

5.3 Air Quality

This section evaluates the potential for the Proposed Project, as well as the alternatives, to impact regional and local air quality due to generation of air emissions during construction, operation, and maintenance activities.

5.3.1 Setting

Air quality is affected by numerous factors, including the rate and location of pollutant emissions and environmental conditions which influence movement and dispersal of pollutants. These conditions include atmospheric features such as wind speed, wind direction, and air temperature gradients, as well as local topography.

The study area for air quality encompasses the City of Moorpark, the City of Thousand Oaks, and parts of unincorporated Ventura County within the South Central Coast Air Basin (SCCAB). Ventura County (County) is comprised of coastal mountain ranges, the coastal shore, the coastal plain, and several inland valleys. The County frequently suffers from poor air quality, as local air movement often exhibits weak vertical and horizontal dispersion characteristics, which limit the dispersion of emissions and cause increased ambient air pollutant levels. Persistent temperature inversions prevent vertical dispersion; the inversions act as a “ceiling” that prevents pollutants from rising and dispersing. Mountain ranges act as “walls” that inhibit horizontal dispersion of air pollutants. The diurnal land/sea breeze pattern common in Ventura County recirculates air contaminants. Air pollutants are pushed toward the ocean during the early morning by the land breeze, and toward the east during the afternoon by the sea breeze. This creates a “sloshing” effect, causing pollutants to remain in the area for several days. Residual emissions from previous days accumulate and chemically react with new emissions in the presence of sunlight, thereby increasing ambient air pollutant levels (VCAPCD, 2003).

The study area typically has average maximum and minimum winter (i.e., January) temperatures of 65 degrees Fahrenheit (°F) and 46 °F, respectively, while average summer (i.e., July) maximum and minimum temperatures are 85 °F and 59 °F, respectively. Rainfall averages approximately 17 inches per year (Weatherbase, 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 *Regulatory Setting* discussion below). Below are descriptions of criteria pollutants that are a concern in the study area.

Ozone

Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and 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 compounds (ROC) and nitrogen oxides (NO_x). ROC 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 three hours.

Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROC 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.

Nitrogen Dioxide

Nitrogen dioxide (NO₂) is an air pollutant of concern because it acts as a respiratory irritant. NO₂ is a major component of the group of gaseous nitrogen compounds commonly referred to as NO_x. A precursor to ozone formation, NO_x is produced by fuel combustion in motor vehicles, industrial stationary sources (such as industrial activities), ships, aircraft, and rail transit. Typically, NO_x emitted from fuel combustion is in the form of nitric oxide (NO) and NO₂. NO is often converted to NO₂ when it reacts with ozone or undergoes photochemical reactions in the atmosphere.

Particulate Matter

Particulate matter less than 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}) 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 adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. According to a study by the California Air Resources Board (CARB), exposure to ambient PM_{2.5}, particularly diesel particulate matter (DPM), can be associated with approximately 14,000 to 24,000 premature annual deaths statewide (CARB, 2009). Particulates can also damage materials and reduce visibility.

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 DPM emissions from diesel-fueled engines (CARB, 2011).

Valley Fever

San Joaquin Valley Fever (formally known as Coccidioidomycosis) is an infectious disease caused by the fungus *Coccidioides immitis*. San Joaquin Valley Fever is also known as Valley Fever, Desert Fever, or Cocci. Infection is caused by inhalation of *Coccidioides immitis* spores that have become airborne when dry, dusty soil or dirt is disturbed by natural processes such as wind or earthquakes, or by human induced ground disturbing activities such as construction, farming, etc.

There are about 100,000 new cases of Valley Fever per year in the southwestern United States. The average number of reported new cases of Valley Fever in Ventura County before 1994 was 40 per year. In 1994, the year that a large earthquake occurred in Northridge, a city approximately 20 miles east of the Proposed Project area, the number of reported new cases of Valley Fever was 243. This increase was attributed to the great quantities of airborne dust generated by the Northridge earthquake (VCAPCD, 2003). From 1995 to 2002, the number of cases of Valley Fever decreased. The number of cases reported annually during that time period averaged less than 19. However, cases of Valley Fever increased by 600 percent in the spring of 2004, following major wildfires in Ventura County in the fall of 2003 (Ventura County, 2010). The most recent annual average of new cases of Valley Fever in Ventura County reported by the Ventura County Department of Public Health is 56 for the period from 2006 through 2010 (VCHCA, 2011).

Existing Air Quality

The Ventura County Air Pollution Control District (VCAPCD)'s regional monitoring network measures the ambient concentrations of criteria pollutants. Existing levels of air pollutants in the study area can be inferred from ambient air quality measurements conducted by VCAPCD at its closest and most meteorologically representative stations to the study area. The closest and most meteorologically representative air quality monitoring stations are the City of Thousand Oaks Moorpark Road station, approximately 4 miles east-northeast of Newbury Substation, and the Simi Valley Cochran Street station, approximately 12 miles east of Moorpark Substation. The City of Thousand Oaks Moorpark Road station monitors ozone and PM_{2.5} and the City of Simi Valley Cochran Street station monitors ozone, PM₁₀, PM_{2.5}, and NO₂. **Table 5.3-1, Air Quality Data Summary (2009–2013) for the Study Area**, shows a 5-year summary of ozone and PM_{2.5} data monitored at the City of Thousand Oaks Moorpark Road station and PM₁₀ and NO₂ data monitored at the City of Simi Valley Cochran Street station. The data are compared to the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS).

