

4.2 AIR QUALITY

This section provides a discussion of existing air quality, evaluates potential air quality impacts associated with the proposed project, both short-term construction-related impacts and long-term operational impacts, and identifies mitigation measures recommended for potentially significant impacts. This air quality section uses information provided by the City, the applicant, San Luis Obispo County Air Pollution Control District (SLOAPCD), and OMNI-MEANS (EIR transportation consultant). Short-term construction emissions would result from grading and digging with large equipment, transport of materials, and worker vehicle commutes. Long-term operational emissions would result from a combination of vehicle and area sources. Modeled air quality emission levels are based upon vehicle data and project trip generation prepared for this project, as well as operational emissions associated with long-term use of the proposed project components.

4.2.1 Existing Conditions

4.2.1.1 Regional Meteorology

San Luis Obispo County is part of the South Central Coast Air Basin (SCCAB), which also includes Santa Barbara and Ventura Counties. The climate of the San Luis Obispo area is strongly influenced by its proximity to the Pacific Ocean. Winds and inversions play an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific high-pressure system and other global weather patterns, topographical factors, and circulation patterns that result from temperature differences between the land and the sea. Ocean temperatures and other large-scale weather patterns also control inversions.

4.2.1.2 San Luis Obispo County

San Luis Obispo County constitutes approximately 3,316 square miles with varied vegetation, topography, and climate. From a geographical and meteorological standpoint, the county is divided into three general regions: the Coastal Plateau, the Upper Salinas River Valley, and the East County Plain. Air quality in each of these regions is characteristically different, although the physical features that divide them provide only limited barriers to the transport of pollutants between regions.

Motor vehicles are the primary source of air pollutant emissions and greenhouse gases (GHGs) (SLOAPCD 2009). Approximately 75 percent of the county population, and a corresponding portion of the commercial and industrial facilities, is located within the Coastal Plateau. Due to higher population density and closer spacing of urban areas, emissions of air pollutants per unit area are generally higher in this region than in other regions of the county. However, emissions per capita may be lower since goods, services, and jobs are typically closer to those in cities and towns compared to rural areas.

4.2.1.3 City of Grover Beach

Grover Beach is primarily a residential community adjacent to the Pacific Ocean, with approximately three out of every four workers currently commuting out of the city for work. This commuting is the primary source of locally produced GHGs and criteria pollutants. Grover Beach's location means airflow plays an important role in the movement and dispersion of pollutants in the project area. The speed and direction of local winds are controlled by the location and strength of the Pacific high-pressure system and other global patterns, by

topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. These contributing factors help Grover Beach enjoy generally good air quality year-round.

4.2.1.4 Air Quality Monitoring

The county's air quality is measured at nine ambient air quality monitoring stations. These stations include four APCD-operated permanent stations, two state-operated permanent stations, two special stations, and one station operated by the ConocoPhillips Oil Refinery (for Sulfur Dioxide). Air quality monitoring is rigorously controlled by federal and state quality assurance and control procedures to ensure data validity. Gaseous pollutant levels are measured continuously and averaged each hour, 24 hours a day. Particulate pollutants are generally sampled by filter techniques for averaging periods of three to 24 hours. PM₁₀ (inhalable particulate matter 10 microns or less in size) and PM_{2.5} (inhalable particulate matter 2.5 microns or less in size) are sampled for 24 hours every sixth day on the same schedule nationwide.

4.2.1.5 Existing Air Quality

The significance of a given pollutant can be evaluated by comparing its atmospheric concentration to federal and state air quality standards. These standards represent allowable atmospheric contaminant concentrations at which the public health and welfare are protected. Generally, standards are set to protect the most vulnerable populations that include infants and children, those with respiratory illness, and the elderly. California ambient air standards are generally more stringent than federal standards.

In San Luis Obispo County, ozone and fine particulate are the pollutants of main concern, since exceedances of state health-based standards for those are experienced in some areas of the county. Particulate matter is monitored in two ways: PM₁₀ and PM_{2.5}. The monitoring stations closest to Grover Beach are located in Nipomo.

Between 2005 and 2008, the Nipomo stations recorded one exceedance of the state eight-hour ozone standard and no violations of state PM_{2.5} standard. No federal standards have been exceeded at Nipomo in the past three years. High readings in the East County Plain will probably trigger a federal ozone non-attainment designation but this will not affect cities on the coastal plateau. The two PM₁₀ monitoring stations in Nipomo have recorded numerous violations of the state standard.

SLO County Attainment Status

The following describes the criteria air pollutants and their attainment status in the SCCAB based on the California Air Resources Board's (ARB) Area Designations, Activities, and Maps (ARB 2008). Table 4.2-1 summarizes the attainment status in San Luis Obispo County for the major criteria pollutants.

