3.3 Air Quality

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
3.	**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:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
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)?	☐	☒	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Environmental Setting

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, which affects air quality.

Regional Topography, Meteorology, and Climate

The Project would be located in southwestern El Dorado County and northeastern Sacramento County. El Dorado County is part of the Mountain Counties Air Basin (MCAB), which includes all of Amador, Calaveras, Mariposa, Nevada, Plumas, Sierra, and Tuolumne counties and the majority of El Dorado and Placer counties. The MCAB spans from the northern Sierra Nevada Mountains to near the eastern edge of the Central Valley, covering an area of approximately 11,000 square miles. The MCAB ranges in elevation from approximately 10,000 feet above sea level in the mountains to several hundred feet above sea level at the Sacramento-El Dorado County border, where the Project is located. Sacramento County is part of the Sacramento Valley Air Basin (SVAB), which includes all of Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, and Yuba counties, the northeast portion of Solano County, and the western portion of Placer County. The SVAB is bounded by the Coast Ranges on the west and the Sierra Nevada Mountains on the east, and is due west of the MCAB. Overall, the topography of the SVAB is very flat, in contrast to the MCAB.

Airflow in the Project area is affected by the mountains and hills that direct surface air flows, cause shallow vertical mixing, and hinder dispersion, creating areas of high pollutant concentrations. Inversion layers frequently occur and trap pollutants close to the ground, creating pollution hot spots (EDCAQMD, 2002). In the summer, strong upwind air flowing into the MCAB from the SVAB transports ozone precursors and ozone generated in the Bay Area and the Sacramento and San Joaquin valleys. These transported pollutants are the primary cause of ozone in the Project area (EDCAQMD, 2002).

The closest metrological monitoring station to the Project area is the Represa monitoring station in Folsom, which is approximately 3 miles north-northwest of Gold Hill Substation. Climate data collected from this monitoring station is generally representative of the Project area. The Project area typically has average maximum and minimum winter (i.e., January) temperatures of 53.3 degrees Fahrenheit (ºF) and 39.3 ºF, respectively, while average summer (i.e., July) maximum and minimum temperatures are 89.5 ºF and 62.6 ºF, respectively. Precipitation in the Project area averages approximately 23 inches per year (WRCC, 2014).

Criteria Air Pollutants

The U.S. Environmental Protection Agency (USEPA) has identified criteria air pollutants that are a threat to public health and welfare. These pollutants are called “criteria” air pollutants because standards have been established for each of them to meet specific public health and welfare criteria (see Section 3.3.2, *Regulatory Setting*). The following criteria pollutants are a concern in the study area.

Ozone

Ozone (O_3) is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_x), including nitrogen dioxide (NO_2). ROG and NO_x are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately 3 hours.

Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROG and NO_x under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone.

Particulate Matter

PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into air passages and the lungs and can cause adverse health effects. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a

more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain absorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates can also damage materials and reduce visibility.

Other Criteria Pollutants

Carbon monoxide (CO) is a non-reactive pollutant that is a product of incomplete combustion and is mostly associated with motor vehicle traffic. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia.

Sulfur dioxide (SO_2) is produced through combustion of sulfur or sulfur-containing fuels such as coal. SO_2 is also a precursor to the formation of atmospheric sulfate and particulate matter (PM10 and PM2.5) and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline. The phase-out of leaded gasoline has resulted in decreasing levels of atmospheric lead.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer-causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes approximately 200 compounds, including diesel particulate matter (DPM) emissions from diesel-fueled engines (CARB, 2014a).

Naturally Occurring Asbestos

Asbestos is the common name for a group of naturally occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Asbestos can be found in serpentine, and other ultramafic and volcanic rock. Naturally occurring asbestos is in many parts of California, including the Project area, where serpentine soils are present. When rock containing naturally occurring asbestos is broken or crushed, asbestos may become released and become airborne, causing a potential health hazard (EDCAQMD, 2014).

The portion of the Project alignment in El Dorado County is in areas that are considered “areas more likely to contain asbestos” and “areas where the presence of asbestos is possible but unlikely.” These areas are located north of U.S. Highway 50, east of Tierra del Dios Road, and along the easternmost portion of the alignment near South Shingle Road (i.e., east of Shingle Springs Substation). The Project alignment portions that are located in “areas where the presence

of asbestos is possible but unlikely" are in the Pine Hill Intrusive Complex-altered gabbro, which is west of Cameron Park Drive, south of U.S. Highway 50, and west of South Shingle Road. In addition, the portion of the Project alignment in the City of Folsom is located in areas that are considered "areas moderately likely to contain naturally occurring asbestos" and "areas least likely to contain naturally occurring asbestos." The City of Folsom Project alignment is located primarily in "areas moderately likely to contain naturally occurring asbestos," which contain the Copper Hill and Gopher Ridge Volcanics. A portion of the City of Folsom project alignment also contains Salt Springs Slate and is categorized as an "area least likely to contain naturally occurring asbestos" (El Dorado County, 2005; CDC, 2006).

Naturally occurring asbestos has been positively identified in ultramafic rocks in the Project area. In an area just southwest of Cameron Park, the proposed locations of Poles 25/195, 25/196, 25/197, and 24/193 would be located in or near areas that are composed on ultramafic rocks (Kleinfelder, 2011).

Existing Air Quality

El Dorado County Air Quality Management District (EDCAQMD) and Sacramento Metro Air Quality Management District (SMAQMD) operate a regional monitoring network that measures the ambient concentrations of criteria pollutants in the Project area. Background ambient concentrations of pollutants are determined by pollutant emissions in a given area as well as wind patterns and meteorological conditions for that area. As a result, background concentrations can vary among different locations within an area. However, areas located close together and exposed to similar wind conditions can be expected to have similar background pollutant concentrations. Existing levels of air quality in the Project area can generally be inferred from ambient air quality measurements conducted at its closest station. The nearest monitoring station to the Project alignment is at the Gold Nugget Way station in Placerville, located approximately 2 miles northeast of the Project alignment at the closest distance, and approximately 18 miles northeast at the furthest distance. However, this monitoring station only measures ozone. NO_2, CO, PM10, and PM2.5 were measured at the Sacramento-Del Paseo Manor station, located approximately 13 miles west-southwest of the western extent of the Project alignment. In general, the ambient air-quality measurements from these stations are the most representative of the air quality in the vicinity of the Project alignment.