As shown in **Table 5.3-1, Air Quality Data Summary (2009–2013) For the Study Area**, the state 1-hour ozone standard was exceeded between zero and nine times per year during the 2009 through 2013 period. The state 8-hour ozone standard was exceeded between one and nine times per year, while the national 8-hour ozone standard was exceeded between zero and six times per year during the 5-year period. The 24-hour state PM₁₀ standard was exceeded once in 2009, and there were no exceedances of the national 24-hour PM₁₀ standard recorded during the 5-year period. The annual average PM₁₀ concentrations exceeded the State standard in 2009 and 2013 during the 5-year study

**TABLE 5.3-1
AIR QUALITY DATA SUMMARY (2009–2013) FOR THE STUDY AREA**

Pollutant	Standard	Monitoring Data by Year				
		2009	2010	2011	2012	2013
Ozone						
Highest 1-Hour Average (ppm)		0.109	0.104	0.093	0.090	0.099
Days over State Standard	0.09	9	2	0	0	1
Highest 8-Hour Average (ppm)		0.086	0.090	0.079	0.075	0.081
Days over State Standard	0.070	9	9	7	2	1
Days over National Standard	0.075	5	6	1	0	1
Particulate Matter (PM₁₀)						
Highest 24-Hour Average (µg/m ³)		76.8	35.2	45.8	37.9	40.3
Days over State Standard	50	1	0	0	0	0
Days over National Standard	150	0	0	0	0	0
State Annual Average (µg/m ³)	20	25.5	18.8	19.6	19.5	22.5
Particulate Matter (PM_{2.5})						
Highest 24-Hour Average (µg/m ³)		21.7	21.7	19.7	41.9	28.7
Days over National Standard	35	0	0	0	1	0
State Annual Average (µg/m ³)	12	10.8	8.7	8.6	8.9	9.4
Nitrogen Dioxide (NO₂)						
Highest 1-Hour Average (ppm)		0.047	0.069	0.041	0.058	0.043
Days over State Standard	0.18	0	0	0	0	0
Days over National Standard	0.100	0	0	0	0	0
State Annual Average	0.030	0.011	0.010	0.009	0.010	0.009

NOTES: ppm = parts per million; µg/m³ = micrograms per cubic meter.

SOURCE: CARB, 2014a

period. There was a single exceedance of the national PM_{2.5} standard in 2012 and no exceedances of the PM_{2.5} state annual standard during the 5-year period. There were no exceedances of the state or national NO₂ standards during the 5-year study period.

Sensitive Receptors

For the purposes of this air quality analysis, sensitive receptors are generally defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and daycare centers. Occupants of these facilities may show greater than average sensitivity to air pollution due to pre-existing health problems, proximity to emissions sources, and/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 also considered sensitive to poor air quality because people usually stay at these locations for extended periods of time, which results in greater exposure to ambient air quality.

Proposed Project

There are about three dozen residences between 150 feet and 500 feet from Staging Yard 1 at Moorpark Substation. In the vicinity of Hitch Road and west of Citrus Drive, there are approximately 30 homes between 80 feet and 500 feet of Segment 2, and within Santa Rosa Valley, there are approximately 20 residences between 130 feet and 500 feet of Segment 2. There are also 12 residences off Marion Street between 70 feet and 500 feet south of Segment 4, and the Newbury Park Adventist Academy is approximately 500 feet south of Segment 4 off North Wendy Drive.

Regulatory Setting

Air quality within the SCCAB is addressed through the efforts of various federal, state, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The air pollutants of concern and agencies primarily responsible for improving the air quality within the SCCAB and the pertinent regulations are discussed below.

Criteria Air Pollutants

Regulation of air pollution is achieved through both CAAQS and NAAQS as well as 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 six criteria pollutants: ozone, carbon monoxide (CO), NO₂, sulfur dioxide (SO₂), particulate matter (i.e., PM₁₀, PM_{2.5}), and lead. To protect human health and the environment, the USEPA has set “primary” and “secondary” maximum ambient thresholds for these criteria pollutants. Primary thresholds were set to protect human health, particularly sensitive receptors 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 (i.e., CAAQS) for most of the criteria air pollutants. **Table 5.3-2, State and National Criteria Air Pollutant Standards, Effects, and Sources**, presents both sets of ambient air quality standards (i.e., national and state) and provides a brief discussion of the related health effects and principal sources for each pollutant. California has also established state ambient air quality standards for sulfates, hydrogen sulfide, and vinyl chloride; however, air emissions of these pollutants are not expected under the Proposed Project or alternatives and are not further discussed in this EIR.

**TABLE 5.3-2
STATE AND NATIONAL CRITERIA AIR POLLUTANT STANDARDS, EFFECTS, AND SOURCES**

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 Hour 8 Hour	0.09 ppm 0.070 ppm	– 0.075 ppm	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when VOC and NO _x react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
Carbon Monoxide (CO)	1 Hour 8 Hour	20 ppm 9.0 ppm	35 ppm 9 ppm	Classified as a chemical asphyxiant, CO interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Incomplete combustion of fuels; primarily from internal combustion engines, primarily gasoline-powered motor vehicles.
Nitrogen Dioxide (NO ₂)	1 Hour Annual	0.18 ppm 0.030 ppm	0.100 ppm 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
Sulfur Dioxide	1 Hour 3 Hour 24 Hour	0.25 ppm – 0.04 ppm	0.075 ppm 0.5 ppm 0.14 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants. Destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM ₁₀)	24 Hour Annual	50 µg/m ³ 20 µg/m ³	150 µg/m ³ –	May irritate eyes and respiratory tract. Decreases lung capacity; increases cancer and mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
Fine Particulate Matter (PM _{2.5})	24 Hour Annual	– 12 µg/m ³	35 µg/m ³ 12.0 µg/m ³	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also, formed from photochemical reactions of other pollutants, including NO _x , SO ₂ , and organics.
Lead	Monthly Rolling 3-month Average Quarterly	1.5 µg/m ³ – –	– 0.15 µg/m ³ 1.5 µg/m ³	Disturbs gastrointestinal system and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present source: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.