Table 4.2-1. Attainment Status in San Luis Obispo County

Pollutant	State	Federal
O3-1 hour	Nonattainment	<u>Unclassified/Attainment</u> Standard Revoked June 2005
O3-8 hour	Nonattainment	<u>Unclassified/Attainment</u> Pending Nonattainment
PM10	Nonattainment	<u>Unclassified/Attainment</u> Attainment
PM2.5	Attainment	<u>Unclassified/Attainment</u> Attainment
CO	Attainment	<u>Unclassified</u> Attainment
NO2	Attainment	<u>Unclassified</u> Attainment
SO2	Attainment	<u>Unclassified</u> Attainment
Lead	Attainment	<u>No Attainment Information</u> Attainment
<u>Vinyl Chloride</u>	<u>No Attainment Information</u>	<u>No Federal Standards</u>
All others	<u>Attainment</u> Attainment/Unclassified	<u>No Federal Standards</u> Attainment/Unclassified

Source: <http://www.arb.ca.gov/desig/adm/adm.htm>

4.2.2 Regulatory Setting

4.2.2.1 Federal Clean Air Act Amendments

Air quality protection at the national level is provided through the federal Clean Air Act Amendments, as amended in 1990. The federal regulations are generally less stringent than the California law. Table 4.2-2 presents the Federal and State ambient air quality standards. The act sets statutory deadlines for attaining health standards for ambient air. The 1990 amendments added several new sections to the law, including requirements for the control of toxic air contaminants; reductions in pollutants responsible for acid deposition; development of a national strategy for stratospheric ozone and global climate protection; and requirements for a national permitting system for major pollution sources.

4.2.2.2 California Clean Air Act

The California Clean Air Act (CCAA) was signed into law in September of 1988. It requires all areas of the state to achieve and maintain the California ambient air quality standards by the earliest practicable date. California standards are generally more stringent than the federal standards; thus, emission controls to comply with the state law are more stringent than necessary for attainment of the federal standards. The law requires that all APCDs adopt and enforce regulations to achieve and maintain the State ambient air quality standards for the area under its jurisdiction. Pursuant to the requirements of the law, the SLOAPCD develops a Clean Air Plan that undergoes subsequent updates as required.

Table 4.2-2. Federal and State Ambient Air Quality Standards

Ambient Air Quality Standards							
Pollutant	Averaging Time	California Standards ¹		Federal Standards ²			
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷	
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 µg/m ³)		0.075 ppm (147 µg/m ³)			
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m ³		—			
Fine Particulate Matter (PM _{2.5})	24 Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	15.0 µg/m ³			
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	None	Non-Dispersive Infrared Photometry (NDIR)	
	1 Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)			
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—			
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Gas Phase Chemiluminescence	53 ppb (100 µg/m ³) (see footnote 8)	Same as Primary Standard	Gas Phase Chemiluminescence	
	1 Hour	0.18 ppm (339 µg/m ³)		100 ppb (188 µg/m ³) (see footnote 8)	None		
Sulfur Dioxide (SO ₂)	24 Hour	0.04 ppm (105 µg/m ³)	Ultraviolet Fluorescence	—	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) ⁹	
	3 Hour	—		—			0.5 ppm (1300 µg/m ³) (see footnote 9)
	1 Hour	0.25 ppm (655 µg/m ³)		75 ppb (196 µg/m ³) (see footnote 9)			—
Lead ¹⁰	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	—	
	Calendar Quarter	—		1.5 µg/m ³			
	Rolling 3-Month Average ¹¹	—		0.15 µg/m ³			Same as Primary Standard
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer — visibility of ten miles or more (0.07 — 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards			
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography				
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence				
Vinyl Chloride ¹⁰	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (09/08/10)

Notes:

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010). Note that the (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.
9. On June 2, 2010, the U.S. EPA established a new 1-hour SO₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum of 0.14 ppm and the annual primary SO₂ standard of 0.030 ppm, effective August 23, 2010. EPA also proposed a new automated Federal Reference Method (FRM) using ultraviolet technology, but will retain the older pararsaniline methods until the new FRM have adequately permeated State monitoring networks. The EPA also revoked both the existing 24-hour SO₂ standard of 0.14 ppm and the annual primary SO₂ standard of 0.030 ppm, effective August 23, 2010. The secondary SO₂ standard was not revised at that time; however, the secondary standard is undergoing a separate review by EPA. Note that the new standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the new primary national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. National lead standard, rolling 3-month average: final rule signed October 15, 2008.

The Final 2001 San Luis Obispo Clean Air Plan is used to guide emission control schemes that will help the area meet PM₁₀ and ozone standards for the entire county (SLOAPCD 2004). The Clean Air Plan presents a detailed description of pollutant sources, future air quality impacts expected under current growth trends, and an appropriate control strategy for reducing ozone precursor emissions, thereby improving air quality. Land use generally dictates mobile source activity. Since cars and trucks are major emission categories, in the long term, land use planning strongly influences air quality.

4.2.3 Thresholds of Significance

The significance of potential air quality impacts is based on thresholds identified within Appendix G of the CEQA Guidelines and standards established within the SLOAPCD CEQA Air Quality Handbook (refer to Appendix G of this EIR for the recently updated Handbook). The specifics of these guidelines are defined below.

4.2.3.1 CEQA Guidelines

Appendix G of the CEQA Guidelines provides the following thresholds for determining significance with respect to air quality. Air quality impacts would be considered significant if the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in 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);
- Expose sensitive receptors to substantial pollutant concentrations; or,
- Create objectionable odors affecting a substantial number of people.

4.2.3.2 SLOAPCD CEQA Air Quality Handbook

According to the December 2009 CEQA Air Quality Handbook, project impacts may also be considered significant if one or more of the following special conditions apply:

- If the project has the ability to emit hazardous or toxic air pollutants in the close proximity of sensitive receptors, such that an increased cancer risk affects the population.
- If the project has the potential to emit diesel particulate matter in an area of human exposure, even if overall emissions are low.
- Remodeling or demolition operations where asbestos-containing materials will be encountered.
- If naturally occurring asbestos has been identified in the project area.
- If project has the ability to emit hazardous or toxic air pollutants in the close proximity of sensitive receptors, such as schools, churches, hospitals, etc.
- If the project results in a nuisance odor problem to sensitive receptors.

