | 0.0902 | | 893.4317 | 893.4317 | 0.0210 | 0.1311 | 933.0302 |
| Worker | 0.3117 | 0.1901 | 2.3232 | 7.5000e-003 | 0.9886 | 4.3000e-003 | 0.9929 | 0.2622 | 3.9700e-003 | 0.2662 | | 781.0235 | 781.0235 | 0.0194 | 0.0206 | 787.6543 |
| **Total** | **0.3743** | **2.4979** | **3.0800** | **0.0158** | **1.2582** | **0.0174** | **1.2756** | **0.3399** | **0.0165** | **0.3563** | | **1,674.4552** | **1,674.4552** | **0.0403** | **0.1518** | **1,720.6845** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 6.2832 | 61.3361 | 50.0940 | 0.1211 | | 2.5059 | 2.5059 | | 2.3143 | 2.3143 | 0.0000 | 11,713.1497 | 11,713.1497 | 3.6096 | | 11,803.3896 |
| **Total** | **6.2832** | **61.3361** | **50.0940** | **0.1211** | | **2.5059** | **2.5059** | | **2.3143** | **2.3143** | **0.0000** | **11,713.1497** | **11,713.1497** | **3.6096** | | **11,803.3896** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.4 Plant Installation - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0627 | 2.3078 | 0.7569 | 8.3200e-003 | 0.2696 | 0.0131 | 0.2826 | 0.0777 | 0.0125 | 0.0902 | | 893.4317 | 893.4317 | 0.0210 | 0.1311 | 933.0302 |
| Worker | 0.3117 | 0.1901 | 2.3232 | 7.5000e-003 | 0.9886 | 4.3000e-003 | 0.9929 | 0.2622 | 3.9700e-003 | 0.2662 | | 781.0235 | 781.0235 | 0.0194 | 0.0206 | 787.6543 |
| **Total** | **0.3743** | **2.4979** | **3.0800** | **0.0158** | **1.2582** | **0.0174** | **1.2756** | **0.3399** | **0.0165** | **0.3563** | | **1,674.4552** | **1,674.4552** | **0.0403** | **0.1518** | **1,720.6845** |

## 3.5 Building Construction - 2025

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 4.7248 | 42.2089 | 37.1822 | 0.1069 | | 1.6207 | 1.6207 | | 1.4999 | 1.4999 | | 10,330.3282 | 10,330.3282 | 3.1624 | | 10,409.3874 |
| **Total** | **4.7248** | **42.2089** | **37.1822** | **0.1069** | | **1.6207** | **1.6207** | | **1.4999** | **1.4999** | | **10,330.3282** | **10,330.3282** | **3.1624** | | **10,409.3874** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0627 | 2.3078 | 0.7569 | 8.3200e-003 | 0.2696 | 0.0131 | 0.2826 | 0.0777 | 0.0125 | 0.0902 | | 893.4317 | 893.4317 | 0.0210 | 0.1311 | 933.0302 |
| Worker | 0.3117 | 0.1901 | 2.3232 | 7.5000e-003 | 0.9886 | 4.3000e-003 | 0.9929 | 0.2622 | 3.9700e-003 | 0.2662 | | 781.0235 | 781.0235 | 0.0194 | 0.0206 | 787.6543 |
| **Total** | **0.3743** | **2.4979** | **3.0800** | **0.0158** | **1.2582** | **0.0174** | **1.2756** | **0.3399** | **0.0165** | **0.3563** | | **1,674.4552** | **1,674.4552** | **0.0403** | **0.1518** | **1,720.6845** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 4.7248 | 42.2089 | 37.1822 | 0.1069 | | 1.6207 | 1.6207 | | 1.4999 | 1.4999 | 0.0000 | 10,330.3282 | 10,330.3282 | 3.1624 | | 10,409.3873 |
| **Total** | **4.7248** | **42.2089** | **37.1822** | **0.1069** | | **1.6207** | **1.6207** | | **1.4999** | **1.4999** | **0.0000** | **10,330.3282** | **10,330.3282** | **3.1624** | | **10,409.3873** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2025