NOTES: ppm = parts per million; µg/m³ = micrograms per cubic meter

SOURCES: CARB, 2013 and VCAPCD, 2003

Ventura County is classified as a non-attainment area for the state one-hour ozone standard as well as the state and federal eight-hour ozone standards. Ventura County is also a non-attainment area relative to the state PM₁₀ standard. For all other criteria pollutants, Ventura County is either unclassified or classified as attainment with respect to state and federal standards (CARB, 2014b).

Federal

The USEPA is responsible for implementing the programs established under the federal CAA, such as establishing 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

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.

County or regional 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 and California CAAs.

California's Diesel Risk Reduction Plan / Diesel Fuel Regulations

As part of California's Diesel Risk Reduction Plan, CARB has passed numerous regulations to reduce diesel emissions from vehicles and equipment that are already in use. Combining these retrofit regulations with new engine standards for diesel fueled vehicles and equipment, CARB intends to reduce DPM emissions by 85 percent from year 2000 levels by 2020. California Diesel Fuel Regulations (13 Cal. Code Regs. §§2281-2285; 17 Cal. Code Regs. §93114) provide standards for diesel fuel.

Ventura County Air Pollution Control District

The Proposed Project and alternatives are located in the SCCAB, which encompasses Ventura, San Luis Obispo, and Santa Barbara counties. The VCAPCD has jurisdiction over the Ventura County portion of the SCCAB. VCAPCD programs include the adoption of regulations and policies, as well as implementation of education and public outreach programs. The VCAPCD is responsible for attaining and/or maintaining air quality in Ventura County within federal and state air quality standards. Specifically, the VCAPCD has the responsibility to monitor ambient air pollutant levels throughout Ventura County and to develop and implement strategies to attain the applicable federal and state standards.

Rule 55 – Fugitive Dust

Rule 55 prohibits emissions of fugitive dust from any applicable source such that the dust remains visible beyond the midpoint (width) of a public street or road adjacent to the property line of the emission source or beyond 50 feet from the property line if there is not an adjacent public street or road. This rule also prohibits emissions of fugitive dust from any applicable source such that the dust causes 20 percent opacity or greater during each observation and the total duration of such observations (not necessarily consecutive) is a cumulative 3 minutes or more in any 1-hour period. The rule prohibits persons from engaging in earth-moving activities in a manner that creates visible dust emissions over 100 feet in length. Additionally, no person shall allow track-out¹ to extend 25 feet or more in length unless at least one of the following three control measures is utilized: 1) track-out area improvement; 2) track out prevention; and 3) track-out removal.

Rule 55.1, Paved Roads and Public Unpaved Roads, requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from the VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public unpaved road.

2007 Air Quality Management Plan

The 2007 Ventura County Air Quality Management Plan (2007 AQMP), adopted by the VCAPCD Board on May 13, 2008, presents Ventura County's strategy for attaining the federal 8-hour ozone standard as required by the federal CAA Amendments of 1990. The 2007 AQMP also presents the VCAPCD's Triennial Assessment and Plan Update required by the California Clean Air Act of 1988. The 2007 AQMP contains a Reasonable Further Progress demonstration, a Motor Vehicle Conformity Budget for transportation conformity purposes, an emissions inventory and emission forecasts, and a local control strategy containing several new and "further study" emission control measures. The new control measures are proposed revisions to existing VCAPCD rules that VCAPCD staff has found practicable for Ventura County. The 2007 AQMP also incorporates CARB's State Strategy to achieve the additional emission reductions needed for all areas of the state, including Ventura County, to attain the federal 8-hour ozone standard (VCAPCD, 2008).

2012 Triennial Assessment and Plan Update

The California CAA requires that once every 3 years the state's air districts are to assess their progress towards attaining the state clean air standards, measure the amount of emission reductions achieved over the previous 3-year period, correct any deficiencies in meeting progress goals, and incorporate new data and projections into their clean air plans. The 2012 Triennial Assessment and Plan Update (Triennial Assessment) covers the most recent assessment period of 2009 through 2011. The Triennial Assessment has not identified any deficiencies with respect to meeting progress goals towards the state 1-hour ozone standard. However, the "every feasible

¹ VCAPCD defines track-out as any material that adheres to and agglomerates on the exterior surface or tires of motor vehicles, haul trucks, or mobile equipment that have been released onto a named, numbered, or lettered public paved road and can be removed by a PM10 efficient street sweeper under normal operating conditions.

measure” analysis conducted for the Triennial Assessment identified several existing VCAPCD rules with potential for enhancement. It also identified three possible new control measures that would help Ventura County continue its progress towards attaining the state ozone standards (VCAPCD, 2013).

5.3.2 Significance Criteria

According to Appendix G of the CEQA *Guidelines*, a project would result in significant air quality effects on the environment if it would:

- 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; or
- e) Create objectionable odors affecting a substantial number of people.

5.3.3 Applicant Proposed Measures

Southern California Edison (SCE) has proposed the following applicant proposed measure (APM) to minimize impacts on air quality from the Proposed Project. The impact analysis assumes that the APM would be implemented (i.e., part of the Proposed Project) to reduce impacts to air quality as discussed below.

APM AQ-1: Air Quality Protection. SCE has implemented, and would implement, a number of practices, including minimizing equipment idling time and maintaining equipment engines in good condition and in proper tune as per manufacturers’ specifications, to reduce emissions.

SCE’s practices for the control of fugitive dust emissions, which were implemented during past construction activities and would be implemented during future construction activities, incorporate many of the recommended measures described in the Ventura County Air Pollution Control District (VCAPCD Model Fugitive Dust Mitigation Plan, which is reproduced verbatim below:²

1. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.