Table 3.3-1 shows a 5-year (2008 – 2012) summary of monitoring data collected by EDCAQMD and SMAQMD. The data are compared to the most stringent of either the California Ambient Air Quality Standards (CAAQS) and/or National Ambient Air Quality Standards (NAAQS). As indicated in the table, the state 1-hour ozone standard and the national and state 8-hour ozone standards were both exceeded numerous times between 2008 and 2012. The state's CO and NO_2 standards were not exceeded between 2008 and 2012. The national 24-hour PM10 standard was not exceeded between 2008 and 2012; however, it is estimated that the state 24-hour PM10 standard was exceeded approximately 12 times in 2008 and 2011, and the state annual average PM10 standard was also exceeded in 2008 and 2011. The national 24-hour PM2.5 standard was exceeded numerous times in 2008, 2009, and 2011. The state and national annual average PM2.5 standards were also exceeded in 2008 and 2009.

TABLE 3.3-1
AIR QUALITY DATA SUMMARY (2008–2012) FOR THE PROJECT AREA

Pollutant	Standard	Monitoring Data by Year				
		2008	2009	2010	2011	2012
Ozone, O_3						
Highest 1-Hour Average, ppm		**0.14**	**0.11**	**0.10**	**0.10**	**0.11**
Days over State Standard	0.09	16	6	3	2	6
Highest 8-Hour Average, ppm		**0.118**	**0.09**	**0.10**	**0.09**	**0.10**
Days over State/National Standards	0.070/0.075	52/36	32/20	19/8	16/5	50/20
Carbon Monoxide, CO						
Highest 8-Hour Average, ppm		2.49	2.77	1.60	2.27	1.51
Days over State Standards	9.0	0	0	0	0	0
Nitrogen Dioxide, NO_2						
Highest 1-Hour Average, ppm		0.06	0.05	0.05	0.05	0.05
Days over State/National Standards	0.18/0.100	0	0	0	0	0
Annual Average, ppm		0.01	0.01	0.008	0.009	0.009
Exceed State/National Standards?	0.030/0.053	No	No	No	No	No
Fine Particulate Matter, PM10						
Maximum 24-Hour Average ($\mu g/m^3$)	50	**93**	45	44	**62**	41
Estimated Days over State Standard		12.1	0.0	0.0	12.2	0.0
State Annual Average ($\mu g/m^3$)	20	**23.2**	18.7	16.3	**20.7**	15.8
Exceed State Standard?		Yes	No	No	Yes	No
Fine Particulate Matter, PM2.5						
Highest 24-Hour Average, $\mu g/m^3$		**74.4**	**49.8**	33.9	**54.3**	35.3
Estimated days over National Standard	35	24.1	8.9	0.0	9.5	0.0
Annual Average, $\mu g/m^3$		18.9	15.5	8.7	11.6	9.2
Exceed State/National Standards?	12/12.0*	Yes	Yes	No	No	No

NOTES: Ozone was measured at the Placerville-Gold Nugget Way station. NO_2, CO, PM10, and PM2.5 were measured at the Sacramento-Del Paseo Manor station. Generally, state standards are not to be exceeded and national standards are not to be exceeded more than once per year. Values in bold are in excess of applicable standard; ppm = parts per million; and $\mu g/m^3$ = micrograms per cubic meter.

* The new national PM2.5 annual average standard was strengthened to12.0 $\mu g/m^3$ on December 14, 2012.The national PM2.5 annual average standard in affect during the study period was 15 $\mu g/m^3$.

SOURCE: CARB, 2014b.

Attainment Status

The EDCAQMD is considered in attainment or unclassified for most of the criteria pollutants for state and federal considerations with the exception of ozone, PM10, and PM2.5. EDCAQMD is designated as nonattainment for the state 1- and 8-hour ozone standards and the state PM10 standard. EDCAQMD is also designated as nonattainment for the federal 8-hour ozone standard and the western portion of El Dorado County is designated as nonattainment with the federal PM2.5 standard. SMAQMD is designated as nonattainment for the state 1- and 8-hour ozone, PM10, and PM2.5 standards. In addition, SMAQMD is designated as nonattainment for the federal 8-hour

ozone standard, PM10, and PM2.5 standards. Refer to **Table 3.3-2** for the current attainment status of the Project area.

TABLE 3.3-2
PROJECT AREA ATTAINMENT STATUS

Pollutant	Federal	State
Ozone (one-hour standard)	---a	Nonattainment
Ozone (eight-hour standard)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Unclassified/Attainment	Unclassified- El Dorado Attainment - Sacramento
Nitrogen Dioxides (NO_2)	Unclassified/Attainment	Attainment
Inhalable Particulates (PM10)	Unclassified- El Dorado Attainment- Sacramento	Nonattainment
Fine Particulates (PM2.5)	Nonattainment	Unclassified- El Dorado Nonattainment- Sacramento

a The Federal one-hour standard was revoked on June 15, 2005.

SOURCE: CARB, 2014c.

Sensitive Receptors

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions sources, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with greater associated exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The Project would largely be located within the existing PG&E power line right-of-way and traverses adjacent to residential, light industrial, and open space areas. Some construction activities would occur in areas that are within approximately 50 feet of sensitive receptors (i.e., residences). Over the entire alignment, there are nearly 100 residences located within 50 feet of the alignment. These are largely located in the City of Folsom and in the communities of El Dorado Hills, Cameron Park, and Shingle Springs. In addition, the following six schools are located within approximately 500 feet of proposed construction sites (PG&E, 2013):

- Blue Oak Elementary and Charter Montessori School (within approximately 370 feet);
- Camerado Springs Middle School (within approximately 315 feet);
- William Brooks Elementary School (within approximately 105 feet);
- Holy Trinity School (within approximately 420 feet);

- Vista del Lago High School (within approximately 315 feet); and
- Los Rios Community College (within approximately 155 feet).