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0627 | 2.3078 | 0.7569 | 8.3200e-003 | 0.2696 | 0.0131 | 0.2826 | 0.0777 | 0.0125 | 0.0902 | | 893.4317 | 893.4317 | 0.0210 | 0.1311 | 933.0302 |
| Worker | 0.3117 | 0.1901 | 2.3232 | 7.5000e-003 | 0.9886 | 4.3000e-003 | 0.9929 | 0.2622 | 3.9700e-003 | 0.2662 | | 781.0235 | 781.0235 | 0.0194 | 0.0206 | 787.6543 |
| **Total** | **0.3743** | **2.4979** | **3.0800** | **0.0158** | **1.2582** | **0.0174** | **1.2756** | **0.3399** | **0.0165** | **0.3563** | | **1,674.4552** | **1,674.4552** | **0.0403** | **0.1518** | **1,720.6845** |

## 3.5 Building Construction - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 4.7248 | 42.2089 | 37.1822 | 0.1069 | | 1.6207 | 1.6207 | | 1.4999 | 1.4999 | | 10,330.3282 | 10,330.3282 | 3.1624 | | 10,409.3874 |
| **Total** | **4.7248** | **42.2089** | **37.1822** | **0.1069** | | **1.6207** | **1.6207** | | **1.4999** | **1.4999** | | **10,330.3282** | **10,330.3282** | **3.1624** | | **10,409.3874** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0606 | 2.2588 | 0.7480 | 8.1700e-003 | 0.2696 | 0.0127 | 0.2823 | 0.0777 | 0.0122 | 0.0898 | | 877.4556 | 877.4556 | 0.0213 | 0.1287 | 916.3333 |
| Worker | 0.2967 | 0.1723 | 2.1903 | 7.2700e-003 | 0.9886 | 4.1000e-003 | 0.9927 | 0.2622 | 3.7800e-003 | 0.2660 | | 763.4320 | 763.4320 | 0.0177 | 0.0194 | 769.6620 |
| **Total** | **0.3573** | **2.4311** | **2.9382** | **0.0154** | **1.2582** | **0.0168** | **1.2750** | **0.3399** | **0.0160** | **0.3558** | | **1,640.8876** | **1,640.8876** | **0.0390** | **0.1481** | **1,685.9953** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 4.7248 | 42.2089 | 37.1822 | 0.1069 | | 1.6207 | 1.6207 | | 1.4999 | 1.4999 | 0.0000 | 10,330.3282 | 10,330.3282 | 3.1624 | | 10,409.3873 |
| **Total** | **4.7248** | **42.2089** | **37.1822** | **0.1069** | | **1.6207** | **1.6207** | | **1.4999** | **1.4999** | **0.0000** | **10,330.3282** | **10,330.3282** | **3.1624** | | **10,409.3873** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.5 Building Construction - 2026

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0606 | 2.2588 | 0.7480 | 8.1700e-003 | 0.2696 | 0.0127 | 0.2823 | 0.0777 | 0.0122 | 0.0898 | | 877.4556 | 877.4556 | 0.0213 | 0.1287 | 916.3333 |
| Worker | 0.2967 | 0.1723 | 2.1903 | 7.2700e-003 | 0.9886 | 4.1000e-003 | 0.9927 | 0.2622 | 3.7800e-003 | 0.2660 | | 763.4320 | 763.4320 | 0.0177 | 0.0194 | 769.6620 |
| **Total** | **0.3573** | **2.4311** | **2.9382** | **0.0154** | **1.2582** | **0.0168** | **1.2750** | **0.3399** | **0.0160** | **0.3558** | | **1,640.8876** | **1,640.8876** | **0.0390** | **0.1481** | **1,685.9953** |

## 3.6 Demobilization - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | | **0.0000** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 3.6 Demobilization - 2026

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0606 | 2.2588 | 0.7480 | 8.1700e-003 | 0.2696 | 0.0127 | 0.2823 | 0.0777 | 0.0122 | 0.0898 | | 877.4556 | 877.4556 | 0.0213 | 0.1287 | 916.3333 |
| Worker | 0.1187 | 0.0689 | 0.8761 | 2.9100e-003 | 0.3955 | 1.6400e-003 | 0.3971 | 0.1049 | 1.5100e-003 | 0.1064 | | 305.3728 | 305.3728 | 7.0900e-003 | 7.7700e-003 | 307.8648 |
| **Total** | **0.1793** | **2.3277** | **1.6241** | **0.0111** | **0.6650** | **0.0144** | **0.6794** | **0.1825** | **0.0137** | **0.1962** | | **1,182.8284** | **1,182.8284** | **0.0284** | **0.1365** | **1,224.1981** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| **Total** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | | **0.0000** |