² This text is taken verbatim, including the parenthetical remark “(indicate by whom)”, from the Ventura County Air Quality Control District’s *Ventura County Air Quality Assessment Guidelines*.

2. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
3. Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
 - a. All trucks shall be required to cover their loads as required by California Vehicle Code Section 23114.
 - b. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
4. Graded and/or excavated inactive areas of the construction site shall be monitored by (indicate by whom) at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.³
5. Signs shall be posted on-site limiting traffic to 15 miles per hour or less.⁴
6. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.
7. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
8. Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

³ SCE did not/may not always undertake soil stabilization activities in areas that were/are inactive for more than four days due to prohibition of construction activities to protect nesting birds.

⁴ SCE did/will not post speed limit signs along the access roads; the design of the roads are not conducive to travel above 15 mph by the types of vehicles used during past construction activities.

5.3.4 Impacts and Mitigation Measures

Approach to Analysis

This analysis presents the potential air quality impacts associated with the construction, operation, and maintenance of the Proposed Project and alternatives and has been prepared in accordance with the *Ventura County Air Quality Assessment Guidelines* (VCAPCD, 2003). The VCAPCD has adopted CEQA thresholds of significance for long-term project operations for ozone precursors of 25 pounds per day for ROC and 25 pounds per day for NO_x. The VCAPCD has determined that an exceedance of the threshold for either or both of the precursors indicates that a project would individually and cumulatively jeopardize attainment of ozone standards, and would result in a significant adverse impact on air quality. The *Ventura County Air Quality Assessment Guidelines* do not identify significance thresholds for short-term construction emissions and recommend that construction-related ROC and NO_x emissions not be counted towards the two significance thresholds, since these emissions are temporary (VCAPCD, 2003).

The South Coast Air Quality Management District (SCAQMD) is an adjacent air district to VCAPCD with its boundary located approximately 7 miles southeast of Newbury Substation. The SCAQMD has adopted well-defined construction mass emission significance thresholds that are supported by substantial evidence (SCAQMD, 2011). Therefore, the California Public Utility Commission (CPUC) has opted to compare the estimated construction exhaust emissions that would be associated with the Proposed Project and alternatives to SCAQMD's significance thresholds for ozone precursors (i.e., NO_x and volatile organic compounds (VOCs))⁵ and particulate matter (i.e., PM₁₀ and PM_{2.5}) to determine if construction exhaust emissions that would be associated with the Proposed Project could result in a violation of an air quality standard or contribute substantially to an existing or projected air quality violation. Exceedance of any of any of these thresholds would also represent a cumulatively considerable net increase in criteria pollutants. It should be noted that the SCAQMD has also identified construction significance thresholds for sulfur oxides (SO_x), CO, and lead; however, there is a long history of low emissions and associated attainment of ambient air quality standards for these pollutants in Ventura County (VCAPCD, 2013). Construction of the Proposed Project would not generate emissions that could result in or contribute to an exceedance of an ambient air quality standard for any of these pollutants or be cumulatively considerable relative to these pollutants.

To assess the significance of dust related impacts, the VCAPCD recommends minimizing fugitive dust, especially during grading and excavation operations, rather than quantifying fugitive dust emissions (VCAPCD, 2003). Therefore, this analysis applies a qualitative approach to assessment of dust-related emissions relative to whether or not the Proposed Project would include implementation of VCAPCD-recommended dust control measures.

With regard to the potential for the Proposed Project to expose sensitive receptors to substantial pollutant concentrations and odors, given that the diesel combustion emissions that would be associated with the proposed subtransmission line construction activities would proceed at a

⁵ For the purposes of this analysis, VOC ozone precursors are assumed to be the same as ROCs ozone precursors.

linear pace, and would not expose any one receptor along the corridors for an extended period of time, these impacts are evaluated qualitatively based on duration of exposure.

**a) Conflict with or obstruct implementation of the applicable air quality plan.
(No Impact)**

The Proposed Project would be located in the SCCAB under the jurisdiction of the VCAPCD. The most recent air quality plan for the Ventura County portion of the SCCAB is the 2007 AQMP, which was released in 2008. Construction of the Proposed Project would be conducted in compliance with applicable federal, state, and local requirements. Long-term operation of the Proposed Project would result in air pollutant emissions from a small amount of worker automobile trips each month and the annual use of a helicopter related to inspection and maintenance purposes. Exhaust emissions from these trips would be negligible (see Impact 5.3-3). Furthermore, the Proposed Project would not induce or cause population growth (see Section 5.14, *Population and Housing*), and therefore would not affect population growth assumptions that were considered when developing the 2007 AQMP. For these reasons, the Proposed Project would not conflict with or obstruct the implementation of the applicable air quality plan (No Impact).

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact 5.3-1: Construction activities would generate exhaust emissions that could contribute substantially to a violation of an air quality standard. *Significant and unavoidable* (Class I)

Construction of the Proposed Project would generate emissions of criteria air pollutants over a construction period of approximately 10 months. Exhaust emissions would result from construction equipment and machinery as well as from vehicular traffic generated by construction activities. Emission levels for the various construction activities would vary with the type of equipment, duration of use, operation schedules, and size of the construction labor force.

As part of the CPUC's Permit to Construct application process, SCE provided construction-related air pollutant emissions estimates for the construction activities that would be associated with the Proposed Project (see Appendix D, *Air Quality and Greenhouse Gas Emission Estimates*). The emission estimates were independently reviewed by the CPUC's consultant, Environmental Science Associates (ESA). The Proposed Project emissions were estimated by SCE using the California Emissions Estimator Model (CalEEMod) version 2011.1.1 developed by the SCAQMD. This version of CalEEMod calculates the construction equipment exhaust emissions based on CARB's OFFROAD2007 model equipment emission and load factors. In 2011, CARB released the In-Use Off-road Equipment Inventory Model that includes more accurate equipment load factors that are based on academic studies and data from engine manufacturers. For the In-Use Off-road Equipment Inventory Model, CARB revised its construction equipment load factors, reducing them by 33 percent compared to those associated with the OFFROAD2007

model (CARB, 2010). Therefore, ESA revised SCE's estimated off-road equipment emissions estimates to reflect CARB's updated equipment use factors (ESA, 2015).

