

5.3 Air Quality

5.3.1 Environmental Setting

Air Basin

The project area is located within the San Joaquin Valley Air Basin (SJVAB), which is bounded by the Sierra Nevada Mountains in the east, the Coast Ranges in the west, and the Tehachapi Mountains in the south, and includes all of Merced County. Air quality in Merced County is regulated by the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the San Joaquin Valley Air Pollution Control District (SJVAPCD). These agencies develop rules, regulations, policies, and/or goals to comply with applicable legislation. Although EPA regulations may not be superseded, both state and local regulations may be more stringent.

Climate and Meteorology

The climate and air quality of Merced County are related to the county's location within the San Joaquin Valley. The San Joaquin Valley Air Basin is defined by the Sierra Nevada Mountains in the east and the Coast Ranges in the west. The mountains surrounding the area restrict air movement through and out of the basin. These topographic features result in weak air flow that becomes blocked vertically by high barometric pressure over the San Joaquin Valley. As a result, the San Joaquin Valley is highly susceptible to pollutant accumulation over time. The climate in the project area is "inland Mediterranean," averaging over 260 sunny days per year. The valley floor is characterized by warm, dry summers and cooler winters. Average summer high temperatures are in the high 90s (degrees Fahrenheit) and temperatures may exceed 115 degrees during heat waves. The San Joaquin Valley is in the rain shadow of the Coast Ranges, and precipitation averages approximately 10 inches annually primarily from November through April. Winter months may be characterized by dense fog.

Ambient Air Quality

The state and federal ambient air quality standards are presented in Table 5.3-1. The primary pollutants of concern in the project area are ozone, particulate matter less than 10 microns in size (PM₁₀), and particulate matter less than 2.5 microns in size (PM_{2.5}). Ozone is not directly emitted, but is formed in the atmosphere by complex chemical reactions of various precursors, reactive organic gases (ROGs), and nitrogen oxides (NO_x) in the presence of sunlight. The major sources of ozone precursor emissions in Merced County are on-road and off-road vehicles, fuel combustion, and solvent usage (paints, consumer products, and certain industrial processes) (SJVAPCD, 2002a). Sources of PM₁₀ and PM_{2.5} include mineral quarries, grading, demolition, agricultural tilling, road dust, and vehicle exhaust (SJVAPCD, 2002b). Additional information on ozone and other pollutants of concern is provided in the *Technical Document Information for Preparing Air Quality Sections in EIRs* (SJVAPCD, 2002a).

Criteria Air Pollutants. Air quality is determined by measuring ambient concentrations of criteria pollutants. Air pollutants are those pollutants for which acceptable levels of exposure can be determined and for which standards have been set. The degree of air quality degradation is then compared to the current National and California Ambient Air Quality Standards (NAAQS and CAAQS). Unique meteorological conditions in California and differences of opinion by medical panels established by the CARB and the U.S. EPA cause considerable diversity between State and Federal standards currently in effect in California. In general, the CAAQS are more stringent than the corresponding NAAQS. The standards currently in effect in California are shown in Table 5.3-1.

Table 5.3-1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards
Ozone	1-hour	0.09 ppm	—
	8-hour	0.070 ppm	0.075 ppm
Respirable Particulate Matter (PM10)	24-hour	50 µg/m ³	150 µg/m ³
	Annual Mean	20 µg/m ³	—
Fine Particulate Matter (PM2.5)	24-hour	—	35 µg/m ³
	Annual Mean	12 µg/m ³	15 µg/m ³
Carbon Monoxide (CO)	1-hour	20 ppm	35 ppm
	8-hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO ₂)	1-hour	0.18 ppm	0.100 ppm
	Annual Mean	0.030 ppm	0.053 ppm
Sulfur Dioxide (SO ₂)	1-hour	0.25 ppm	0.075 ppm
	24-hour	0.04 ppm	0.14 ppm
	Annual Mean	—	0.03 ppm

Notes: ppm=parts per million; µg/m³= micrograms per cubic meter; "—" =no standard
Source: CARB 2011a.