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 3.6 Demobilization - 2026

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0606 | 2.2588 | 0.7480 | 8.1700e-003 | 0.2696 | 0.0127 | 0.2823 | 0.0777 | 0.0122 | 0.0898 | | 877.4556 | 877.4556 | 0.0213 | 0.1287 | 916.3333 |
| Worker | 0.1187 | 0.0689 | 0.8761 | 2.9100e-003 | 0.3955 | 1.6400e-003 | 0.3971 | 0.1049 | 1.5100e-003 | 0.1064 | | 305.3728 | 305.3728 | 7.0900e-003 | 7.7700e-003 | 307.8648 |
| **Total** | **0.1793** | **2.3277** | **1.6241** | **0.0111** | **0.6650** | **0.0144** | **0.6794** | **0.1825** | **0.0137** | **0.1962** | | **1,182.8284** | **1,182.8284** | **0.0284** | **0.1365** | **1,224.1981** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.0110 | 0.0141 | 0.0958 | 1.8000e-004 | 0.0201 | 1.7000e-004 | 0.0203 | 5.3700e-003 | 1.6000e-004 | 5.5300e-003 | | 18.6646 | 18.6646 | 1.3000e-003 | 9.7000e-004 | 18.9866 |
| Unmitigated | 0.0110 | 0.0141 | 0.0958 | 1.8000e-004 | 0.0201 | 1.7000e-004 | 0.0203 | 5.3700e-003 | 1.6000e-004 | 5.5300e-003 | | 18.6646 | 18.6646 | 1.3000e-003 | 9.7000e-004 | 18.9866 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Office Building | 0.00 | 0.00 | 0.00 | | |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | | |
| Research & Development | 4.00 | 4.00 | 4.00 | 9,551 | 9,551 |
| Unrefrigerated Warehouse-No Rail | 0.00 | 0.00 | 0.00 | | |
| User Defined Industrial | 0.00 | 0.00 | 0.00 | | |
| User Defined Parking | 0.00 | 0.00 | 0.00 | | |
| Total | 4.00 | 4.00 | 4.00 | 9,551 | 9,551 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| General Office Building | 13.00 | 5.00 | 5.00 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| Other Non-Asphalt Surfaces | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Research & Development | 13.00 | 5.00 | 5.00 | 33.00 | 48.00 | 19.00 | 82 | 15 | 3 |
| Unrefrigerated Warehouse-No | 13.00 | 5.00 | 5.00 | 59.00 | 0.00 | 41.00 | 92 | 5 | 3 |
| User Defined Industrial | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| User Defined Parking | 13.00 | 5.00 | 5.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Office Building | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Other Non-Asphalt Surfaces | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Research & Development | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| Unrefrigerated Warehouse-No Rail | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| User Defined Industrial | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |
| User Defined Parking | 0.497733 | 0.057565 | 0.201969 | 0.144152 | 0.035091 | 0.008836 | 0.008322 | 0.005990 | 0.000928 | 0.000359 | 0.031997 | 0.000919 | 0.006141 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.0344 | 0.3129 | 0.2629 | 1.8800e-003 | | 0.0238 | 0.0238 | | 0.0238 | 0.0238 | | 375.5141 | 375.5141 | 7.2000e-003 | 6.8800e-003 | 377.7456 |
| NaturalGas Unmitigated | 0.0344 | 0.3129 | 0.2629 | 1.8800e-003 | | 0.0238 | 0.0238 | | 0.0238 | 0.0238 | | 375.5141 | 375.5141 | 7.2000e-003 | 6.8800e-003 | 377.7456 |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| General Office Building | 348.486 | 3.7600e-003 | 0.0342 | 0.0287 | 2.0000e-004 | | 2.6000e-003 | 2.6000e-003 | | 2.6000e-003 | 2.6000e-003 | | 40.9984 | 40.9984 | 7.9000e-004 | 7.5000e-004 | 41.2420 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 144.616 | 1.5600e-003 | 0.0142 | 0.0119 | 9.0000e-005 | | 1.0800e-003 | 1.0800e-003 | | 1.0800e-003 | 1.0800e-003 | | 17.0137 | 17.0137 | 3.3000e-004 | 3.1000e-004 | 17.1148 |
| Unrefrigerated Warehouse-No Rail | 2698.77 | 0.0291 | 0.2646 | 0.2223 | 1.5900e-003 | | 0.0201 | 0.0201 | | 0.0201 | 0.0201 | | 317.5020 | 317.5020 | 6.0900e-003 | 5.8200e-003 | 319.3888 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0344** | **0.3129** | **0.2629** | **1.8800e-003** | | **0.0238** | **0.0238** | | **0.0238** | **0.0238** | | **375.5141** | **375.5141** | **7.2100e-003** | **6.8800e-003** | **377.7456** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| General Office Building | 0.348486 | 3.7600e-003 | 0.0342 | 0.0287 | 2.0000e-004 | | 2.6000e-003 | 2.6000e-003 | | 2.6000e-003 | 2.6000e-003 | | 40.9984 | 40.9984 | 7.9000e-004 | 7.5000e-004 | 41.2420 |
| Other Non-Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Research & Development | 0.144616 | 1.5600e-003 | 0.0142 | 0.0119 | 9.0000e-005 | | 1.0800e-003 | 1.0800e-003 | | 1.0800e-003 | 1.0800e-003 | | 17.0137 | 17.0137 | 3.3000e-004 | 3.1000e-004 | 17.1148 |
| Unrefrigerated Warehouse-No Rail | 2.69877 | 0.0291 | 0.2646 | 0.2223 | 1.5900e-003 | | 0.0201 | 0.0201 | | 0.0201 | 0.0201 | | 317.5020 | 317.5020 | 6.0900e-003 | 5.8200e-003 | 319.3888 |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| User Defined Parking | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0344** | **0.3129** | **0.2629** | **1.8800e-003** | | **0.0238** | **0.0238** | | **0.0238** | **0.0238** | | **375.5141** | **375.5141** | **7.2100e-003** | **6.8800e-003** | **377.7456** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 3.9650 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| Unmitigated | 3.9650 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.9085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.0552 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.3500e-003 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| **Total** | **3.9650** | **1.3000e-004** | **0.0147** | **0.0000** | | **5.0000e-005** | **5.0000e-005** | | **5.0000e-005** | **5.0000e-005** | | **0.0316** | **0.0316** | **8.0000e-005** | | **0.0336** |