To estimate peak daily construction emissions that would be associated with construction of the Proposed Project, a worst-case scenario was developed in order to identify the types of construction activities that could overlap in schedule and would contribute to the combined total maximum daily emissions. Based on SCE's emissions estimates, construction activities associated with right-of-way (ROW) clearing, marshalling yards, roads and landing work, wood pole removal, guard structure installation, removal of conductor from lattice steel towers (LST), LST removal and foundation removal, tubular steel pole (TSP) installation, light weight steel (LWS) pole installation, improvements at Moorpark Substation, and improvements at Newbury Park Substation could be undertaken during the same time periods, representing the peak day construction scenario.

Table 5.3-3, Proposed Project Peak Day Construction Exhaust Emission Estimates, presents the estimated peak day construction exhaust emissions that would be associated with the Proposed Project. These emissions would be dispersed throughout the study area along the proposed subtransmission alignment, as well as along the roads that would be used to access the Proposed Project. TSP foundation installation, and TSP hauling, assembly, and erection would generate the most air pollution among all construction activity sources associated with the peak day of construction under the Proposed Project.

**TABLE 5.3-3
PROPOSED PROJECT PEAK DAY CONSTRUCTION EXHAUST EMISSION ESTIMATES**

Emission Sources	Peak Day Exhaust Emissions (lb/day)			
	ROC	NO _x	PM ₁₀	PM _{2.5}
ROW Clearing	5.04	39.29	1.78	1.78
Marshalling Yards	1.60	12.57	0.47	0.47
Roads and Landing Work	3.06	25.10	0.92	0.92
Wood Pole Removal	2.66	22.06	0.80	0.80
Guard Structure Installation	2.68	22.20	0.80	0.80
Removal of Conductor from LST	6.48	54.96	1.88	1.88
LST Removal and Foundation Removal	3.81	30.39	1.30	1.30
TSP Foundation Installation, and TSP Hauling, Assembly, and Erection	7.67	63.42	2.33	2.33
LWS Pole Haul, Assembly, and Installation	6.16	51.21	1.88	1.88
Moorpark Substation: Electrical, Wiring, Testing/Maintenance Improvements	1.74	11.47	0.81	0.81
Newbury Park Substation: Electrical, Wiring, Testing/Maintenance Improvements	1.83	13.13	0.84	0.84
Total Maximum Daily Emissions	42.74	345.80	13.81	13.81
Significance Thresholds	75	100	150	55
Significant Impact?	No	Yes	No	No

NOTES: See Appendix D for all assumptions and emissions factors used to estimate the peak day construction emissions for the Proposed Project.

As indicated in Table 5.3-3, *Proposed Project Peak Day Construction Exhaust Emission Estimates*, Proposed Project construction-related peak day NO_x emissions would be approximately 346 pounds, which would be more than the significance threshold, resulting in a significant impact. Therefore, implementation of Mitigation Measure 5.3-1, which requires the use of available construction equipment that meets the highest USEPA-certified tiered emission standards, would be required. It should be noted that these emissions are projected to occur on a single day. Construction NO_x emissions on the next highest day would be approximately 268 pounds, and the average daily NO_x emissions over the duration of construction activities would be approximately 131 pounds.

With regard to the estimated ROC, PM₁₀, and PM_{2.5} exhaust emissions presented in Table 5.3-3, *Proposed Project Peak Day Construction Exhaust Emission Estimates*, these mass emissions would not exceed any of the significance thresholds. Therefore, ROC, PM₁₀, and PM_{2.5} exhaust emissions generated by the Proposed Project would not be expected to violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts associated with the generation of ROC, PM₁₀, and PM_{2.5} exhaust emissions would therefore be less than significant.

Mitigation Measure 5.3-1: For diesel-fueled off-road construction equipment of more than 50 horsepower, SCE shall make a good faith effort to use available construction equipment that meets the highest USEPA-certified tiered emission standards. An Exhaust Emissions Control Plan that identifies each off-road unit's certified tier specification and Best Available Control Technology (BACT) shall be submitted to the CPUC for review and approval at least 30 days prior to commencement of construction activities. Construction activities cannot commence until the plan has been approved. For all pieces of equipment that would not meet Tier 3 emission standards, the Exhaust Emissions Control Plan shall include documentation from two local heavy construction equipment rental companies that indicates that the companies do not have access to higher-tiered equipment for the given class of equipment.

Implementation of Mitigation Measure 5.3-1 would reduce the Proposed Project-related NO_x exhaust emissions identified in Table 5.3-3, *Proposed Project Peak Day Construction Exhaust Emission Estimates*. While implementation of Mitigation Measure 5.3-1 would reduce NO_x emissions to the maximum extent feasible, the availability of construction equipment that meets the highest USEPA-certified tiered emission standards is currently unknown. As a result, it cannot be established at this time that implementation of Mitigation Measure 5.3-1 would reduce NO_x emissions to below the significance threshold. The construction-related NO_x impact would remain significant and unavoidable even with incorporation of mitigation.

NO_x emissions are a concern as an ozone precursor. The health implications of this significant impact to regional air quality would coincide with any increased violations of the air quality standards for ozone. As noted previously (Section 5.3.1, *Setting*), elevated ozone concentrations can cause adverse effects on human health, including the aggravation of existing respiratory diseases such as asthma, bronchitis, and emphysema. However, the extent to which these significant ozone precursor emissions would result in adverse health effects is not readily quantifiable on a local scale because by its very nature, ozone is a regional pollutant in that it can be formed miles away and hours after the ozone precursor emissions are generated.