Ambient Air Quality Conditions. The SJVAPCD operates a network of ambient air quality monitoring stations that measure concentrations of ozone, PM10, PM2.5, CO, NO₂, and SO₂. The nearest monitoring stations to the Proposed Project are located in Merced, approximately 15 miles from the project area: one on South Coffee Avenue (Merced-S Coffee Avenue) and one on M Street (Merced-2334 M Street). Table 5.3-2 presents concentrations of the non-attainment pollutants — ozone, PM10, and PM2.5 — for the project area. Concentrations of NO₂ have not exceeded a federal or state standard in the past 3 years. CO and SO₂ concentrations are not monitored in Merced County. CO concentrations measured in neighboring Stanislaus County at the Turlock S Minaret Street monitoring station have not exceeded federal or state standard in the past 3 years (CARB, 2011b). The nearest monitoring station that measures SO₂ concentrations is located in Fresno, California at the Fresno 1st Street monitoring station. SO₂ concentrations at this station have not exceeded federal or state standards in the past 3 years (CARB, 2011b).

Measured 1-hour and 8-hour ozone concentrations at Merced-S Coffee Avenue monitoring station have exceeded the state standard in one or more of the past three years. The state 24-hour PM10 concentration was exceeded at the Merced-2334 M Street station in all of the past three years, and the annual mean concentration of PM10 was exceeded at this location in all of the past three years.

Table 5.3-2. Summary of Maximum Ambient Air Monitoring Data in the Project Area.

Pollutant	Averaging Time	2008	2009	2010
Ozone (ppm)	1 Hour	0.131	0.094	0.117
	8 Hour	0.121	0.084	0.096
PM10 (µg/m ³)	24 Hour	76.8	65.1	91.4
	Annual Arithmetic Mean	34.5	26.9	25.5
PM2.5 (µg/m ³)	24 Hour	54.0	53.3	46.9
	Annual Arithmetic Mean	*	13.6	11.2

µg/m³ = micrograms per cubic meter; ppm = parts per million
Ozone concentrations are from the Merced-S. Coffee Avenue monitoring station and the particulate matter concentrations are from the Merced-2334 M Street monitoring station.

Carbon monoxide, sulfur dioxide, hydrogen sulfide, vinyl chloride, and visibility-reducing particles are not monitored in Merced County. Bold text indicates figure exceeds standards.

* There were insufficient (or no) data to determine the value.

Source: CARB 2011b, PG&E 2011.

Attainment Status and Air Quality Plans. The U.S. EPA, CARB, and the local air district establish attainment designations based on the available monitoring data. Three air quality designations can be given to an area for a particular pollutant:

- **Non-attainment:** This designation applies when air quality standards have not been consistently achieved.
- **Attainment:** This designation applies when air quality standards have been achieved.
- **Unclassified:** This designation applies when there are not enough monitoring data to determine if the area should be designated non-attainment or attainment.

The classification depends on whether the monitored ambient air quality data show compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively. Table 5.3-3 summarizes attainment status for the criteria pollutants in the SJVAB with both the federal and state standards.

Table 5.3-3. Attainment Status for SJVAPCD

Pollutant	Federal Designation	State Designation
Ozone (1-hour)	No Federal Standard	Nonattainment
Ozone (8-hour)	Nonattainment/Extreme	Nonattainment
PM ₁₀	Attainment	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment/Unclassified	Attainment/Unclassified
NO ₂	Attainment/Unclassified	Attainment
SO ₂	Attainment/Unclassified	Attainment

Source: SJVAPCD, <http://www.valleyair.org/aqinfo/attainment.htm>.

Because of ongoing violations of the NAAQS and CAAQS for ozone, PM10, and PM2.5, the San Joaquin Valley Air Basin is designated as a nonattainment area for these criteria pollutants. The SJVAPCD manages these pollutants through a long-term attainment planning process that forecasts emissions and future concentrations depending on changes in source activity (population and economic growth), regulatory programs, and meteorological conditions. The air quality plans for attainment demonstration (one each for ozone and PM10) are evolving documents that are updated triennially to reflect the changing population, economic, land use, and transportation conditions in the San Joaquin Valley.