The CEQA Air Quality Handbook defines thresholds for long-term operational emissions and short-term construction related emissions. Depending on the level of exceedance of a defined threshold, the APCD has established varying levels of mitigation.

Significance of Long-term Operational Emissions

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for long-term operational emissions (i.e., vehicular and area source emissions) from a project are presented in Table 4.2-3. Emissions that equal or exceed the designated threshold levels are considered potentially significant and should be mitigated. As shown in the table, the level of analysis and mitigation recommended follows a tiered approach based on the overall amount of emissions generated by the project. For projects requiring air

quality mitigation, the APCD has developed a list of both standard and discretionary mitigation strategies tailored to the type of project being proposed: residential, commercial, or industrial.

Table 4.2-3. SLOAPCD Thresholds of Significance for Operational Emissions

Pollutant	Threshold ¹	
	Daily	Annual
Ozone Precursors (ROG + NOx) ²	25 lbs/day	25 tons/year
Diesel Particulate Matter (DPM) ²	1.25 lbs/day	N/A
Fugitive Particulate Matter (PM10), Dust	25 lbs/day	25 tons/year
CO	550 lbs/day	N/A
Greenhouse Gases (CO2, CH4)	Not Yet Established	

1. Daily and annual emission thresholds are based on the California Health & Safety Code Division 26, Part 3, Chapter 10, Section 40918, and the CARB Carl Moyer Guidelines for DPM.

2. URBEMIS – use winter operational emission data to compare to operational thresholds.

Source: County of San Luis Obispo, APCD CEQA Air Quality Handbook, 2009

Ozone Precursor (ROG + NOx) Emissions

- If the project’s ozone precursor emissions are below the APCD’s **25 lbs/day** (combined ROG+ NOx emissions) no ozone mitigation measures are necessary. The Lead Agency will prepare the appropriate, required environmental document(s).
- Projects that emit **25 lb/day** or more of ozone precursors (ROG + NOx combined) have the potential to cause significant air quality impacts, and should be submitted to SLOAPCD for review. On-site mitigation measures, following the guidelines in Section 3.7 of the SLOAPCD CEQA Air Quality Handbook 2009 (*Operational Emission*), are recommended to reduce air quality impacts to a level of insignificance.

If all feasible mitigation measures are incorporated into the project and emissions can be reduced to less than 25 lbs/day, then the Lead Agency will prepare the appropriate, required environmental document(s).

If all feasible mitigation measures are incorporated into the project and emissions are still greater than 25 lbs/day, then an EIR should be prepared. Additional mitigation measures, including off-site mitigation, may be required depending on the level and scope of air quality impacts identified in the EIR.

- Projects which emit **25 tons/year** or more of ozone precursor (ROG + NOx combined), require the preparation of an EIR. Depending upon the level and scope of air quality impacts identified in the EIR, mitigation measures, including off-site mitigation, may be required to reduce the overall air quality impacts of the project to a level of insignificance.

Diesel Particulate Matter (DPM) Emissions

Diesel particulate matter (DPM) is seldom emitted from individual projects in quantities, which lead to local or regional air quality attainment violations. DPM is, however, a toxic air contaminant and carcinogen, and exposure DPM may lead to increased cancer risk and respiratory problems. Certain industrial and commercial projects may emit substantial quantities of DPM through the use of stationary and mobile on-site diesel-powered equipment as well diesel trucks and other vehicles that serve the project.

Projects that emit more than **1.25 lbs/day** of DPM need to implement on-site Best Available Control Technology measures. If sensitive receptors are within 1,000 feet of the project site, a Health Risk Assessment (HRA) may also be required. Sections 3.5.1 and 3.6.4 of the SLOAPCD CEQA Air Quality Handbook 2009 provide more background on HRAs in conjunction with CEQA review. Guidance on the preparation of a HRA may be found in the California Air Pollution Control Officers Association (CAPCOA) report *Health Risk Assessment For Proposed Land Use Projects* which can be downloaded from the CAPCOA website at www.capcoa.org.

Fugitive Particulate Matter (Dust) Emissions

Projects which emit more than **25 lbs/day** or **25 tons/year** of fugitive particulate matter need to implement permanent dust control measures to mitigate the emissions below these thresholds or provide suitable off-site mitigation approved by the APCD. Operational fugitive dust emissions from a proposed project are calculated using the URBEMIS model discussed in Section 3.6.1. of the SLOAPCD CEQA Air Quality Handbook 2009. Typical sources of operational emissions included the following:

- **Paved roadways:** Vehicular traffic on paved roads that are used to access large residential, commercial, or industrial projects can generate significant dust emissions.
- **Off and/or on-site unpaved roads or surfaces:** Even at low traffic volume, vehicular traffic on unpaved roads or surfaces that are used to access residential, commercial, or industrial operations or that access special events, etc. can generate significant dust emissions.
- **Industrial and/or commercial operations:** Certain industrial operations can generate significant dust emissions associated with vehicular access, commercial or industrial activities.

Any of the above referenced land uses or activities can result in dust emissions that exceed the APCD significance thresholds, cause violations of an air quality standard, or create a nuisance impact in violation of APCD Rule 402 *Nuisance*. In all cases where such impacts are predicted, appropriate fugitive dust mitigation measures shall be implemented.

