

## 4.2. Air Quality

This section discusses the regulatory setting, environmental setting, and impacts of the proposed Project related to air quality.

The Project, which would be constructed in three phases, has four main elements that could result in air quality impacts: 1) a wastewater treatment facility, 2) pump stations, 3) wastewater collection and recycled water distribution system pipelines, and 4) percolation ponds and groundwater injection wells. For the purposes of this section, “Project area” refers to the area that encompasses the extent of the four main elements described above and the area that would be served by these proposed Project facilities. “Project site” refers specifically to those areas that would be disturbed by construction activities associated with these four main elements. The Project would include a Local Coastal Program Amendment, and modification of zoning for the wastewater treatment facility to include an Institutional District Overlay.

### 4.2.1. Environmental Setting

#### Regulatory Setting

##### Federal Regulations

##### Federal Clean Air Act

The federal Clean Air Act (CAA), enacted in 1963 and amended several times thereafter (including the 1990 amendments, known as the Clean Air Act Amendments of 1990, which are the current governing regulations for air quality), establishes the framework for modern air pollution control. In addition, the U.S. Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS) for criteria pollutants (see Table 4.2-1), which include carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter smaller than 10 micrometers in diameter (PM<sub>10</sub>), particulate matter smaller than 2.5 micrometers in diameter (PM<sub>2.5</sub>), and lead (Pb). “Primary” standards have been set to protect public health. For some pollutants, “secondary” standards have been set to protect crops or other materials and avoid nuisance conditions. The CAA also mandates that the state submit and implement a State Implementation Plan (SIP) for local areas not meeting those standards. The plans must include pollution control measures that demonstrate how the standards will be met.

The proposed Project is located within the Los Angeles County portion of the South Coast Air Basin (Basin), which is designated as a nonattainment area for certain pollutants that are regulated under the CAA (see Table 4.2-2).

## State Regulations

### California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and set standards for other pollutants recognized by the state. In general, the California standards are more health protective than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Table 4.2-1 provides the current NAAQS and CAAQS. Table 4.2-2 provides the Project area's attainment status with respect to federal and state standards.

## Local Regulations

### South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for the urban portions of Los Angeles, Riverside, and San Bernardino Counties and all of Orange County. SCAQMD has adopted a series of air quality management plans (AQMPs) to meet the CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources, control programs for area sources and indirect sources, a SCAQMD permitting system to ensure no net increase in emissions from any new or modified (i.e., previously permitted) emission sources, and transportation control measures. The 2012 AQMP was adopted on December 7, 2012 (SCAQMD 2012).

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to construction or operation of the Project. For example, SCAQMD Rule 403 requires implementing the best available fugitive dust control measures during active operations that are capable of generating fugitive dust emissions from on-site earthmoving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads. [Other possible applicable rules and regulations include Rule 212 – Standards for Approving Permits and Issuing Public Notice; Rule 401 – Visible Emissions; Rule 402 – Nuisance; Rule 403 – Fugitive Dust; Rule 431.1 – Sulfur Content of Gaseous Fuels; Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines; Regulation XIII – New Source Review; and Rule 1401 – New Source Review of Toxic Air Contaminants.](#)

SCAQMD published the *CEQA Air Quality Handbook* (November 1993, with section updates provided on SCAQMD's website) to help local governments analyze and mitigate project-specific air quality impacts. This handbook provides standards, methodologies, and procedures for conducting air quality analyses for CEQA documents prepared within SCAQMD's jurisdiction. In addition, SCAQMD has published two additional guidance documents—*Localized Significance Threshold Methodology for CEQA Evaluations* (June 2008) and *Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* (October 2006)—that provide guidance for evaluating localized effects from mass emissions during construction. Both were used in the preparation of this analysis.

**Table 4.2-1. State and Federal Criteria Air Pollutant Standards**

<b>Ambient Air Quality Standards</b>						
Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>		
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.075 ppm (147 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM <sub>10</sub> ) <sup>8</sup>	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		—		
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>8</sup>	24 Hour	—	—	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12.0 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m <sup>3</sup> )	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )		9 ppm (10 mg/m <sup>3</sup> )	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		—	—	
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>9</sup>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	100 ppb (188 µg/m <sup>3</sup> )	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )		0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	
Sulfur Dioxide (SO <sub>2</sub> ) <sup>10</sup>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m <sup>3</sup> )	
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>10</sup>	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) <sup>10</sup>	—	
Lead <sup>11,12</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m <sup>3</sup> (for certain areas) <sup>12</sup>	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m <sup>3</sup>		
Visibility Reducing Particles <sup>13</sup>	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	<b>No National Standards</b>		
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride <sup>11</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			

See footnotes on next page ...