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

## 6.2 Area by SubCategory

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.9085 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 3.0552 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 1.3500e-003 | 1.3000e-004 | 0.0147 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | | 0.0316 | 0.0316 | 8.0000e-005 | | 0.0336 |
| **Total** | **3.9650** | **1.3000e-004** | **0.0147** | **0.0000** | | **5.0000e-005** | **5.0000e-005** | | **5.0000e-005** | **5.0000e-005** | | **0.0316** | **0.0316** | **8.0000e-005** | | **0.0336** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

San Miguel WWTP Upgrade/Expansion Project - San Luis Obispo County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|
| Emergency Generator | 1 | 1 | 100 | 500 | 0.73 | CNG |

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|---|---|---|---|---|---|

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 10.1 Stationary Sources

**Unmitigated/Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Type | lb/day | | | | | | | | | | lb/day | | | | | |
| Emergency Generator - CNG (500 - 9999 HP) | 4.3990 | 0.3388 | 11.4571 | 1.5300e-003 | | 0.0243 | 0.0243 | | 0.0243 | 0.0243 | | 281.0547 | 281.0547 | 0.5877 | | 295.7462 |
| **Total** | **4.3990** | **0.3388** | **11.4571** | **1.5300e-003** | | **0.0243** | **0.0243** | | **0.0243** | **0.0243** | | **281.0547** | **281.0547** | **0.5877** | | **295.7462** |

## 11.0 Vegetation

# APPENDIX B

## California Natural Diversity Database Species List

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

**Query Summary:**
Quad IS (Wunpost (3512087) OR Bradley (3512077) OR Adelaida (3512067) OR Valleton (3512086) OR San Miguel (3512076) OR Paso Robles (3512066) OR Stockdale Mountain (3512085) OR Ranchito Canyon (3512075) OR Estrella (3512065))