Carbon Monoxide (CO) Emissions

Carbon monoxide is a colorless, odorless, tasteless gas emitted during combustion of carbon-based fuels. While few land use projects result in high emissions of CO, this pollutant is of particular concern when emitted into partially or completely enclosed spaces such as parking structures and garages. Projects that emit more than 550 lbs/day of carbon monoxide (CO) and occur in a confined or semi-confined space (e.g., parking garage or enclosed indoor stadium) must be modeled to determine their significance. In confined or semi-confined spaces where vehicle activity occurs, CO modeling is required. If modeling shows the potential to violate the

State CO air quality standard, mitigation or project redesign is required to reduce CO concentrations to a level below the health-based standard.

Guidelines for Applying ROG, NO_x and PM₁₀ Mitigation Measures

In general, projects that do not exceed the 25 lb/day ROG+NO_x threshold do not require mitigation. For projects that exceed this threshold, the SLOAPCD has developed a list of mitigation strategies for residential, commercial, and industrial projects. The project proponent may suggest alternate mitigation measures if the APCD suggested measures are not feasible. Project mitigation recommendations are summarized in Table 4.2-4.

Table 4.2-4. SLOAPCD Mitigation Threshold Guide

Combined ROG+NO _x or PM ₁₀ Emissions (lbs/day)	Mitigation Measures Recommended	
	Residential, Commercial or Industrial	Off-Site Mitigation
< 25	None	None
25 – 29	8	*
30 – 34	14	*
35 – 50	18	*
≥ 50	All Feasible	*
≥ 25 ton/yr	All Feasible	Yes

* Will be dependent on the effectiveness of the mitigation measures, location of project and high vehicle dependent development. Examples of projects potentially subject to off-site mitigation include: rural subdivisions, drive-through applications, commercial development located far from urban core.

Source: County of San Luis Obispo, APCD CEQA Air Quality Handbook, 2009

The recommended standard air quality mitigation measures have been separated according to land use (i.e., residential, commercial and industrial), measure type (i.e., site design, energy efficiency and transportation) and pollutant reduced (i.e., ozone, particulate, diesel PM, and GHGs). Any project generating 25 lbs/day or more of ROG + NO_x or PM₁₀ should select the applicable number of mitigation measure as outlined above from Table 4.2-4 to reduce the air quality impacts from the project below the significance thresholds. Consult Table 3-5 of the SLOAPCD CEQA Air Quality Handbook, 2009, for a list of applicable mitigation measures.

Significance of Short-term Construction Emissions

Heavy equipment and earth-moving operations can generate construction dust and combustion emissions. These may have substantial temporary impacts on local air quality. Fugitive dust emissions would result from land clearing, demolition, ground excavation, cut and fill operations, and equipment traffic over temporary roads at the construction site. Combustion emissions, such as NO_x, and diesel particulate matter, are most significant when using large diesel fueled scrapers, loaders, dozers, haul trucks, compressors, generators, and other types of equipment. Because specific construction equipment information is often not available during the EIR

process, the SLOAPCD has developed an alternative method for calculating construction emissions based on the amount of earthwork involved for a particular project. It may be necessary to calculate the project's construction impacts without knowing the exact fleet of construction equipment involved in the project. Table 4.2-5 contains screening construction emission rates based on the volume of soil moved and the area disturbed. This table should only be used when no other project information is available. Table 4.2-6 summarizes the level of emissions requiring mitigation.

Table 4.2-5. Screening Emission Rates for Construction Operations

Pollutant	Grams/Cubic Yard of Material Moved	Lbs/Cubic Yard of Material Moved
Diesel Particulate Matter (DPM)	2.2	0.0049
Reactive Organic Gases (ROG)	9.2	0.0203
Oxides of Nitrogen (NOx)	42.4	0.0935
Fugitive Dust (PM10)	0.75 tons/acre/month of construction activity (assuming 22 of operation per month)	

Source: County of San Luis Obispo, APCD CEQA Air Quality Handbook, 2009

Table 4.2-6. Level of Construction Activity Requiring Mitigation

Pollutant	Threshold ¹		
	Daily (Pounds)	Quarterly Tier 1 (Tons)	Quarterly Tier 2 (Tons)
ROG + NOx (Combined)	137	2.5	6.3
Diesel Particulate Matter (DPM)	7	0.13	0.32
Fugitive Particulate Matter (PM10), Dust2	n/a	2.5	n/a

1. Daily and quarterly emission thresholds are based on the California Health & Safety Code and the CARB Carl Moyer Guidelines.

2. Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5-ton PM10 quarterly threshold.

Mitigation of construction activities is required when the emission thresholds are equaled or exceeded by fugitive and/or combustion emissions:

ROG and NOx Emissions

- **Daily:** For construction projects expected to be completed in less than one quarter (90 days), exceedance of the 137 lb/day threshold requires Standard Mitigation Measures;

- **Quarterly – Tier 1:** For construction projects lasting more than one quarter, exceedance of the 2.5 ton/qtr threshold requires Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. If implementation of the Standard Mitigation and BACT measures cannot bring the project below the threshold, off-site mitigation may be necessary; and,
- **Quarterly – Tier 2:** For construction projects lasting more than one quarter, exceedance of the 6.3 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP), and off-site mitigation.