Significance after mitigation: Significant and unavoidable.

Impact 5.3-2: Construction activities would generate fugitive dust emissions that could contribute substantially to an existing or projected air quality violation. *Less than significant with mitigation* (Class II)

Construction-related activities would generate dust from earthmoving, excavation, vehicle travel on paved and unpaved surfaces, and other activities over the 10-month construction period. Emissions of fugitive dust would vary according to the level and type of construction activity, silt content of soil, and prevailing weather. While most of the heavier dust particles would settle on or near the construction site, smaller dust particles would tend to remain suspended longer in the air, increasing particulate levels in the vicinity of the Proposed Project.

The *Ventura County Air Quality Assessment Guidelines* recommend that lead agencies for projects that could generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause injury or damage to business or property, identify the project as one that would cause a significant adverse air quality impact. To assess the significance of dust related impacts, the VCAPCD recommends that lead agencies require projects to minimize fugitive dust, especially during grading and excavation operations, rather than quantifying fugitive dust emissions.

SCE has committed to implementing APM AQ-1, which indicates that SCE would apply many of the recommended measures described in the VCAPCD model Fugitive Dust Mitigation Plan. However, APM AQ-1 does not identify which control measures would be implemented and does not specifically require the implementation of the measures. Therefore, to strengthen the intent of APM AQ-1, Mitigation Measure 5.3-2, which defines the VCAPCD dust control measures, would be implemented to insure that the Proposed Project would not result in a significant impact related to the generation of fugitive dust. It should be noted that VCAPCD dust control components 4 and 5 have been modified in Mitigation Measure 5.3-2 to: 1) allow for flexibility in implementation of the measure given the potential for non-work buffer areas to be established to protect nesting birds pursuant to implementation of APM BIO-4 (see Section 5.4.3, *Biological Resources*); and 2) require that Proposed Project vehicle speeds on access roads would not exceed 15 miles per hour rather than simply requiring the posting of speed limit signs.

Mitigation Measure 5.3-2: SCE shall reduce construction-related fugitive dust emissions by implementing the following VCAPCD dust control measures. SCE shall require all contractors to comply with the following requirements:

1. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.

2. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
3. Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
 - a. All trucks shall be required to cover their loads as required by California Vehicle Code Section 23114.
 - b. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
4. Graded and/or excavated inactive areas of the construction site shall be monitored by SCE's mitigation monitor at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over 4 days as long as there are no prohibitions of construction activities in the area to protect nesting birds. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.
5. All traffic on dirt access roads shall be limited to a speed of 15 miles per hour or less.
6. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.
7. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
8. Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

Significance after mitigation: Less than significant.

Impact 5.3-3: Operation and maintenance activities would generate emissions of criteria pollutants. *Less than significant* (Class III)

Operation and maintenance of the Proposed Project would not result in new stationary sources of criteria pollutants nor would it increase criteria pollutant emissions from existing stationary

sources. Mobile source emissions-related activities associated with Proposed Project operation would be limited to up to 15 maintenance and inspection trips per month and an annual inspection using a helicopter. Operation and maintenance emissions have been estimated by ESA using CARB’s EMFAC 2014 model emission factors for light duty trucks and helicopter emissions factors obtained from the Emissions and Dispersion Modeling System (EDMS) version 5.1.4.1. **Table 5.3-4** presents the estimated peak day operation and maintenance exhaust emissions that would be associated with the Proposed Project (see Appendix D for all assumption used to estimate the Proposed Project operation and maintenance emission).

**TABLE 5.3-4
PROPOSED PROJECT PEAK DAY OPERATION AND
MAINTENANCE EXHAUST EMISSION ESTIMATES**

Emission Sources	Peak Day Exhaust Emissions (lb/day)			
	ROC	NO _x	PM ₁₀	PM _{2.5}
Light-duty trucks – maintenance and inspections	0.09	0.34	0.08	0.03
Helicopter - inspections	8.47	0.81	0.27	0.27
Total Maximum Daily Emissions	8.56	1.15	0.35	0.3
Significance Thresholds	25	25	---	---
Significant Impact?	No	No	No	No

NOTES: See Appendix D for all assumptions and emissions factors used to estimate the peak day operation and maintenance emissions for the Proposed Project.

These emissions would not exceed the VCAPCD operational significance thresholds. Therefore, criteria pollutant emissions that would be generated by operation and maintenance of the Proposed Project would not be expected to contribute substantially to a violation of an air quality standard and the associated impact would be less than significant.

Mitigation: None required.

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).

Ventura County is designated as non-attainment for ozone and PM₁₀. Long term operation of the Proposed Project would result in emissions of ozone precursors (NO_x and ROC) and PM₁₀, which would not exceed the operational significance thresholds (see discussion for Impact 5.3-3). The VCAPCD has determined that an exceedance of a threshold indicates that a project would cumulatively jeopardize attainment of standards. Therefore, Proposed Project long-term emissions would not be cumulatively considerable and the associated cumulative impact would not be significant.

Impact 5.3-4: Construction activities would result in emissions of NO_x that would be cumulatively considerable. Significant and unavoidable (Class I)

Construction activities associated with the Proposed Project, as described in the Impacts 5.3-1 and 5.3-2 discussions, could have a temporary adverse effect on regional air quality through short-term increases in ozone precursors, which could be cumulatively significant when combined with other projects described in Section 7.1, *Projects Considered in the Cumulative Analysis*.