Toxic Air Contaminants

Toxic air contaminants are air pollutants that may cause adverse health effects, particularly cancer or reproductive harm. The Air Toxics “Hot Spots” Information and Assessment Act (Assembly Bill [AB] 2588) was enacted in September 1987. The project would not be considered a stationary source subject to AB 2588 requirements.

Sensitive Receptors

Children, seniors, or the infirm are population groups found that have increased susceptibility to respiratory distress or other adverse health effects of air pollution. Sensitive receptor locations are facilities such as hospitals, schools, convalescent facilities, or residential areas. The nearest sensitive receptors are residences located approximately 0.01 miles from the power line, 0.08 miles from Cressey Substation, and 0.5 miles from Gallo Substation (see Figure 5.10-1a through 5.10-1d).

Rules and Regulations

- **California Air Resources Board (CARB) Off-Road Mobile Sources Emission Reduction Program.** The California CAA mandates CARB to achieve the maximum degree of emission reductions from all off-road mobile sources in order to attain the State ambient air quality standards. Off-road mobile sources include construction and farming equipment. Tier 1, Tier 2, and Tier 3 standards for large compression-ignition engines used in off-road mobile sources went into effect in California in 1996, 2001, and 2006

respectively. In addition, equipment can be retrofitted to achieve lower emissions using the CARB-verified retrofit technologies. The engine standards and ongoing rulemaking jointly address NO_x emissions and toxic particulate matter from diesel combustion (DPM).

- **CARB Portable Equipment Registration Program.** This program allows owners or operators of portable engines and associated equipment commonly used for construction or farming to register their units under a statewide program that allows them to operate their equipment throughout California without having to obtain individual permits from local air districts.
- **SJVAPCD Rules 4101 and 4102 (Visible Emissions and Nuisances).** These rules apply to any source of air contaminants, and they prohibit emissions of visible air contaminants to the atmosphere and any activity that creates a public nuisance.
- **SJVAPCD Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).** This rule applies to the use of asphalt for paving, should it be necessary to resurface substation sites or restore roadways disturbed by project activities.
- **SJVAPCD Regulation VIII (Fugitive PM₁₀ Prohibitions).** This series of rules is aimed at reducing fugitive PM₁₀ emissions. Sources regulated under these rules include: construction, excavation, earth-moving activities, carryout and trackout, open areas, paved and unpaved roads, unpaved vehicle/equipment traffic areas, and agricultural sources. Violating Regulation VIII would be subject to enforcement action by SJVAPCD. Regulation VIII requires implementation of various dust control measures (watering unpaved surfaces, minimizing vehicle speeds on unpaved surfaces, etc.) to ensure that visible dust emissions are substantially eliminated.
- **SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts.** SJVAPCD has established guidelines for lead agencies that must characterize the significance of construction emissions and assess mitigation strategies for short-term emission of PM₁₀. SJVAPCD recommends that all construction projects implement effective and comprehensive control measures. Emissions thresholds for project operations are set at 10 tons per year for both ROG and NO_x and 9 parts per million (ppm) averaged over 8 hours and 20 ppm for 1 hour for CO (SJVAPCD, 2002b).

Applicant Proposed Measures

PG&E proposes to implement measures during the design, construction, and operation of the Proposed Project to ensure it would occur with minimal environmental impacts in a manner consistent with applicable rules and regulations. Applicant Proposed Measures (APMs) are considered part of the Proposed Project in the evaluation of environmental impacts. CPUC approval would be based upon PG&E adhering to the Proposed Project as described in this document, including this project description and the APMs (see Table 5.3-4), as well as any adopted mitigation measures identified by this Initial Study.