Print Close

**CNDDB Element Query Results**

| Scientific Name | Common Name | Taxonomic Group | Element Code | Total Occs | Returned Occs | Federal Status | State Status | Global Rank | State Rank | CA Rare Plant Rank | Other Status | Habitats |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Abies bracteata | bristlecone fir | Gymnosperms | PGPIN01030 | 80 | 1 | None | None | G2G3 | S2S3 | 1B.3 | IUCN_NT-Near Threatened, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive | Broadleaved upland forest, Chaparral, Lower montane coniferous forest, Oldgrowth, Riparian woodland, Ultramafic |
| Agelaius tricolor | tricolored blackbird | Birds | ABPBXB0020 | 957 | 3 | None | Threatened | G1G2 | S2 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern | Freshwater marsh, Marsh & swamp, Swamp, Wetland |
| Agrostis hooveri | Hoover's bent grass | Monocots | PMPOA040M0 | 31 | 1 | None | None | G2 | S2 | 1B.2 | BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive | Chaparral, Cismontane woodland, Closed-cone coniferous forest, Valley & foothill grassland |
| Anniella pulchra | Northern California legless lizard | Reptiles | ARACC01020 | 386 | 9 | None | None | G3 | S2S3 | null | CDFW_SSC-Species of Special Concern, USFS_S-Sensitive | Chaparral, Coastal dunes, Coastal scrub |
| Antirrhinum ovatum | oval-leaved snapdragon | Dicots | PDSCR2K010 | 16 | 1 | None | None | G3 | S3 | 4.2 | null | Chaparral, Cismontane woodland, Pinon & juniper woodlands, Valley & foothill grassland |
| Antrozous pallidus | pallid bat | Mammals | AMACC10010 | 420 | 2 | None | None | G4 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive | Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland |
| Aquila chrysaetos | golden eagle | Birds | ABNKC22010 | 325 | 2 | None | None | G5 | S3 | null | BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, CDFW_WL-Watch List, IUCN_LC-Least Concern | Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ardea herodias | great blue heron | Birds | ABNGA04010 | 156 | 1 | None | None | G5 | S4 | null | CDF_S-Sensitive, IUCN_LC-Least Concern | Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland |
| Aristocapsa insignis | Indian Valley spineflower | Dicots | PDPGN0U010 | 5 | 1 | None | None | G1 | S1 | 1B.2 | null | Cismontane woodland |
| Athene cunicularia | burrowing owl | Birds | ABNSB10010 | 2011 | 10 | None | None | G4 | S2 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern | Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland |
| Branchinecta lynchi | vernal pool fairy shrimp | Crustaceans | ICBRA03030 | 796 | 18 | Threatened | None | G3 | S3 | null | IUCN_VU-Vulnerable | Valley & foothill grassland, Vernal pool, Wetland |
| Buteo regalis | ferruginous hawk | Birds | ABNKC19120 | 107 | 1 | None | None | G4 | S3S4 | null | CDFW_WL-Watch List, IUCN_LC-Least Concern | Great Basin grassland, Great Basin scrub, Pinon & juniper woodlands, Valley & foothill grassland |
| Calycadenia villosa | dwarf calycadenia | Dicots | PDAST1P0B0 | 59 | 3 | None | None | G3 | S3 | 1B.1 | SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive | Chaparral, Cismontane woodland, Meadow & seep, Valley & foothill grassland |
| Camissoniopsis hardhamiae | Hardham's evening-primrose | Dicots | PDONA030N0 | 22 | 2 | None | None | G2 | S2 | 1B.2 | BLM_S-Sensitive, USFS_S-Sensitive | Chaparral, Cismontane woodland, Limestone |
| Castilleja densiflora var. obispoensis | San Luis Obispo owl's-clover | Dicots | PDSCR0D453 | 69 | 4 | None | None | G5T2 | S2 | 1B.2 | SB_SBBG-Santa Barbara Botanic Garden | Meadow & seep, Ultramafic, Valley & foothill grassland |
| Caulanthus lemmonii | Lemmon's jewelflower | Dicots | PDBRA0M0E0 | 91 | 6 | None | None | G3 | S3 | 1B.2 | BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive | Pinon & juniper woodlands, Valley & foothill grassland |
| Chorizanthe rectispina | straight-awned spineflower | Dicots | PDPGN040N0 | 24 | 2 | None | None | G2 | S2 | 1B.2 | BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive | Chaparral, Cismontane woodland, Coastal scrub |