3.3.2 Regulatory Setting

Criteria Air Pollutants

Regulation of air pollution is achieved through both national and state ambient air quality standards and emission limits for individual sources of air pollutants. As required by the federal Clean Air Act (CAA), the USEPA has identified criteria pollutants and has established NAAQS to protect public health and welfare. NAAQS have been established for ozone, CO, NO_2, SO_2, PM10, PM2.5, and lead. To protect human health and the environment, the USEPA has set "primary" and "secondary" maximum ambient standards for each of the criteria pollutants. Primary standards were set to protect human health, particularly sensitive individuals such as children, the elderly, and individuals suffering from chronic lung conditions such as asthma and emphysema. Secondary standards were set to protect the natural environment and prevent further deterioration of animals, crops, vegetation, and buildings.

The NAAQS are defined as the maximum acceptable concentration that may be reached, but not exceeded more than once per year. California has adopted more stringent ambient air quality standards for most of the criteria air pollutants. Table 3.3-2, above, presents the Project area's attainment status for the ozone, CO, NO_2, PM10, and PM2.5 NAAQS and CAAQS. California has also established state ambient air quality standards for sulfates, hydrogen sulfide, and vinyl chloride.

Toxic Air Contaminants

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources, but does not directly regulate air toxics emissions. Under the Act, TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment and, if specific thresholds are violated, are required to communicate the results to the public in the form of notices and public meetings. Depending on the risk levels, emitting facilities are required to implement varying levels of risk reduction measures. The EDCAQMD and SMAQMD are responsible for implementing AB 2588, and are responsible for prioritizing facilities that emit air toxics, reviewing health risk assessments, and implementing risk reduction procedures. Pursuant to the requirements of AB 2588, the EDCAQMD and SMAQMD publish air toxics emissions inventories that detail the TAC emissions of facilities throughout their districts.

Federal

USEPA is responsible for implementing the programs established under the federal CAA, such as developing and reviewing the NAAQS and judging the adequacy of State Implementation Plans (SIPs), but has delegated the authority to implement many of the federal programs to the states while retaining an oversight role to ensure that the programs continue to be implemented.

State

California Clean Air Act

The California Air Resources Board (CARB) is responsible for establishing and reviewing the state standards, compiling the California SIP and securing approval of that plan from USEPA, conducting research and planning, and identifying TACs. CARB also regulates mobile sources of emissions in California, such as construction equipment, trucks, and automobiles, and oversees the activities of California's air quality management districts, which are organized at the county or regional level. Air quality management districts are primarily responsible for regulating stationary sources at industrial and commercial facilities within their geographic areas and for preparing the air quality plans that are required under the federal CAA and California CAA.

Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations

CARB has established the Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations to minimize the generation of asbestos from earth disturbance (17 Cal. Code Regs. §93105). The Asbestos ATCM applies to any project that will include sites to be disturbed in a geographic ultramafic rock unit area or an area where naturally occurring asbestos, serpentine, or ultramafic rocks are determined to be present. Serpentine soils may be present in the Project area; therefore, the Project would be subject to the Asbestos ATCM.

Local

Sacramento Metro Region Air Quality Management Plans

The Sacramento Metro Region air quality management plans described below are applicable to the Project area in both the SMAQMD and the EDCAQMD.

1994 Sacramento Area Regional Ozone Attainment Plan

The *1994 Sacramento Area Regional Ozone Attainment Plan* is a regional planning document prepared by SMAQMD and EDCAQMD in coordination with the air quality management districts and air pollution control districts of Placer, Solano, Sutter, and Yolo counties. The 1994 Sacramento Regional Ozone Attainment Plan addresses compliance with the California CAA and the region's nonattainment status for ozone and, to a lesser extent, CO and PM10 in particular. The 1994 plan undergoes a triennial assessment relative to the extent of air quality improvements and emission reductions that have been achieved through the use of control measures. Triennial reports were prepared in 1997, 2000, 2003, and 2009, in compliance with the California CAA (CARB, 2014d).

2013 SIP Revision for the 1997 8-hour Ozone Standard

Sacramento County and the western portion of El Dorado County are part of the Sacramento Federal Ozone Nonattainment Area, which also includes Yolo County and portions of Placer, and Solano counties. The 2013 SIP Revision for the 1997 8-hour Ozone Standard for the Sacramento Metropolitan Area was adopted by CARB on November 21, 2013. The plan demonstrated progress toward attainment of the federal 8-hour ozone standard; however, it concluded that the

region would not be able to achieve attainment of the 8-hour ozone standard by the required 2013 deadline and requested an extension of the attainment deadline to June 15, 2019. As a result, the region was reclassification as a "severe" 8-hour ozone nonattainment area (CARB, 2013).

El Dorado County Air Quality Management District

EDCAQMD is responsible for attaining and/or maintaining air quality in El Dorado County respect to the federal and state air quality standards. Specifically, the EDCAQMD has the responsibility to monitor ambient air pollutant levels throughout El Dorado County and to develop and implement strategies to attain the applicable federal and state standards. EDCAQMD also adopts rules and regulations to control air pollutant emissions. The EDCAQMD rules summarized below would apply to the Project (CARB, 2014e).

Rule 202: Visible Emissions

Rule 202 prohibits a person from discharging into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour which is: (a) as dark or darker in shade as that designated as number 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines, or (b) of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in (a).

Rule 205: Nuisance

This rule prohibits persons from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property.

Rule 223: Fugitive Dust - General Requirements

The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions.

Rule 223-1: Fugitive Dust - Construction, Bulk Material Handling, Blasting, Other Earthmoving Activities and Carryout and Track-out Prevention

The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions.

Rule 223-2: Fugitive Dust - Asbestos Hazard Mitigation

The purpose of this rule is to reduce the amount of asbestos particulate matter entrained in the ambient air as a result of any construction related activities that disturbs or potentially disturbs naturally occurring asbestos by requiring actions to prevent, reduce, or mitigate airborne asbestos emissions.