The VCAPCD has determined that an exceedance of a threshold indicates that a project would cumulatively jeopardize attainment of standards. Proposed Project exhaust emissions of ROC, PM₁₀, and PM_{2.5} would not exceed the significance thresholds; therefore, Proposed Project-related ROC, PM₁₀, and PM_{2.5} emissions would not be cumulatively considerable and the associated cumulative impacts would be less than significant. Mitigation Measure 5.3-1 would help reduce NO_x emissions; however, NO_x emissions could continue to exceed the VCAPCD significance threshold. Therefore, emissions of NO_x during construction of the Proposed Project would be cumulatively considerable and when combined with emissions from other projects would represent a cumulative impact on air quality that would be significant and unavoidable.

To assess the significance of construction-related dust in the form of PM₁₀, the VCAPCD recommends minimizing project-related fugitive dust rather than quantifying the associated PM₁₀ emissions. Implementation of Mitigation Measure 5.3-2 would ensure that PM₁₀ emissions that would be associated with construction of the Proposed Project would be minimized to the extent that the emissions would not be cumulatively considerable. Therefore, PM₁₀-related cumulative impacts on air quality from the Proposed Project and other projects would be less than significant.

Mitigation: Implement Mitigation Measures 5.3-1 (Construction Equipment NO_x Reductions) and 5.3-2 (Fugitive Dust Mitigation Plan).

Implementation of Mitigation Measures 5.3-1 and 5.3-2 would reduce emissions of criteria pollutants; however, not all potential significant impacts from construction emissions would be mitigated to a less-than-significant level. Therefore, when considered with other projects, construction of the Proposed Project would result in a cumulatively considerable net increase in NO_x emissions and the associated cumulative impact would be significant and unavoidable (Class I).

Significance after mitigation: Significant and unavoidable.

d) Expose sensitive receptors to substantial pollutant concentrations.

Impact 5.3-5: Construction activities would generate emissions of Toxic Air Contaminants (TACs), potentially exposing sensitive receptors to harmful pollutant concentrations. Less than significant (Class III)

Particulate exhaust emissions from diesel-fueled engines (DPM) were identified as a TAC by CARB in 1998. Construction of the Proposed Project would result in temporary and short-term

generation of DPM emissions from the use of off-road diesel equipment and from construction material deliveries and debris hauling using on-road heavy-duty trucks. Long-term sources of DPM emissions that would be associated with the Proposed Project would be negligible and limited to up to 15 off-site truck trips per month related to inspection and maintenance activities. It is assumed that helicopters that would be used to inspect the subtransmission line would be fueled with aviation gasoline.

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, 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 Proposed Project.

The majority of Proposed Project DPM emissions would be associated with subtransmission line construction, which would proceed at a linear pace and would not be expected to expose any one receptor along the corridors for longer than 2 weeks. Because the total emissions and duration of exposure at any one sensitive receptor location would be relatively minor compared to the 70-year exposure used in health risk assessments, the health risk from the short-term DPM emissions that would be associated with construction of the Proposed Project would be negligible, and this impact would be less than significant.

Mitigation: None required.

Impact 5.3-6: Construction activities could expose local sensitive receptors to *coccidioides immitis* spores. *Less than significant* (Class III)

Construction activities that include ground disturbance would have the potential to release *coccidioides immitis* spores. However, it is likely that much of the population of Ventura County has already been exposed to Valley Fever and would continue to be exposed because of the various earthmoving activities that have historically occurred and continue to occur as a result of agricultural and construction activities throughout the region. As a result of the endemic nature of the disease and the number of earthmoving activities in the County (e.g., grading and excavation for agriculture, as well as new residential, commercial, and industrial development, and surface mining operations), there are new cases of Valley Fever documented in the County each year; however, many people who are exposed do not develop symptoms.

Valley Fever-related impacts associated with the Proposed Project would not be considered significant because ongoing ground-disturbing activities in the County currently represent a continual source of spores that contribute to the low number of Valley Fever cases reported each year. Construction activities associated with the Proposed Project would result in similar

localized ground disturbing activities to those that occur continually within the County and the Proposed Project would not result in a substantial increase in spore release. In addition, based on analysis by the Centers for Disease Control and Prevention of the Valley Fever outbreak associated with the January 1994 Northridge earthquake, as well as a subsequent outbreak following the wildfires in the fall of 2003, a major ground-disturbing event (e.g., another major earthquake or wildfire) is required to release a large number of spores over a wide area for a significant outbreak of Valley Fever to occur. Construction of the Proposed Project would not be a major ground disturbing event that could release a large number of spores. Therefore, construction of the Proposed Project would not represent an increased risk to public health. In addition, implementation of Mitigation Measure 5.3-2 (see above), which requires implementation of VCAPCD fugitive dust control measures, would ensure that fugitive dust that could contain *coccidioides immitis* spores would be controlled to the maximum extent feasible. Valley Fever-related impacts would be less than significant.

Mitigation: None required.

e) Create objectionable odors affecting a substantial number of people.

Impact 5.3-7: Construction and operation would not create objectionable odors. *Less than significant* (Class III)

Operation of the Proposed Project would not create odorous emissions. However, Proposed Project construction would include 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 would 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 Proposed Project would be less than significant.

Mitigation: None required.

5.3.5 Alternatives

No Project Alternative 1

Under No Project Alternative 1, the construction, operation, and maintenance-related impacts that would result under the Proposed Project, as discussed in Section 5.3.4, would not occur. There would be no impact under No Project Alternative 1.