Table 5.3-4. Applicant Proposed Measures (APMs) Related to Air Quality

APM Number	Issue Area
Air Quality	
APM AQ-1	<p>Minimize Fugitive Dust. PG&E will minimize fugitive dust during construction by implementing the following measures. According to SJVAPCD, implementation of the following measures minimizes fugitive dust emissions to a less-than-significant level (SJVAPCD, 2002a).</p> <ul style="list-style-type: none"> • Visible dust emissions (VDE) will not exceed 20 percent opacity during times when soil is disturbed. • All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, will be effectively stabilized to control dust emissions using water, chemical stabilizer/suppressants, or covering soils with a tarp or other suitable cover or vegetative ground cover. • All onsite unpaved roads and offsite unpaved access roads will be effectively stabilized against dust emissions using water or chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities will be effectively controlled to prevent fugitive dust emissions by application of water or presoaking. • When materials are transported offsite, all material will be covered, or effectively wetted to limit VDE, and at least 6 inches of freeboard space from the top of the container shall be maintained. • All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday.* • Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized to control fugitive dust emissions by application of water or chemical stabilizer/suppressant. • Within urban areas, track-out will be immediately removed when it extends 50 or more feet from the site and at the end of each workday. • Vehicle speeds will be limited to 15 miles per hour on unpaved roads.
APM AQ-2	<p>Minimize Construction Exhaust Emissions – Criteria Pollutants and GHGs. The following measures will be implemented during construction to further minimize the less-than-significant construction emissions:</p> <ul style="list-style-type: none"> • Construction equipment will be properly maintained. All offroad construction diesel engines not registered under the CARB Statewide Portable Equipment Registration Program will meet at a minimum the Tier 1 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations (CCR) Title 13, Chapter 9, Sec. 2423(b)(1). • Idling times will be minimized either by shutting equipment or commercial motor vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by CCR Title 13, Chapter 9, Section 2449 and Chapter 10, Section 2485). The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel-powered vehicles, have extended warm up times following start up that limit their availability for use following startup. Where such diesel powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project will apply a "common sense" approach to vehicle use; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction foremen will provide briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a "common sense" approach to vehicle use. • Minimize welding and cutting by using compression or mechanical applications where practical and within standards. • Encourage use of natural gas powered vehicles for passenger cars and light duty trucks where feasible and available. • Encourage the recycling of construction waste where feasible.

* Per SJVAPCD Rule 8041, the use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the VDE. The use of blower devices is expressly forbidden.

5.3.2 Environmental Impacts and Assessment

AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:**

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance criteria established by CEQA Guidelines, Appendix G.

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

LESS THAN SIGNIFICANT IMPACT – CONSTRUCTION. SJVAPCD is responsible for implementing and regulating air emissions from stationary and area sources. Activities conducted within Merced County are required to comply with provisions of the SJVAPCD Rules and Regulations and Air Quality Plans that maintain compliance with federal standards for ozone, PM10 and CO (SJVAPCD, 2002a and 2002b). The SJVAPCD Rules and Regulations and Air Quality Plans identify emission control techniques for stationary and area sources and incorporate estimates of emissions from mobile sources to determine the appropriate control measures that can be implemented across the region to reduce emissions.

The Merced County General Plan also contributes to improving air quality through land-use planning policies. The County’s Draft 2030 General Plan includes an Air Quality element that provides the policy context for Merced County to achieve its vision for air quality and greenhouse gas reduction (Merced County, 2011).

The project would not permanently increase emissions from mobile sources through the generation of a significant number of new vehicle trips. Project construction would increase traffic and other mobile source activity (off-road construction equipment) during approximately 9 months. Construction of the project would result in short-term emissions that would be subject to SJVAPCD requirements for dust control and emissions managed by statewide programs for off-road mobile sources and portable equipment. Therefore, project construction would be compatible with the applicable air quality plans. Because the short-term construction-related emissions would not conflict with or interfere with SJVAPCD’s implementation of its approved air quality plans, this impact would be less than significant.

NO IMPACT – OPERATIONS AND MAINTENANCE. The project would be operated using a Supervisory Control and Data Acquisition (SCADA) system. Therefore, no additional operating and maintenance staff would be required after construction is completed. Existing operation and maintenance (O&M) crews would operate and maintain the new equipment as part of their current O&M activities. Operation of the project would not result in an incremental increase in O&M emissions (except for sulfur hexafluoride, addressed in Section 5.7, Greenhouse Gas Emissions) and would not conflict with air quality plans, violate an air quality standard, or result in a significant impact to air quality.