Sacramento Metropolitan Air Quality Management District

SMAQMD oversees air quality conditions in Sacramento County. Sacramento County was designated as a moderate federal non-attainment area for PM10 in 1994 and USEPA determined that the County had achieved attainment of the federal PM10 AAQS in 2002 based on SMAQMD's *Implementation/Maintenance Plan and Redesignation Request for Sacramento County*. The plan describes measures to ensure maintenance of the attainment status through 2022 (SMAQMD, 2010). Specific SMAQMD rules applicable to project construction may include, but are not limited to, the following (SMAQMD, 2014a):

Rule 201: General Permit Requirements

This rule regulates the use of equipment capable of releasing emissions to the atmosphere, and requires operators of portable construction equipment (e.g., generators, compressors, pile drivers, lighting equipment) with an internal combustion engine over 50 horsepower (hp) to have a SMAQMD permit or the equipment must be included in the CARB portable equipment registration.

Rule 403: Fugitive Dust

This rule requires the developer or contractor to control dust emissions from earthmoving activities or any other construction activity to prevent airborne dust from leaving the project area.

Rule 902: Asbestos

To purpose of this rule is to limit the emission of asbestos to the atmosphere.

3.3.3 Applicant Proposed Measures

PG&E has proposed the following APMs to minimize air pollutant emissions from Project construction activities.

APM AQ-1: Minimize Fugitive Dust

PG&E will minimize fugitive dust during construction by implementing the following measures, which comply with EDCAQMD and SMAQMD requirements:

- Reduce the amount of the disturbed area where possible.
- Use water trucks or sprinkler systems in sufficient quantity to prevent airborne dust from leaving the site. Increase watering frequency whenever wind speeds exceed 15 miles per hour (mph). Use reclaimed non potable water whenever possible. Do not use non-potable water in or around crops intended for human consumption.
- Implement permanent dust control measures as soon as possible following completion of any soil-disturbing activities.
- Enforce a policy that vehicle speed for all construction vehicles is not to exceed 15 mph on any unpaved surface.
- Water all active construction areas as needed to suppress dust. Base the frequency on the type of operation and the soil and wind exposure.

- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site.
- Cover inactive storage piles.
- Sweep public roads if visible soil material is carried out from a work site.
- Post a publicly visible sign with the phone number for the EDCAQMD for compliance in reporting any Rule 205 (Nuisance) violations, as well as the telephone number and person to contact regarding dust complaints. Instruct this person to respond to complaints and take corrective action within 48 hours.
- Limit the area of earth-disturbing activities at any one time.

APM AQ-2: Minimize Vehicle and Equipment Emissions

PG&E will minimize vehicle emissions during project construction by implementing the following measures:

- Maintain construction equipment in proper working conditions in accordance with PG&E standards.
- Minimize unnecessary construction vehicle idling time. The ability to limit construction vehicle idling time will depend on 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 start-up. 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, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes allowed by California law; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction foremen will include 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 construction equipment exhaust by using low-emission or electric construction equipment where feasible. Portable diesel-fueled construction equipment with engines 50 hp or larger and manufactured in 2000 or later will be registered under the CARB Statewide Portable Equipment Registration Program.
- Minimize welding and cutting by using compression of 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.

APM AQ-3: Minimize Potential Naturally Occurring Asbestos Emissions

The project will develop a preemptive Asbestos Dust Mitigation Plan to identify all necessary best management practices that will be implemented if naturally occurring asbestos is encountered at any time during construction. The Asbestos Dust Mitigation Plan will be compliant with the requirements of CARB's Asbestos ATCM, EDCAQMD's Rule 223-2 (Fugitive Dust – Asbestos Hazard Mitigation), and SMAQMD's Rule 902 (Asbestos).

Before beginning any earth-disturbing activities in areas identified in [PEA] Section 3.6, Geology and Soils (i.e., "areas more likely to contain asbestos," "areas where the presence of asbestos is possible but unlikely," "areas moderately likely to contain naturally occurring asbestos," or "areas least likely to contain naturally occurring asbestos"), a geological evaluation will be performed by a registered geologist to determine whether naturally occurring asbestos is present. In addition, before beginning any earth-disturbing activities that will occur within 50 feet of residences and 500 feet of schools, a geological evaluation also will be performed by a registered geologist, to test for the presence of naturally occurring asbestos. If naturally occurring asbestos is detected during any geological evaluation or during subsequent construction activities, PG&E will minimize naturally occurring asbestos emissions by implementing the Asbestos Dust Mitigation Plan, which will comply with the requirements of CARB's Asbestos ATCM, EDCAQMD's Rule 223-2 (Fugitive Dust – Asbestos Hazard Mitigation), and SMAQMD's Rule 902 (Asbestos).

CARB's Asbestos ATCM includes asbestos management requirements that range from creating and implementing an Asbestos Dust Mitigation Plan, observing pre-notifications of construction activities, maintaining construction best management practices, meeting post-construction stabilization requirements, and performing administrative recordkeeping. Construction best management practices include monitoring all potential naturally occurring asbestos emission sources: road dust (e.g., limiting vehicle speeds); earth-disturbing activities (e.g., watering before, during, and after disturbance); track-out from work sites (e.g., washing equipment and vehicle tires); material export (e.g., haul truck material handling requirements); and post-construction stabilization (e.g., covering, chemical stabilizers, or vegetation). In addition, prior to construction, PG&E will consult with the local air district or air pollution control officer, to determine if air monitoring for asbestos will be required. The project will comply with EDCAQMD's Rule 223-2, which provides a list of best management practices to minimize the generation of asbestos dust from construction activities. The Asbestos Dust Mitigation Plan will include, but will not be limited to measures from EDCAQMD's Rule 223-2, as applicable. Implementation of the following asbestos best management practices for the project would be required where applicable, to ensure adequate performance of the Asbestos Dust Mitigation Plan:

Backfilling

- Mix backfill soil with water before moving the soil.
- Have a dedicate water truck or a high-capacity hose connected to backfilling equipment.
- Empty the loader bucket slowly to prevent dust plumes from being generated.
- Minimize the drop height from the loader bucket.

Clearing and Grubbing

- Maintain live perennial vegetation where possible.
- Apply water in sufficient quantity to prevent generation of visible dust.

Cut and Fill

- Pre-water with sprinklers or water trucks and allow time for penetration.
- Use water as necessary to minimize dust.