| Corynorhinus townsendii | Townsend's big-eared bat | Mammals | AMACC08010 | 635 | 4 | None | None | G4 | S2 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive | Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland |
| Delphinium umbraculorum | umbrella larkspur | Dicots | PDRAN0B1W0 | 95 | 1 | None | None | G3 | S3 | 1B.3 | BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive | Chaparral, Cismontane woodland |
| Emys marmorata | western pond turtle | Reptiles | ARAAD02030 | 1522 | 10 | Proposed Threatened | None | G3G4 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU- | Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Vulnerable, USFS_S-Sensitive | Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland |
| Entosthodon kochii | Koch's cord moss | Bryophytes | NBMUS2P050 | 4 | 1 | None | None | G1 | S1 | 1B.3 | BLM_S-Sensitive | Cismontane woodland |
| Eremophila alpestris actia | California horned lark | Birds | ABPAT02011 | 94 | 2 | None | None | G5T4Q | S4 | null | CDFW_WL-Watch List, IUCN_LC-Least Concern | Marine intertidal & splash zone communities, Meadow & seep |
| Eriastrum luteum | yellow-flowered eriastrum | Dicots | PDPLM03080 | 34 | 1 | None | None | G2 | S2 | 1B.2 | BLM_S-Sensitive, USFS_S-Sensitive | Broadleaved upland forest, Chaparral, Cismontane woodland |
| Eriogonum temblorense | Temblor buckwheat | Dicots | PDPGN085P0 | 16 | 2 | None | None | G2 | S2 | 1B.2 | BLM_S-Sensitive | Valley & foothill grassland |
| Erythranthe hardhamiae | Santa Lucia monkeyflower | Dicots | PDPHR01030 | 6 | 1 | None | None | G1 | S1 | 1B.1 | null | Chaparral, Ultramafic |
| Falco mexicanus | prairie falcon | Birds | ABNKD06090 | 451 | 6 | None | None | G5 | S4 | null | CDFW_WL-Watch List, IUCN_LC-Least Concern | Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland |
| Githopsis tenella | delicate bluecup | Dicots | PDCAM07070 | 5 | 1 | None | None | G2 | S2 | 1B.3 | BLM_S-Sensitive | Chaparral, Cismontane woodland, Ultramafic |
| Haliaeetus leucocephalus | bald eagle | Birds | ABNKC10010 | 332 | 1 | Delisted | Endangered | G5 | S3 | null | BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern, USFS_S-Sensitive | Lower montane coniferous forest, Oldgrowth |
| Hooveria purpurea var. purpurea | Santa Lucia purple amole | Monocots | PMLIL0G051 | 18 | 2 | Threatened | None | G2T2 | S2 | 1B.1 | SB_SBBG-Santa Barbara Botanic Garden | Chaparral, Cismontane woodland, Valley & foothill grassland |
| Horkelia cuneata var. sericea | Kellogg's horkelia | Dicots | PDROS0W043 | 58 | 1 | None | None | G4T1? | S1? | 1B.1 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCSC-UC Santa Cruz, USFS_S-Sensitive | Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub |
| Juncus luciensis | Santa Lucia dwarf rush | Monocots | PMJUN013J0 | 37 | 2 | None | None | G3 | S3 | 1B.2 | BLM_S-Sensitive, USFS_S-Sensitive | Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadow & seep, Vernal pool, Wetland |
| Lagophylla diabolensis | Diablo Range hare-leaf | Dicots | PDAST5J060 | 15 | 1 | None | None | G2 | S2 | 1B.2 | BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden | Cismontane woodland, Valley & foothill grassland |
| Lasiurus cinereus | hoary bat | Mammals | AMACC05032 | 238 | 1 | None | None | G3G4 | S4 | null | IUCN_LC-Least Concern | Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest |
| Lavinia exilicauda harengus | Monterey hitch | Fish | AFCJB19013 | 2 | 1 | None | None | G4T3 | S3 | null | CDFW_SSC-Species of Special Concern | Aquatic, Klamath/North coast flowing waters, Klamath/North coast standing |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | waters, Riparian forest |
| Lepidium jaredii ssp. jaredii | Jared's pepper-grass | Dicots | PDBRA1M0G1 | 12 | 1 | None | None | G2G3T1T2 | S1S2 | 1B.2 | BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden | Valley & foothill grassland |
| Malacothamnus abbottii | Abbott's bush-mallow | Dicots | PDMAL0Q010 | 11 | 3 | None | None | G1 | S1 | 1B.1 | SB_UCSC-UC Santa Cruz | Riparian scrub |
| Malacothamnus aboriginum | Indian Valley bush-mallow | Dicots | PDMAL0Q020 | 63 | 3 | None | None | G3 | S3 | 1B.2 | BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden | Chaparral, Cismontane woodland |