No Project Alternative 2

Under No Project Alternative 2, the Proposed Project would not be constructed and the infrastructure already constructed for the Moorpark-Newbury 66 kV Subtransmission line would

be removed, with the exception of the previously installed LWS poles and energized conductor. The 22 TSPs, a partial TSP, 30 TSP foundations, and three TSP foundation holes filled with slurry would be removed. Infrastructure removal under No Project Alternative 2 would generate pollutant emissions from construction equipment over a period estimated to be approximately 5 months. Short-term exhaust emissions would result from construction equipment and machinery as well as from vehicular traffic generated by construction activities. There would be no emissions associated with long-term operation or maintenance under No Project Alternative 2. Estimated emissions that would be associated with No Project Alternative 2 were estimated by ESA based on emissions of similar construction phases associated with the Proposed Project, adjusted to No Project Alternative 2 assumptions. See Appendix D for all assumptions used to estimate No Project Alternative 2 emissions.

Table 5.3-5, *No Project Alternative 2 Peak Day Construction Exhaust Emission Estimates*, presents the peak day estimated air pollutant exhaust emissions that would be associated with infrastructure removal under No Project Alternative 2, generated by off-road construction equipment and on-road vehicles. As shown in the table, construction activities associated with roads and landing work; marshalling yards; TSP pole, foundation, and slurry removal; removal of conductor on LWS poles; removal of improvements at Moorpark Substation; and removal of improvements at Newbury Park Substation could overlap in schedule, representing the peak day construction scenario.

**TABLE 5.3-5
NO PROJECT ALTERNATIVE 2 PEAK DAY CONSTRUCTION EXHAUST EMISSION ESTIMATES**

Emission Sources	Peak Day Emissions (lb/day)			
	ROC	NO _x	PM ₁₀	PM _{2.5}
Roads and Landing Work	3.06	25.10	0.92	0.92
Marshalling Yard	1.60	12.57	0.47	0.47
TSP Pole Removal	4.93	41.65	1.54	1.54
TSP Foundation and Slurry Removal	1.80	13.77	0.62	0.62
Removal of Conductor on LWS Poles	6.48	54.96	1.88	1.88
Removal of Infrastructure at Moorpark Substation - wiring	0.07	0.74	0.02	0.02
Removal of Infrastructure at Moorpark Substation - Civil	4.21	32.51	1.23	1.23
Removal of Electrical Infrastructure at Newbury Park Substation	0.16	2.40	0.05	0.05
Removal of Infrastructure at Newbury Substation - Civil	4.21	32.51	1.23	1.23
Total Maximum Daily Emissions	26.53	216.22	7.97	7.97
Significance Thresholds	75	100	150	55
Significant Impact?	No	Yes	No	No

NOTES: See Appendix D for all assumptions and emissions factors used to estimate the peak day construction emissions for the No Project Alternative 2.

As indicated in Table 5.3-5, *No Project Alternative 2 Peak Day Construction Exhaust Emission Estimates*, No Project Alternative 2 construction-related maximum day NO_x exhaust emissions would be approximately 216 pounds, which would be less emissions than would occur under the

Proposed Project, but would exceed the significance threshold, resulting in a significant impact. Therefore, implementation of Mitigation Measure 5.3-1, which requires the use of available construction equipment that meets the highest USEPA-certified tiered emission standards, would be required. While implementation of Mitigation Measure 5.3-1 would reduce NO_x emissions to the maximum extent feasible, the availability of construction equipment that meets the highest USEPA-certified tiered emission standards is currently unknown. As a result, it cannot be established at this time that implementation of Mitigation Measure 5.3-1 would reduce NO_x emissions to below the significance threshold. The construction-related NO_x impact under the No Project Alternative 2 would remain significant and unavoidable even with incorporation of mitigation (Class I).

Mitigation Measure 5.3-2, which defines the VCAPCD dust control measures, would be required to be implemented to insure that No Project Alternative 2 would not result in a significant impact related to the generation of fugitive dust (Class II). Local health risk and odor impacts that would be associated with No Project Alternative 2 would be negligible given the limited exposure periods of sensitive receptors to construction emissions. Same as described for the Proposed Project, local health risk and odor impacts under No Project Alternative 2 would be less than significant (Class III).

References – Air Quality

California Air Resources Board (CARB), 2009. *Methodology for Estimating Premature Deaths Associated with Long-Term Exposure to Fine Airborne Particulate Matter in California*, Draft Staff Report, December 7, 2009, www.arb.ca.gov/Research/Health/pm-mort/pm-mortdraft.pdf.

CARB, 2010. Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use off-road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements, Appendix D: OSM and Summary of Off-Road Emissions Inventory Update.

CARB. 2011, *Toxic Air Contaminant Identification List*. Last updated July 18, 2011. Available at: <http://www.arb.ca.gov/toxics/id/taclist.htm>, accessed October 27, 2014.

CARB, 2013. *Ambient Air Quality Standards*, last updated June 4, 2013.

CARB, 2014a. *iADAM Air Quality Data Statistics*. Available at: www.arb.ca.gov/adam/index.html, accessed September 29 and 30, 2014.

CARB, 2014b. Area Designations Maps / State and National. Available at: <http://www.arb.ca.gov/desig/adm/adm.htm>, last updated August 22, 2014.

Environmental Science Associates (ESA), 2015. Air Quality and GHG Supplement for the Moorpark-Newbury Subtransmission Line Project. April, 2015.

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.

South Coast Air Quality Management District (SCAQMD), 2011. SCAQMD Air Quality Significance Thresholds. Last revised March 2011.

Ventura County Air Pollution Control District (VCAPCD), 2003. *Ventura County Air Quality Assessment Guidelines*. Last revised October 2003.

VCAPCD, 2008. Final Ventura County 2007 Air Quality Management Plan, adopted May 13, 2008.

VCAPCD, 2013. Ventura County Triennial Assessment and Plan Update, 2009 – 2011, adopted January 8, 2013.

Ventura County Health Care Agency (VCHCA), 2011. Community Health Status Report 2011.

Weatherbase, 2014. Thousand Oaks, California Travel Weather Averages. Available at: <http://www.weatherbase.com/weather/weather.php3?s=509840>, accessed August 7, 2014.

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