- Install upwind fencing to prevent material movement on site.
- Suspend operations when winds generate visible dust emissions despite control measures.
- Use tarps or other suitable enclosures on haul trucks.
- Provide water while loading and unloading to reduce visible dust plumes.
- If excavated material is classified as a hazardous waste material, verify that off-site transport complies with state and federal rules and regulations.

Disturbed Soil

- Limit vehicular traffic and disturbances on soils where possible.
- Limit vehicle speeds to 15 miles per hour.
- Apply water or a stabilizing agent in sufficient quantities to prevent generation of visible dust plumes.

General Site Management

- Wash mud and soil from equipment and vehicles after completing earth-disturbing activities to prevent them from crusting and drying.
- Prohibit the use of blower devices, dry rotary brushes, or dry brooms.
- Restrict vehicular access to established, unpaved travel paths and parking lots, to meet stabilization requirements.
- Document all locations and quantities of cut and fill, and off-site soil transport.
- Provide signage at work sites that meet Occupational Safety and Health Administration requirements.

3.3.4 Environmental Impacts and Mitigation Measures

a) Whether the Project would conflict with or obstruct implementation of the applicable air quality plan: *NO IMPACT*.

The Project would be located in the MCAB under the jurisdiction of the EDCAQMD and in the SVAB under the jurisdiction of the SMAQMD. There are several air quality plans that are applicable to the Project area given the multijurisdictional nature of the alignment and pollutants of concern for the region. Requirements of the air quality plans are adopted as applicable by the governing air quality management district and are enforced through district rules and regulations. Construction and operation of the Project would be conducted in compliance with applicable federal, state, and local requirements and long-term operations of the Project would result in no net increase in air pollutant emissions.

The mass emissions significance thresholds developed by EDCAQMD and SMAQMD to assess the potential for a project to violate an air quality standard or contribute to an air quality standard violation approximately correlate to the planned increases in air pollutant emissions that are assumed in the applicable regional air quality plans. Therefore, Project-related increases that would

equal or exceed the EDCAQMD or SMAQMD significance thresholds would be considered to conflict or obstruct implementation of applicable air quality plan. If a project's emissions would be less than these thresholds, the project would not be expected to conflict or obstruct implementation of the applicable air quality plans. As described in discussion b), below, emissions that would be associated with Project construction activities within EDCAQMD's and SMAQMD's jurisdictions would not exceed any construction-related thresholds of significance. Therefore, the Project would not conflict with any applicable air quality plans, and no impact would result.

b) Whether the Project would violate any air quality standard or contribute substantially to an existing or projected air quality violation: *LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*.

Construction

As discussed in Section 3.3.1, *Environmental Setting*, existing conditions within the Project area have been classified as nonattainment of ozone, PM10, and PM2.5 standards due to recent air quality violations. As described below, implementation of the Project could result in a violation or contribute to a violation of a PM10 or PM2.5 standard associated with dust generated during construction; however, implementation of mitigation measures would reduce this potential impact to a less-than-significant level. Construction of the Project would not cause or contribute to existing violations of any ozone standards. Construction of the Project would generate emissions of criteria air pollutants and precursors (i.e., ROG, NO_x, PM10, PM2.5, CO, and SO_2) over the 20-month construction period. Construction-related temporary exhaust and fugitive dust emissions would result from off-road construction equipment and machinery, helicopter activity, and from vehicular traffic generated by commuting workers and material hauling. As part of the CPUC's permit application process, PG&E provided construction emissions estimates for the construction activities that would be associated with the Project (PG&E, 2013 and 2014; see Appendix B). These emission estimates were independently reviewed by the CPUC's consultant, Environmental Science Associates (ESA), and are summarized below.

Project construction emissions that would be associated with the use of off-road construction equipment, such as graders, backhoes, loaders, and cranes, were estimated for the Project using the California Emission Estimator Model (CalEEMod version 2011.1.1). CalEEMod uses location-based emissions factors for off-road equipment with Project-specific construction information, such as equipment types, amounts, usage hours, and construction phase scheduling data, to estimate on-site construction emissions. PG&E has determined that a helicopter may be required to facilitate access to one of the tower staging areas. The helicopter emissions were estimated using specific emission and fuel use factors developed by the Switzerland Federal Office of Civil Aviation. To estimate off-site construction-related vehicle emissions that would be associated with construction of the Project, emission factors for on-road trucks and worker vehicles were derived using CARB's EMFAC2011 Model with anticipated trip characteristics, such as daily round trips, phase duration, and trip lengths.

Because the Project would occur within the jurisdictions of EDCAQMD and SMAQMD, the construction activities occurring in each jurisdiction were separated and modeled using the appropriate region-specific emissions factors so the Project emissions that would be generated

within each of the jurisdictions could be compared to the air districts CEQA thresholds of significance that were established to identify projects that could result in a violation or contribute to a violation of an air quality standard. Reasonable worst-case construction scenarios that would occur within each of the air districts were developed in order to identify the types of construction activities that would overlap in schedule and would contribute to the combined total maximum daily emissions.

Table 3.3-3 presents the estimated peak day construction exhaust emissions that would occur in El Dorado County that would be associated with the Project. For the purposes of this analysis, it is assumed that the construction activities associated with installation of tubular steel poles (TSP), reconductoring, installation of wooden pole, installation of micropiles for TSP foundations, and helicopter takeoffs, operations, and landings, would overlap in schedule during a single day, representing the maximum day construction scenario that would occur within El Dorado County.

TABLE 3.3-3
MAXIMUM DAILY CONSTRUCTION EXHAUST EMISSIONS WITHIN EL DORADO COUNTY

Construction Phase	Maximum Pollutant Emissions (lbs/day)			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Tubular Steel Pole	1.26	13.13	0.71	0.57
Reconductoring	1.78	15.90	0.88	0.74
Wood Poles	1.13	11.93	0.69	0.55
Grading	0.74	6.97	0.45	0.35
Micropiles[a]	3.06	32.69	1.82	1.47
Helicopter Landings and Takeoffs[b]	1.95	0.83	0.01	0.01
Helicopter Operations[c]	2.01	1.63	0.04	0.04
Maximum Daily Emissions[d]	11.93	83.08	4.60	3.73

[a] This analysis assumes a maximum of five micropiles may be constructed per day.
[b] For purposes of a conservative analysis, emissions from four helicopter landings and take-offs were assumed to occur within the EDCAQMD's jurisdiction, which would capture the worst-case construction scenario.
[c] For purposes of a conservative analysis, it is assumed that up to 1 hour per day of helicopter operations activity would occur within El Dorado County (ESA, 2014).
[d] Maximum daily emissions assume project construction associated with all of the above construction activities would occur on the same day. However, these activities are likely to be phased and all of the activities may not occur on a single day.