Diesel Particulate Matter (DPM) Emissions

- **Daily:** For construction projects expected to be completed in less than one quarter, exceedance of the 7 lb/day threshold requires Standard Mitigation Measures;
- **Quarterly - Tier 1:** For construction projects lasting more than one quarter, exceedance of the 0.13 tons/quarter threshold requires Standard Mitigation Measures, BACT for construction equipment; and,
- **Quarterly - Tier 2:** For construction projects lasting more than one quarter, exceedance of the 0.32 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Particulate Matter (PM10), Dust Emissions

- **Quarterly:** Exceedance of the 2.5 ton/qtr threshold requires Fugitive PM₁₀ Mitigation Measures, and may require the implementation of a CAMP.

Special Conditions for Construction Activity

In addition to the construction air quality thresholds defined above, there are a number of special conditions, local regulations or state / federal rules that apply to construction activities. These conditions must be addressed in proposed construction activity and are summarized below.

Sensitive Receptors

The proximity of sensitive individuals (receptors) to a construction site constitutes a special condition and may require a more comprehensive evaluation of toxic diesel PM impacts and if deemed necessary by the SLOAPCD, more aggressive implementation of mitigation measures than described below in the diesel idling section. Areas where sensitive receptors are most likely to spend time include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). The types of construction projects that typically require a more comprehensive evaluation include large-scale, long-term projects that occur within 1,000 feet of a sensitive receptor location(s).

Diesel Idling Restrictions for Construction Phases

There are methods for public health risk reductions that can be realized by idle limitations for both on and off-road equipment. The following idle restricting measures are required for the construction phase of projects:

Idling Restrictions Near Sensitive Receptors for Both On and off-Road Equipment

- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- Diesel idling within 1,000 feet of sensitive receptors is not permitted;
- Use of alternative fueled equipment is recommended whenever possible;
- Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location,
- Signs that specify the no idling requirements must be posted and enforced at the construction site.

Permits

Portable equipment and engines 50 horsepower (hp) or greater, used during construction activities will require California statewide portable equipment registration (issued by the ARB) or an Air District permit.

4.2.4 Impact Assessment and Methodology

The APCD has established four separate categories of evaluation for determining the significance of air quality emissions. Full disclosure of the potential air pollutant and/or toxic air emissions from a project is needed for these evaluations, as required by CEQA. The evaluation categories include:

- Comparison of calculated project emissions to APCD emission thresholds;
- Consistency with the most recent Clean Air Plan;
- Comparison of predicted ambient pollutant concentrations resulting from the project to federal and state health standards, when applicable; and,
- The evaluation of special conditions that apply to certain projects.

This document analyzes impacts using a reasonable worst-case analysis approach for air quality resources. Section 5 of each impact section describes the specific methodologies of each worst-case approach under each project component heading, as applicable. Emission estimates for the proposed project have been determined through the following:

- Use of the SLOAPCD CEQA Air Quality Handbook (December 2009);
- Use of the SLOAPCD Clean Air Plan (December 2001);
- Use of the URBEMIS Version 9.2.4. Emission Modeling Program; and,
- Incorporation of the Traffic and Circulation Study prepared by OMNI-MEANS for the Proposed Project.

URBEMIS is a software program, which uses land use emissions inventory models to estimate GHG and criteria pollutant emissions, such as PM₁₀, ROG, and NO_x under particular scenarios

involving construction area and other sources. It has been designed specifically for California. The software allows users to enter project-specific data, including construction schedules, time of year during which construction would occur, the number and type of equipment to be used, and other factors such as the amount of material to be moved, and the distance required to haul material. Appendix G of this EIR includes the URBEMIS modeling for the proposed project.

4.2.5 Project-Specific Impacts and Mitigation Measures

As identified in the project description, the various components of the proposed project have been broken down into four use areas. The use areas are the lodge and conference center (Area A), the proposed State Park Improvements (Area B), the proposed equestrian parking lot (Area C), and the proposed North Beach Campground dump station expansion (area D). Air emissions for each area are described in the following section.

4.2.5.1 Operational Related Impacts (All Areas)

The proposed land uses would result in both stationary and mobile sources of air pollution, which together constitute project-related operational emissions. The stationary source emissions from these land uses would come from the consumption of natural gas, emissions from landscaping maintenance, consumer products, and electricity. Mobile sources of air pollution are primarily the result of an increase in vehicle trips. Motor vehicles are a primary source of long-term emissions from many recreational land uses such as the proposed project. Recreational land uses often do not emit significant amounts of air pollutants directly, but cause or attract motor vehicle trips that do produce emissions. Such land uses are referred to as indirect sources.

Based on the Traffic Impact Analysis prepared for the project EIR (OMNI-MEANS, 2010), given the project's description and intended use, it is appropriate to assign trip generation rates for a resort hotel. Because "Resort Hotel" does not include a convention facility, a hybrid trip generation rate was developed. The hybrid trip generation combines the trip generation rates from the ITE "Hotel" and "Resort Hotel" land uses. The "Hotel" trip rates include a conference center, which will generate more weekday trips than a typical "Resort Hotel." The air pollutant emission modeling included in the URBEMIS run assumes this hybrid daily trip rate of 11.51 per unit, which will provide a reasonable, conservative analysis for the project. Build out of the proposed project would generate 1,727 average daily trips (Saturday). Additionally, the proposed project would include the deliveries of goods and services. Estimated weekly deliveries include: two beer vendors, two to three liquor/wine vendors, one large food and beverage delivery, two to three smaller specialty food deliveries (seafood/produce/bakery), and one linen delivery. Estimated monthly deliveries include: one laundry chemical delivery, one room linen and terry delivery, one to two room amenity deliveries, and one office supplies delivery. These incidental additional project related trips have been included in the various project components in the URBEMIS runs. All other project components assume URBEMIS default trip generation rates.