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED – CONSTRUCTION. Construction equipment exhaust results in short-term emissions of ROG, NO_x, CO, SO₂, PM₁₀, and PM_{2.5}. Project activity data and emissions presented in this chapter are summarized from the applicant’s construction and operation emissions forecast for the Cressey-Gallo 115 kV Power Line Project, which is included as Appendix D (PG&E, 2011). Construction emissions were estimated using construction equipment emission factors available at the time of project design, from URBEMIS2007 and truck emission factors from EMFAC2007, which would conservatively over-state emissions from the anticipated construction equipment fleet. As shown in Table 5.3-5, the construction phase ROG and NO_x emissions would be less than the quantitative thresholds of significance (10 tons per year recommended by the SJVAPCD for project operations) (SJVAPCD, 2002b). Construction-phase emissions of both diesel exhaust particulate and fugitive dust would be subject to SJVAPCD requirements for dust control and statewide programs for off-road mobile sources and portable equipment. Although quantitative thresholds have not been established for construction-phase emissions, exhaust emissions of CO, SO₂, PM₁₀, and PM_{2.5} would be minor, as shown in Table 5.3-5.

Table 5.3-5. Construction Emission Estimates with Implementation of APMs (tons/year)

Construction Year and Thresholds	ROG	NO _x	CO	SO ₂	Exhaust PM10	Fugitive PM10	Exhaust PM2.5
2013 Months 1-9	0.34	2.88	4.10	0.008	0.17	3.8	0.14
2014Month 10	0.05	0.42	0.64	0.001	0.02	0.6	0.02
SJVAPCD Threshold	10	10	NE	NE	NE	NE	NE
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A	N/A

N/A = Not applicable.
 NE = Quantitative threshold has not been established.
 ROG = reactive organic gas
 NO_x = oxides of nitrogen
 CO = carbon monoxide
 SO₂ = sulfur dioxide
 PM₁₀ = particulate matter less than 10 microns in aerodynamic diameter
 PM_{2.5} = particulate matter less than 2.5 microns in aerodynamic diameter
 Source: See Appendix D (PG&E, 2011).

Fugitive particulate matter emissions during construction would occur as a result of soil disturbance and travel on paved and unpaved roads. Table 5.3-5 presents the estimated mitigated fugitive PM₁₀ emissions resulting from project construction. Calculations of the estimated emissions to be generated during construction are included in Appendix D (Construction and Operation Emissions), which appeared in the Proponent’s Environmental Assessment (PEA) (PG&E, 2011).

The applicant proposes to implement APM AQ-1 for fugitive dust control measures, which would reduce impacts to air quality. To implement all feasible practices for dust control especially in the vicinity of residences and other sensitive receptors, Mitigation Measure A-1 would supplement APM AQ-1 by requiring additional control measures (SJVAPCD, 2002b) to fully reduce potential impacts to a less than significant level. Fugitive dust emissions would not result in a violation of any air quality standards, and the potential impact would be reduced to a less than significant level with the implementation of Mitigation Measure A-1.

MM A-1 Minimize Fugitive Dust near Sensitive Receptors (Proposed to supplement APM AQ-1 “Minimize Fugitive Dust”). The following dust control measures shall be implemented for locations near (within 1,000 feet) of residences or other sensitive receptors in conjunction with the measures in APM AQ-1 (SJVACPD, 2002b):

- Limit area subject to excavation, grading, and other construction activity at any one time.
- Increased dust suppression or watering frequency shall be applied whenever wind speeds exceed 20 miles per hour (mph) and visible dust emissions occur.

The applicant proposes APM AQ-2 to control exhaust emissions from fuel use during construction activities. Reducing emissions from construction equipment exhaust or construction-related vehicle trips for workers commuting or deliveries depends on using properly controlled vehicles or limiting the use of equipment and other mobile sources. Emissions estimates in Table 5.3-5 are based on minimizing vehicle trip lengths by choosing staging areas that are along the project route. To implement all feasible practices for minimizing emissions from mobile sources and other construction activities, Mitigation Measure A-2 (Facilitate Carpooling to Construction Sites) would supplement APM AQ-2 by encouraging carpooling to the job staging area. Short-term construction equipment emissions would not result in a violation of any air quality standards, and the potential impact would be reduced to a less than significant level with the implementation of Mitigation Measure A-2.