SOURCE: PG&E, 2014; ESA, 2014 (for helicopter operations only).

It should be noted that exhaust emissions estimated to occur in El Dorado County provided by PG&E only included helicopter emissions estimates that would be associated with takeoffs and landings because the majority of helicopter-related activities would occur within Sacramento County. However, because the helicopter may transit through El Dorado County from the airport where it is stationed each day and because the proposed helicopter/landing zone is at least 2,000 feet from the Sacramento County border, it is reasonable to assume that there would be some helicopter operations-related activity that would occur within El Dorado County in addition to takeoffs and landings. Therefore, to ensure a conservative analysis, PG&E's maximum-day emission estimates for El Dorado County were supplemented to include 1 hour of helicopter operations to account for travel to and from the Project area (ESA, 2014; see Appendix B).

Table 3.3-3 presents the maximum daily exhaust emissions that could occur within El Dorado County during construction of the Project. However, because construction emissions are temporary and typically involve a limited amount of sources, the EDCAQMD recommends that lead agencies estimate average daily exhaust emissions on a quarterly basis to be compared to its daily significance thresholds. Therefore, using PG&E's emissions estimates as a basis, ESA estimated the average daily exhaust emissions that would be associated with the first quarter of construction, which represents the quarter that would involve the most Project-related construction activities (ESA, 2014; see Appendix B). As disclosed in **Table 3.3-4**, average daily construction exhaust emissions would not exceed the EDCAQMD thresholds of significance. Therefore, construction exhaust emissions that would be generated within El Dorado County would not result in a violation or contribute to a violation of an air quality standard. The associated impact would be less than significant.

TABLE 3.3-4
AVERAGE DAILY CONSTRUCTION EXHAUST EMISSIONS WITHIN EL DORADO COUNTY

Construction Phase	Worst-case Workdays in Q1[a]	Quarterly Average Pollutant Emissions (lbs/day)[b]			
		ROG	NO_X	PM_{10}	$PM_{2.5}$
Tubular Steel Pole	60	1.26	13.13	0.71	0.57
Reconductoring	60	1.78	15.90	0.88	0.74
Wood Poles	60	1.13	11.93	0.69	0.55
Grading	5	0.06	0.58	0.04	0.03
Interset Poles	11	0.25	2.94	0.12	0.10
Wood Poles at Substations	7	0.16	1.88	0.08	0.06
Distribution Underground	13	0.34	3.04	0.16	0.15
Distribution Grading	26	0.49	3.33	0.26	0.24
Micropiles	6.4	0.33	3.49	0.19	0.16
Helicopter Landings and Takeoffs[c]	5	0.16	0.07	0.00	0.00
Helicopter Operations[d]	5	0.17	0.14	0.00	0.00
Total Average Quarterly Emissions	-	6.13	56.42	3.13	2.60
EDCAQMD Threshold of Significance		82	82	-	-
Exceeds Thresholds?		No	No	-	-

[a] Worst-case workdays that would occur during the first quarter of construction are based on PG&E, 2014.
[b] It is assumed that there would be 60 workdays for the project as a whole in the first quarter of construction. "-" indicates not applicable.
[c] For purposes of a conservative analysis, emissions from four helicopter landing and take-offs were assumed to occur within the EDCAQMD's jurisdiction (PG&E, 2014).
[d] For purposes of a conservative analysis, it is assumed that up to 1 hour per day of helicopter operations activity over 5 days would occur within El Dorado County; however, most of the helicopter operations would occur in Sacramento County in the vicinity of the subject towers.

SOURCE: ESA, 2014 (based on PG&E, 2014).

Table 3.3-5 presents the estimated maximum daily construction exhaust emissions for the Project that would occur in Sacramento County. For the purposes of this analysis, it is assumed that the construction activities associated with reconductoring, installation of lattice steel towers, helicopter operations, and grading activities, would overlap in schedule during a single day, representing the peak day construction scenario that would occur within Sacramento County. The

SMAQMD recommends that the maximum daily emissions of NO_x be compared to its threshold of significance for construction-generated NO_x to determine if the Project would result in a significant impact to air quality. As disclosed in Table 3.3-5, maximum daily construction exhaust emissions of NO_x would not exceed the SMAQMD's threshold of significance. Therefore, construction exhaust emissions that would be generated within Sacramento County would not result in a violation or contribute to a violation of an air quality standard. The associated impact would be less than significant.

TABLE 3.3-5
MAXIMUM DAILY CONSTRUCTION EXHAUST EMISSIONS WITHIN SACRAMENTO COUNTY

Construction Phase	Maximum Daily Pollutant Emissions (lbs/day)a			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Reconductoring	0.85	10.38	0.55	0.41
Lattice Steel Towers	1.84	20.28	0.79	0.65
Helicopter Operations[a]	12.06	9.79	0.29	0.29
Grading	0.72	6.76	0.44	0.34
Total Maximum Day Emissions[b]	15.47	47.21	2.07	1.69
SMAQMD Threshold of Significance	-	85	-	-
Exceeds Thresholds?	-	No	-	-

[1] For purposes of a conservative analysis, it is assumed that up to 6 hours per day of helicopter operations activity would occur within Sacramento County. "-" indicates not applicable.
[2] Maximum daily emissions assume project construction associated with all of the above construction activities would occur on the same day. However, these activities are likely to be phased and all of the activities may not occur on a single day.

SOURCE: PG&E, 2014.