| Malacothamnus davidsonii | Davidson's bush-mallow | Dicots | PDMAL0Q040 | 78 | 1 | None | None | G2 | S2 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland |
| Masticophis flagellum ruddocki | San Joaquin coachwhip | Reptiles | ARADB21021 | 96 | 10 | None | None | G5T2T3 | S3 | null | CDFW_SSC-Species of Special Concern | Chenopod scrub, Valley & foothill grassland |
| Monolopia gracilens | woodland woollythreads | Dicots | PDAST6G010 | 94 | 1 | None | None | G3 | S3 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | Broadleaved upland forest, Chaparral, Cismontane woodland, North coast coniferous forest, Ultramafic, Valley & foothill grassland |
| Navarretia nigelliformis ssp. radians | shining navarretia | Dicots | PDPLM0C0J2 | 102 | 13 | None | None | G4T2 | S2 | 1B.2 | BLM_S-Sensitive | Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland |
| Navarretia prostrata | prostrate vernal pool navarretia | Dicots | PDPLM0C0Q0 | 61 | 3 | None | None | G2 | S2 | 1B.2 | null | Coastal scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland |
| Neotoma macrotis luciana | Monterey dusky-footed woodrat | Mammals | AMAFF08083 | 8 | 3 | None | None | G5T3 | S3 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern | Broadleaved upland forest, Chaparral |
| Perognathus inornatus psammophilus | Salinas pocket mouse | Mammals | AMAFD01062 | 9 | 7 | None | None | G2G3T2? | S1 | null | CDFW_SSC-Species of Special Concern | Valley & foothill grassland |
| Phrynosoma blainvillii | coast horned lizard | Reptiles | ARACF12100 | 784 | 3 | None | None | G4 | S4 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern | Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland |
| Plagiobothrys uncinatus | hooked popcornflower | Dicots | PDBOR0V170 | 14 | 2 | None | None | G2 | S2 | 1B.2 | USFS_S-Sensitive | Chaparral, Cismontane woodland, Valley & foothill grassland |
| Polyphylla nubila | Atascadero June beetle | Insects | IICOL68040 | 4 | 1 | None | None | G1 | S1 | null | null | Interior dunes |
| Rana boylii pop. 6 | foothill yellow-legged frog - south coast DPS | Amphibians | AAABH01056 | 79 | 1 | Endangered | Endangered | G3T1 | S1 | null | BLM_S-Sensitive, USFS_S-Sensitive | Aquatic, Riparian forest, Riparian scrub, Riparian woodland, South coast flowing waters |
| Setophaga petechia | yellow warbler | Birds | ABPBX03010 | 78 | 1 | None | None | G5 | S3 | null | CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern | Riparian forest, Riparian scrub, Riparian woodland |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spea hammondii | western spadefoot | Amphibians | AAABF02020 | 1444 | 33 | None | None | G2G3 | S3S4 | null | BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened | Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland |
| Stebbinsoseris decipiens | Santa Cruz microseris | Dicots | PDAST6E050 | 19 | 1 | None | None | G2 | S2 | 1B.2 | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCSC-UC Santa Cruz | Broadleaved upland forest, Chaparral, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland |
| Sycamore Alluvial Woodland | Sycamore Alluvial Woodland | Riparian | CTT62100CA | 17 | 1 | None | None | G1 | S1.1 | null | null | Riparian woodland |
| Taxidea taxus | American badger | Mammals | AMAJF04010 | 645 | 44 | None | None | G5 | S3 | null | CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern | Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland |
| Trimerotropis occulens | Lompoc grasshopper | Insects | IIORT36310 | 8 | 1 | None | None | G1G2 | S1S2 | null | IUCN_EN-Endangered | null |
| Valley Oak Woodland | Valley Oak Woodland | Woodland | CTT71130CA | 91 | 6 | None | None | G3 | S2.1 | null | null | Cismontane woodland |
| Vireo bellii pusillus | least Bell's vireo | Birds | ABPBW01114 | 505 | 3 | Endangered | Endangered | G5T2 | S3 | null | null | Riparian forest, Riparian scrub, Riparian woodland |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vulpes macrotis mutica | San Joaquin kit fox | Mammals | AMAJA03041 | 1020 | 54 | Endangered | Threatened | G4T2 | S3 | null | null | Chenopod scrub, Valley & foothill grassland |