The proposed project revisions made subsequently to preparation of the Final EIR and the July 21, 2011 Planning Commission hearing would have no impact on the estimated trip generation rates, as those rates are based on the number of hotel rooms, which is not changing, rather than the size or layout of the conference center. Therefore, the project revisions would have no impact on existing URBEMIS modeling data or the existing impact analysis.

Emission Quantification

Operational emissions for the proposed project have been quantified using the URBEMIS version 9.2.4 modeling program per SLOAPCD guidelines. The SLOAPCD CEQA thresholds require that they be compared to the winter emission totals for “area” and “operational vehicle emissions” for impact determination. Table 4.2-7 provides daily and annual emission estimates using the URBEMIS modeling program. The URBEMIS results have been summarized for the various project components; daily and annual emission estimates were then compared to APCD thresholds to determine exceedance of APCD thresholds.

Table 4.2-7. Estimated Operational + Area Source Emissions

Component	Pollutants						
	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Area A : Grover Beach Lodge and Conference Center (lbs/day)	12.40	18.26	133.15	0.08	16.05	3.09	8,860.84
Area B: State Park Project Components (lbs/day)	1.27	1.82	12.31	0.00	1.48	0.29	1321.03
Area C: Equestrian Staging Area (lbs/day)	0.15	0.22	1.68	0.00	0.20	0.04	100.72
Area D: RV Sewer Dump Station (lbs/day)	0.07	0.10	0.74	0.00	0.09	0.02	44.17
Daily Total Project (lbs/day)	13.89	20.40	147.88	0.08	17.82	3.44	10,326.76
APCD Daily Threshold	ROG+NOx: 25 lbs		550 lbs	n/a	25 lbs	n/a	n/a
Exceed Daily Threshold?	YES		NO	NO	NO	n/a	n/a
Annual Emissions (tons)	2.46	3.21	25.93	0.01	3.27	0.63	1,946.67
APCD Annual Threshold	ROG+NOx: 25 tons		n/a	n/a	25 tons	n/a	n/a
Exceed Annual Threshold?	NO		n/a	n/a	NO	n/a	n/a

Since the proposed project would exceed the daily ROG + NOx combined threshold, mitigation measures must be implemented to offset project generated impacts. Based on the SLOAPCD CEQA Air Quality Handbook (December 2009); the amount of onsite standard plus discretionary measures required are based on by how much the project exceeds the identified threshold. Following the guidelines in Section 3.7 of the Handbook (*Operational Emission Mitigation*), the proposed project would fall within the 35-50 pounds per day range (ROG + NOx), requiring 18 standard onsite mitigation measures to reduce air quality impacts to a level of insignificance.

AQ Impact 1 Operational and Area Source emissions resulting from all Areas of the project development and operation of the various project components would exceed the SLOAPCD daily ROG and NOx combined threshold.

AQ/mm-1

All project design for Areas A through D shall be conducted in conformance with the standard mitigation measures included in Section 3.7.2 of the SLOAPCD CEQA Air Quality Handbook (December 2009). Prior to issuance of grading permits, the City of Grover Beach Community Development Director, or designee, shall verify that at least 18 required measures are noted on all building plans. Required measures include site design and energy efficiency measures.

Due to the vehicle-dependent nature of the proposed project, it may be difficult to reduce ROG and NOx emissions from the 18 selected on-site mitigation measures to a level of insignificance. The project proponent should calculate the emission reduction effectiveness of the 18 selected mitigation measures and compare the mitigated emissions total to the APCD's 25 lb/day ROG and NOx CEQA threshold.

If operational phase emissions cannot be adequately mitigated with on-site mitigation measures alone, off-site mitigation measures are needed in order to reduce air quality impacts to a level of insignificance. Whenever off-site mitigation measures are deemed necessary, it is important that the developer, lead agency and APCD work together to develop and implement the measures to ensure successful outcome. This work should begin at least six months prior to issuance of occupancy permits for the project.

Examples of potential off-site mitigation for this project include:

- *Support of the SLO Car Free program to promote use of Amtrak train travel to the nearby Grover Beach Amtrak Station as a means of reducing vehicle trips to the facility;*
- *Installation of a rapid charge electric vehicle (EV) station;*
- *Assistance in the implementation of the West Grand Avenue Master Plan; and/or*
- *Contribution to funding of new bike lanes.*

Residual Impacts

With mitigation as identified above, impacts resulting from all areas of the proposed project will be less than significant.

4.2.5.2 Construction Related Impacts (All Areas)

During construction, the proposed project will generate air pollutants. The exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. The use of asphalt, concrete, and other chemicals during construction activities would emit organic gases and other potentially harmful compounds. However, the largest percentage of pollutants would be combustion emissions and windblown dust generated during excavation, grading, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses. Dust and odors

could potentially cause occasional annoyance and complaints from nearby residences. Total Suspended Particulate matter (TSP) will be the major air pollutant generated. Of particular concern will be PM₁₀ (particulate matter smaller than 10 microns in diameter). PM₁₀ is about 65 percent of TSP, and is considered a health hazard that can lead to respiratory ailments, especially in the young and the elderly, who are more prone to respiratory ailments.