For projects in El Dorado County, the EDCAQMD does not recommend that lead agencies quantify mass emissions of PM10 in the form of fugitive dust; however, if a project does not incorporate fugitive dust control measures to prevent visible dust from extending beyond the property line in compliance with Rule 403 of the South Coast Air Quality Management District (SCAQMD), the EDCAQMD assumes these emissions would be potentially significant (ECAQMD, 2002). In addition, the SMAQMD considers projects to result in less than significant PM10-related impacts to air quality if all of the SMAQMD Basic Construction Emission Control Practices are implemented and if the maximum daily disturbed area would not exceed 15 acres (SMAQMD, 2013).

Therefore, CPUC's approach to analysis of construction dust impacts is to emphasize implementation of SCAQMD Rule 403 measures in El Dorado County and SMAQMD Basic Construction Emission Control Practices in Sacramento County. Without implementation of these measures, the construction-related dust impact would generally be considered significant. Although PG&E has committed to implementing APM AQ-1 (Minimize Fugitive Dust), this measure does not require implementation of all the applicable fugitive dust control measures. Therefore, implementation of **Mitigation Measure 3.3-1** is required to ensure that all applicable SCAQMD Rule 403 fugitive dust control measures are implemented for construction activities in El Dorado County, and implementation of **Mitigation Measure 3.3-2** is required to ensure that all SMAQMD Basic Construction Emission Control Practices for fugitive dust are implemented

for construction activities in Sacramento County. Implementation of these measures would result in a less-than-significant impact relative to the potential for Project construction-generated dust to result in a violation or contribute to a violation of any PM10 or PM2.5 standard.

Operation and Maintenance

The proposed Project would require no change to PG&E's existing operation and maintenance activities, and would result in no net change in long-term emissions. Therefore, no operation-related impacts would occur.

Mitigation Measure 3.3-1: The following SCAQMD Rule 403 Best Available Fugitive Dust Control Measures shall be implemented during construction, where applicable, within El Dorado County:

- For inactive disturbed surfaces, either: apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust (excluding any areas which are inaccessible due to excessive slope or other safety conditions); or apply dust suppressants to inactive disturbed surface areas in sufficient quantity and frequency to maintain a stabilized surface; or establish a vegetative ground cover within 21 days after active operations have ceased (ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting); or utilize any combination of these controls together to control fugitive dust on all inactive disturbed surface areas.

- Water all unpaved roads used for any vehicular traffic once daily, during dry weather conditions.

- To control track-out, pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet; or pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.

- When wind gusts exceed 25 mph, implement the applicable Best Available Fugitive Dust Control Measures for High Wind Conditions identified in Appendix C-1, Table C.5 of the EDCAQMD Guide to Air Quality Assessment Determining Significance of Air Quality Impact Under the California Environmental Quality Act (EDCAQMD, 2002).

Mitigation Measure 3.3-2: The following SMAQMD Basic Construction Emission Control Practices shall be implemented during construction, where applicable, within Sacramento County:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads;

- Any haul trucks that would be traveling along freeways or major roadways should be covered; and

- Use wet power vacuum street sweepers to remove any visible track-out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

Significance after Mitigation: Less than Significant.

c) Whether the Project would 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*.

As summarized in Table 3.3-2, *Project Area Attainment Status*, El Dorado and Sacramento counties are designated as non-attainment for the state 1-hour ozone standard, federal and state 8-hour ozone standard, the state PM10 standard, and the federal PM2.5 standard. Sacramento County also is designated as non-attainment for the state PM2.5 standard. As described below, with the implementation of mitigation measures, the Project would not cause a cumulatively considerable net increase of any of these pollutants.

Pursuant to the EDCAQMD *Guide to Air Quality Assessment*, projects in El Dorado County that would be consistent with the applicable air quality plans, meet all applicable rules and regulations, and would not result in emissions that would exceed EDCAQMD thresholds, would not be considered to have a significant cumulative impact with regards to criteria air pollutant emissions (EDCAQMD, 2002). As discussed under items a) and b) above, the Project would be consistent with all applicable air quality plans and average daily emissions of criteria pollutants from construction of the Project would be less than the adopted EDCAQMD significance thresholds. In addition, implementation of Mitigation Measure 3.3-1 would ensure that all applicable SCAQMD Rule 403 fugitive dust control measures are implemented. Therefore, with mitigation, construction emissions occurring in El Dorado County that would be associated with the Project would not be cumulatively considerable.

Emissions of the Project generated within Sacramento County would be considered to have a significant cumulative impact if its individual emissions would exceed the SMAQMD threshold of significance (SMAQMD, 2013). As discussed under item b) above, Project-related emissions in Sacramento County would not exceed the SMAQMD threshold of significance. In addition, implementation of Mitigation Measure 3.3-2 would ensure that all applicable SMAQMD Basic Construction Emission Control Practices for fugitive dust would be implemented. Therefore, with mitigation, the Project would not result in a cumulatively considerable adverse contribution to Sacramento County's existing air quality conditions.

Mitigation Measures: Implement Mitigation Measures 3.3-1 and 3.3-2.

Significance after Mitigation: Less than Significant.

d) Whether the Project would expose sensitive receptors to substantial pollutant concentrations: *LESS THAN SIGNIFICANT*.

The Project would pass through areas of residential development in the City of Folsom and communities of El Dorado Hills, Cameron Park, and Shingle Springs. Over the entire Project alignment, there are nearly 100 residences located within 50 feet from the alignment and six schools are located within approximately 500 feet of the proposed construction sites.

Exposure to Toxic Air Contaminants

There would be no long-term net increases in TAC emissions generated by the Project; however, construction of the Project would result in the generation of short-term diesel exhaust emissions from on-site heavy duty equipment and from off-site material deliveries and debris hauling. Particulate exhaust emissions from diesel-fueled engines were identified as a TAC by CARB in 1998. The dose to which receptors are exposed is the primary factor affecting health risk from TACs. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period when assessing TACs (such as DPM) that have only cancer or chronic non-cancer health effects (OEHHA, 2003). However, such health risk assessments should be limited to the duration of the emission-producing activities associated with the project.

Construction of the Project would be short term, taking up to 20 months to complete; however, due to the linear nature of the power line construction activities, individual receptors would not be exposed to elevated levels of DPM for an extended period of time. In fact, individual sensitive receptors would not be expected to be exposed to DPM emissions from construction equipment for more than a week or two along the proposed power line segments. Since health risks associated with DPM are generally associated with chronic exposure and are assessed over a 70-year exposure period, emissions during construction of the Project would have a less-than-significant impact on nearby receptors.