MM A-2 Facilitate Carpooling to Construction Sites (Proposed to supplement APM AQ-2 “Minimize Construction Exhaust Emissions”). To minimize GHG and criteria pollutant emissions during construction, PG&E shall identify a central place to meet, such as a substation, staging area or a service center, in the project vicinity and encourage construction workers to carpool to the work site to the extent reasonably feasible. The ability to develop an effective carpool program for the Proposed Project shall depend on the proximity of carpool facilities to the work site, the geographical commute departure points of construction workers, and the extent to which carpooling shall not adversely affect worker arrival time and the project’s construction schedule. Crew transportation to the project site is addressed in Section 5.16, Transportation and Traffic.

NO IMPACT – OPERATIONS AND MAINTENANCE. As described for checklist item (a), emissions during O&M would cause no air quality impact.

c. *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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED – CONSTRUCTION. The project would be located in an area that is nonattainment for the state and federal ozone and PM2.5 ambient air quality standards and State PM10 standards (see Table 5.3-3). Fuel combustion from construction equipment would emit non-attainment pollutants NOx and ROG (ozone precursors) and particulate matter. Project construction emissions would cease after the project enters operational service, and the emission rates during construction would not be a cumulatively significant increase in the non-attainment pollutants because emissions would be well below the SJVAPCD significance thresholds (see Table 5.3-4).

The Proposed Project includes APMs AQ-1 and AQ-2, which would reduce air quality impacts from emissions of non-attainment pollutants. Impacts to air quality would be less than significant with the implementation of the APMs supplemented by Mitigation Measures A-1 and A-2.

NO IMPACT – OPERATIONS AND MAINTENANCE. As described for checklist item (a), emissions during O&M would cause no air quality impact.

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

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Sensitive receptors include residential uses, where persons susceptible to air pollution may dwell. The nearest sensitive receptors are residences located approximately 0.01 miles from the power line, 0.08 miles from Cressey Substation, and 0.5 miles from Gallo Substation (see Figure 5.10-1a through 5.10-1d). Construction would generate toxic diesel particulate matter (DPM) found in the exhaust of diesel-fueled equipment. However, project construction activities along the alignment of the power line would only briefly (2-3 days at a time) expose receptors to DPM and other toxic air pollutants. Diesel-powered equipment and vehicles would be based at staging areas over the entire construction duration of 9 months. Residences or other sensitive receptors, if occurring near the staging locations, would be temporarily exposed to increased concentrations of DPM and other toxic air pollutants from the mobile sources.

The applicant proposes to implement APM AQ-1 for fugitive dust control measures and APM AQ-2 to further control exhaust emissions, which would reduce the potential for exposure to substantial pollutant concentrations. Because of the proximity of sensitive receptors to the construction sites, and potential staging locations, mitigation is recommended to supplement the APMs and ensure that the project implements all feasible practices for control of diesel exhaust, which would ensure that receptors would not be exposed to substantial concentrations of DPM or other toxic air contaminants.

Implementation of the APMs supplemented by Mitigation Measures A-1 (Minimize Fugitive Dust near Sensitive Receptors) and A-3 (Reduce Toxic Diesel Particulate Matter) would prevent receptors from being exposed to substantial pollutant levels, which would reduce this impact to a less than significant level.

MM A-3 Reduce Toxic Diesel Particulate Matter (Proposed to supplement APM AQ-2 “Minimize Construction Exhaust Emissions”). The following measures shall be implemented during construction to reduce toxic diesel particulate matter (DPM) emissions:

- On- and off-road equipment shall be subject to the following restrictions:
 - Alternative-fueled equipment shall be used when reasonably available.
- Signs shall be posted at substation delivery locations to remind delivery vehicle operators of the 5-minute idling restriction identified in Section 2449(d)(3) of CARB’s In-Use off-Road Diesel regulation: <http://www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf>.

e. Would the project create objectionable odors affecting a substantial number of people?

NO IMPACT. The project does not include any sources likely to create objectionable odors such as dairies, wastewater treatment plants, or solid waste facilities (SJVAPCD, 2002a). Project construction would involve the temporary use of vehicles and construction equipment that may generate intermittent, minor odors from exhaust emissions. These emissions would occur briefly during construction, in a rural area that is not densely populated. Therefore, there would be no impact of objectionable odors affecting a substantial number of people.

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