The San Luis Obispo region is known to contain areas of ultramafic, or serpentine, rocks which contain naturally occurring forms of asbestos. Exposure and disturbance of rock and soil that contains naturally occurring asbestos can result in a release of fibers into the air and a consequent exposure to workers or the public. However, based on review of geologic maps and the Geology Report for the project (refer to Appendix I of this EIR), the project site is underlain entirely by sand dune deposits, older sand dune deposits, and alluvial deposits. There are no areas of ultramafic or serpentine rocks at the project site that could potentially be disturbed during project construction. Therefore, the potential for naturally occurring asbestos to be present is not likely, and this is not considered to be an environmental concern.

Asbestos containing materials could be encountered during demolition or remodeling of existing buildings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). If utility pipelines are scheduled for removal or relocation; or building(s) are removed or renovated, this project may be subject to various regulatory jurisdictions, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40 CFR 61, Subpart M – asbestos NESHAP). These requirements include, but are not limited to: 1) notification requirements to the District, 2) asbestos survey conducted by a Certified Asbestos Inspector, and 3) applicable removal and disposal requirements of identified ACM.

Project Phasing

According to the applicant, all lodge and conference center improvements would be completed in several phases, in approximately 14 months. However the specific timing and duration of each sub-phase has not yet been determined. Phase 1 includes the proposed lodge and conference center, relocation of the RV Sewer Dump Station to North Beach Campground, the construction of the equestrian parking area, renovation of the picnic areas and tie-ins to existing pathways along the beachfront, and the relocation of the golf course parking lot, relocation of the event tent and construction of the new golf course parking lot and paths to the existing pro shop. The Fin's Restaurant and concession improvements would be a separate phase and are not part of the applicant's proposed project.

Project Earthwork Requirements

The applicant proposes to balance grading on site, and estimates 11,470 CY of cut and 11,470 CY of fill. Soil amendments will be imported for bio filtration basins for approximately 1,600 cubic yards of import. Due to uncertainties concerning the exact design, timing, and equipment usage rates associated with specific project features and potential work required, the following analysis assumes a worst case with respect to the amount of soil disturbance, asphalt and concrete usage. For purposes of analyzing construction related emissions, it has been assumed that all mass site grading earthwork operations would be completed over a three-month period, a conservative estimate to directly compare to the APCD's Tier 1 and Tier 2 quarterly emission thresholds. Fine site grading, building construction, and finally paving, would follow mass site grading. Appropriate mitigation measures would be applied accordingly for exceedance of any threshold.

The APCD retains the discretion to require mitigation for projects that would not exceed the mitigation thresholds if those projects would result in special circumstances, such as the release of diesel particulate matter emissions near sensitive receptors. Projects in the SCCAB with construction-related emissions that exceed any of the emissions thresholds (daily or quarterly) above are considered significant by the APCD.

Since precise construction equipment information is unavailable at this time, URBEMIS was used to quantify construction related emissions using default equipment usage rate assumptions augmented with additional equipment necessary to construct a project of this type such as cranes, aerial lifts, generators, air compressors, etc. Project revisions made subsequent to the preparation of the Final EIR and the July 21, 2011 Planning Commission hearing would not change the construction equipment assumptions previously analyzed in the Final EIR. The new conference center building is not significantly different than what was previously proposed within Building 1 and, while the size of the conference center has been increased by approximately 3,500 square feet, no new construction equipment not previously included in the assumptions would be necessary to complete construction. Project phasing and construction duration is not expected to change and the new conference center building would be moved to an area previously designated for hardscape parking, so no new areas of disturbance would be required. Table 4.2-8 summarizes estimated construction emissions over a 14-month period using the URBEMIS modeling program. Refer to Appendix G for URBEMIS modeling outputs.

Table 4.2-8. Estimated Construction Emissions

Component	Pollutants								
	ROG	NOx	CO	SO ₂	PM ₁₀ Dust	PM _{2.5} Dust	PM ₁₀ Exhaust	PM _{2.5} Exhaust	CO ₂
2011 TOTALS (lbs/day unmitigated)	10.14	80.95	57.47	0.02	376.31	78.59	4.14	3.81	8,244.93
2012 TOTALS (lbs/day unmitigated)	45.25	25.66	41.51	0.02	0.11	0.04	1.84	1.69	4,577.04
APCD Daily Threshold	ROG+NOx: 137 lbs		n/a	n/a	n/a		7 lbs		n/a
Exceed Daily Threshold?	NO		n/a	n/a	n/a		Yes		n/a
2011 TOTALS (tons/qrtr unmitigated)	0.21	1.31	1.29	0.00	3.50	0.08	0.73	0.07	167.50
2012 TOTALS (tons/qrtr unmitigated)	0.28	0.21	0.33	0.00	0.00	0.02	0.00	0.01	36.76
APCD Quarterly Tier 1 Threshold	ROG+NOx: 2.5 tons		n/a	n/a	2.5 tons		0.13 tons		n/a
Exceed Quarterly Threshold?	NO		n/a	n/a	Yes		Yes		n/a
APCD Quarterly Tier 2 Threshold	ROG+NOx: 6.3 tons		n/a	n/a	n/a		0.32 tons		n/a
Exceed Quarterly Threshold?	NO		n/a	n/a	n/a		Yes		n/a

Using the URBEMIS results shown in Table 4.2-8 prepared for the proposed project, estimated construction emissions would exceed the SLOAPCD daily threshold for particulate matter originating from equipment exhaust. The total project would also exceed the Quarterly Tier 1 and Tier 2 thresholds for particulate matter from exhaust. Construction of all the sub areas would also exceed the Quarterly Tier 1 threshold for fugitive dust. In addition to the emission threshold exceedances described above, the project site is located within 1,000 feet to adjacent sensitive residential receptor areas to the north and east. These sensitive air receptors would potentially be subject to elevated levels of construction emissions depending on prevailing wind conditions.