In addition, PG&E has committed to implementing APM AQ-2 (Minimize Vehicle and Equipment Emissions), which requires the use of best management practices to reduce construction vehicle and equipment exhaust emissions, thereby further limiting DPM emissions.

Exposure to Naturally Occurring Asbestos

As discussed in Section 3.3.1, portions of the Project alignment are located in areas designated as "areas more likely to contain asbestos," "areas where the presence of asbestos is possible but unlikely," and "areas moderately likely to contain asbestos." Project construction activities resulting in ground disturbance could occur in areas where asbestos is present. Construction activities requiring soil excavation and movement of earth materials, such as concrete-pier and micropile foundations, installation of the underground distribution line, and replacement pole installations would result in the highest potential for causing naturally occurring asbestos (if present) to become airborne, where it could become a health hazard to construction workers and/or other members of the public.

In the designated areas along the proposed power line route described above, PG&E has proposed to implement APM AQ-3 to provide proper identification of naturally occurring asbestos along the power line route where soil disturbance is planned. If naturally occurring asbestos is found in these areas, CARB's Asbestos ATCMs, EDCAQMD's Rule 223-2, and SMAQMD's Rule 902 (such as developing an Asbestos Dust Mitigation Plan that outlines project-specific track-out prevention and control measures, stockpile protection measures, and wetting of soil to control fugitive dust) would be implemented during construction.

Furthermore, APM AQ-3 includes a provision to avoid and minimize naturally occurring asbestos impacts on sensitive receptors by requiring a geological evaluation for any ground-disturbing activities occurring within 50 feet of residences or 500 feet of a school, to test for the presence of naturally occurring asbestos before initiating ground disturbing activities in these areas. Therefore, all areas of earth disturbance documented as having the potential for naturally occurring asbestos to be present, or are located in proximity of residences or schools, would be evaluated for naturally occurring asbestos by a registered geologist before any earth-disturbing activities are conducted, and all required abatement measures would be implemented. With implementation of APM AQ-3, the impact with respect to naturally occurring asbestos would be less than significant.

e) Whether the Project would create objectionable odors affecting a substantial number of people: *LESS THAN SIGNIFICANT*.

Operation of the Project would not create odorous emissions. However, Project construction would include mobile emission sources, such as diesel equipment, which could result in the creation of objectionable odors. Since the construction activities would be temporary and spatially dispersed, and generally take place in rural areas, these activities would not affect a substantial number of people. Therefore, impacts from odors generated by construction of the Project would be less than significant.

References

California Air Resources Control Board (CARB), 2013. 2013 SIP Revision for the 1997 8-hour Ozone Standard for the Sacramento Metropolitan Area. November 21, 2013.

CARB, 2014a. *Toxic Air Contaminant Identification List*. [http://www.arb.ca.gov/toxics/id/taclist.htm]. Accessed April 22, 2011.

CARB, 2014b. iADAM Air Quality Data Statistics. [http://www.arb.ca.gov/adam/index.html]. Accessed March 11, 2014.

CARB, 2014c. Air Quality Standards and Area Designations. [http://www.arb.ca.gov/desig/desig.htm]. Accessed March 18, 2014.

CARB, 2014d. Sacramento Metro Region Air Quality Management Plans. [http://www.arb.ca.gov/planning/sip/planarea/sacsip/sacmetsip.htm]. Accessed March 18, 2014.

CARB, 2014e. El Dorado County AQMD List of Current Rules. [http://www.arb.ca.gov/drdb/ed/cur.htm]. Accessed March 18, 2014.

California Department of Conservation (CDC). 2006. Relative Likelihood for the Presence of Naturally Occurring Asbestos in Eastern Sacramento County, California. [http://www.conservation.ca.gov/cgs/information/publications/sr/East_Sac_County_SR192.pdf]. Accessed March 28, 2013.

El Dorado County, 2005. Asbestos Review Areas Map. July 21, 2005. [http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx]. Accessed March 18, 2014.

El Dorado County Air Quality Management District (EDCAQMD), 2002. *Guide to Air Quality Assessment Determining Significance of Air Quality Impact Under the California Environmental Quality Act (CEQA),* First Edition, February 2002.

EDCAQMD, 2014. Asbestos in El Dorado County. [http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx]. Accessed March 18, 2014.

Environmental Science Associates (ESA, 2014). Air Quality Supplement for the Missouri Flat-Gold Hill 115 kV Power Line Reconductoring Project, March 2014.

Kleinfelder, 2011. *Geotechnical Investigation Report Pacific Gas and Electric Company Missouri Flat – Gold Hill 115-kV Transmission Line Reconductoring Project : Sacramento and El Dorado Counties, California*. September 12, 2011.

Office of Environmental Health Hazard Assessment (OEHHA). 2003. *Air Toxics Hot Spots Program Risk Assessment Guidelines: The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. August, 2003.

Pacific Gas and Electric (PG&E), 2013. *Proponent's Environmental Assessment for the Application of Pacific Gas and Electric Company for a Permit to Construct the Missouri Flat-Gold Hill 115 kV Power Line Reconductoring Project*, filed August 23, 2013.

PG&E, 2014. Missouri Flat-Gold Hill 115 kV Power Line Reconductoring Project Response to Data Request No. 1. January 13, 2014.

Sacramento Metropolitan Air Quality Management District (SMAQMD), 2010. PM10

Implementation/Maintenance Plan and Redesignation Request for Sacramento County. [http://www.airquality.org/plans/federal/pm/pm10/index.shtml]. Accessed on March 24, 2014.

SMAQMD, 2013. Guide to Air Quality Assessment in Sacramento County. Last revised April 2013. [http://www.airquality.org/ceqa/ceqaguideupdate.shtml]. Accessed on May 14, 2014.

SMAQMD, 2014. Rules and Regulations. [http://www.airquality.org/rules/index.shtml. Accessed March 18, 2014].

Western Regional Climate Center (WRCC), 2014. Period of Record Monthly Climate Summary

for Represa Station, California (047370). [http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7370]. Accessed March 4, 2014.