Applicable measures should be applied as necessary to reduce construction impacts below the significance thresholds listed in Table 4.2-6. Construction equipment mitigation measures and construction activity management practices have been shown to significantly reduce emissions. Applying Best Available Control Technology for construction equipment or implementing a Construction Activity Management Plan is required when the Quarterly Tier 2 construction significance thresholds of 0.32 tons per quarter diesel PM is exceeded. The mitigation measures for construction activity fall into three separate sections:

- Standard Mitigation Measures,
- Best Available Control Technologies (BACT) and Construction Activity Management Plans,
 - Construction Activity Management Plans (CAMP)
 - Retrofit Devices and Alternative Fuels
 - Repowers
- Fugitive Dust Mitigation Measures.

AQ Impact 2 **Construction emissions resulting from development of the various project components (Areas A through D) would exceed the SLOAPCD daily threshold for PM exhaust; the Quarterly Tier 1 and Tier 2 thresholds for particulate matter from exhaust, and the Quarterly Tier 1 threshold for fugitive dust.**

AQ/mm-2 ***Construction Activity Management Plan.*** *Prior to issuance of any grading permits for All Areas of the project, ~~either~~ a comprehensive Construction Activity Management Plan (CAMP), if required, shall be developed and ~~or~~ the following construction mitigation measures shall be itemized on the construction plans. The CAMP will be submitted to the City of Grover Beach Community Development Director and the APCD for review and approval. Revised post-mitigation emission calculations will be quantified and compared to the 2009 APCD CEQA Handbook thresholds and the Community Development Director and APCD will review the CAMP to verify that mitigation measures are implemented to reduce emissions below CEQA thresholds. ~~The CAMP or construction plans shall be reviewed and approved by the City of Grover Beach Community Development Director, or designee.~~ The Plan shall include the Best Available Control Technology for Construction equipment (CBACT) measures that the SLOAPCD has identified to reduce construction emissions. The Plan shall also stipulate compliance with the requirements of APCD Rule 403 to reduce fugitive dust emissions. The*

construction mitigation measures applicable to the proposed project are summarized below.

Standard Mitigation Measures for Construction Equipment

Standard construction measures for reducing nitrogen oxides (NO_x), reactive organic gases (ROG), and diesel particulate matter (DPM) emissions from construction equipment are listed below: The following list of standard and specific mitigation measures shall be incorporated into project conditions.

- Maintain all construction equipment in proper tune according to manufacturer's specifications;
- Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
- Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation;
- Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;
- Diesel idling within 1,000 feet of sensitive receptors is not permitted;
- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- Electrify equipment when feasible;
- Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel.

Best Available Control Technology (BACT) for Construction Equipment

The BACT measures include:

- Replacing equipment with equipment with cleaner engines;
- Repowering equipment with the cleanest engines available;
- Installing California Verified Diesel Emissions Control Strategies; and
- Implementing a Comprehensive Construction Activity

- *Management Plan designed to minimize the amount of large construction equipment operating during any given time period. If this plan will be implemented as BACT, then it should be submitted to the APCD for review and approval prior to the start of construction. The plans should include but not be limited to the following elements:*
- *Schedule construction truck trips during non-peak hours to reduce peak-hour emissions.*
- *Limit the length of the construction work-day period, if necessary; and*
- *Phase construction activities, if appropriate.*

Fugitive Particulate Matter Less than 10 Microns in Diameter (PM10) Mitigation Measures Expanded List

Projects with grading areas that are greater than 4-acres or are within 1,000 feet of any sensitive receptor shall implement the following mitigation measures to minimize nuisance impacts and to significantly reduce fugitive dust emissions:

- *Reduce the amount of the disturbed area where possible;*
- *Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;*
- *All dirt stock pile areas should be sprayed daily as needed;*
- *Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;*
- *Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;*
- *All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;*
- *All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;*
- *Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;*
- *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;*
- *Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;*

- *Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible;*
- *All of these fugitive dust mitigation measures shall be shown on grading and building plans; and*
- *The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20 percent opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition.*

Construction Permit Requirement

Portable equipment, 50 horsepower (hp) or greater, used during construction activities will require California statewide portable equipment registration (issued by the California Air Resources Board or an Air Pollution Control District permit).

Residual Impacts

With mitigation as identified above, impacts resulting from all areas of the proposed project will be less than significant.

4.2.6 Cumulative Impacts

The cumulative study area for air quality impacts is the SCCAB. The project would contribute criteria pollutants to the SCCAB during project construction and long-term operational use. A number of individual projects in the area may be under construction simultaneously with the proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term increases in air pollutants. This would be a contribution to short-term cumulative air quality impacts.

The Master EIR for the LUE Update previously evaluated the proposed project with respect to cumulative impacts and did not identify a significant cumulative impact. Analysis conducted specifically for this project concluded that the proposed project would contribute to cumulative long-term operational air quality impacts because it is projected to exceed the daily ROG + NOx threshold. However, with implementation of Mitigation Measures AQ/mm-1, the project's contribution to cumulative air quality impacts would be less than significant.

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