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1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, 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 arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site 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  $150 \mu\text{g}/\text{m}^3$  is equal to or less than one. For PM2.5, 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 the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of  $25^\circ\text{C}$  and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of  $25^\circ\text{C}$  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 measurement method 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 U.S. 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 U.S. EPA.
8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from  $15 \mu\text{g}/\text{m}^3$  to  $12.0 \mu\text{g}/\text{m}^3$ . The existing national 24-hour PM2.5 standards (primary and secondary) were retained at  $35 \mu\text{g}/\text{m}^3$ , as was the annual secondary standard of  $15 \mu\text{g}/\text{m}^3$ . The existing 24-hour PM10 standards (primary and secondary) of  $150 \mu\text{g}/\text{m}^3$  also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
10. On June 2, 2010, a new 1-hour  $\text{SO}_2$  standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971  $\text{SO}_2$  national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.  
  
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour 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.
11. 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.
12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ( $1.5 \mu\text{g}/\text{m}^3$  as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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**Table 4.2-2. State and Federal Criteria Air Pollutant Standards, Effects, and Sources**

<b>Pollutant</b>	<b>Principal Health and Atmospheric Effects</b>	<b>Typical Sources</b>	<b>Project Area Attainment Status</b>
Ozone (O <sub>3</sub> )	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants (TACs). Biogenic volatile organic compounds (VOCs) may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases (ROGs) or VOCs and nitrogen oxides (NO <sub>x</sub> ) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal-combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.	Federal: Nonattainment  State: Nonattainment
Carbon Monoxide (CO)	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical ozone. Colorless, odorless.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.	Federal: Attainment/ Maintenance  State: Attainment
Respirable Particulate Matter (PM <sub>10</sub> )	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some TACs. Many toxic and other aerosol and solid compounds are part of PM <sub>10</sub> .	Dust- and fume-producing industrial and agricultural operations, combustion smoke and vehicle exhaust, atmospheric chemical reactions, construction and other dust-producing activities, unpaved road dust and re-entrained paved road dust, natural sources.	Federal: Nonattainment  State: Nonattainment
Fine Particulate Matter (PM <sub>2.5</sub> )	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter is in the PM <sub>2.5</sub> size range. Many toxic and other aerosol and solid compounds are part of PM <sub>2.5</sub> .	Combustion, including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; and atmospheric chemical and photochemical reactions involving other pollutants, including NO <sub>x</sub> , sulfur oxides (SO <sub>x</sub> ), ammonia, and ROGs.	Federal: Nonattainment  State: Nonattainment
Nitrogen Dioxide (NO <sub>2</sub> )	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain and nitrate contamination of stormwater. Part of the NO <sub>x</sub> group of ozone precursors.	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.	Federal: Attainment/ Maintenance  State: Nonattainment

<b>Pollutant</b>	<b>Principal Health and Atmospheric Effects</b>	<b>Typical Sources</b>	<b>Project Area Attainment Status</b>
Sulfur Dioxide (SO <sub>2</sub> )	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, and steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources, such as active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.	Federal: Attainment  State: Attainment
Lead (Pb)	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a TAC and water pollutant.	Lead-based industrial processes, such as those involving battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.	Federal: Nonattainment (for Los Angeles County portion of SCAB)  State: Nonattainment
Sulfate	Premature mortality and respiratory effects. Contributes to acid rain. Some TACs attach to sulfate aerosol particles.	Industrial processes, such as those involving refineries, oil fields, and mines; natural sources, such as volcanic areas, salt-covered dry lakes, and large sulfide rock areas.	Federal: n/a  State: Attainment
Hydrogen Sulfide (H <sub>2</sub> S)	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea. Strong odor.	Industrial processes, such as those involving refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources, such as volcanic areas and hot springs.	Federal: n/a  State: Unclassified
Visibility-Reducing Particles	Reduces visibility. Produces haze. Note: Not directly related to the Regional Haze program under the federal CAA, which is oriented primarily toward visibility issues in national parks and other "Class I" areas.	See particulate matter, above. May be related more to aerosols than to solid particles.	Federal: n/a  State: Unclassified
Vinyl Chloride	Neurological effects, liver damage, cancer. Also considered a TAC.	Industrial processes.	Federal: n/a  State: Unclassified
Source: California Air Resources Board, 2009.			

## Existing Conditions

### Regional Setting

#### Climate

The Basin, which is a subregion of SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The climate within the Basin is Mediterranean, with warm, dry summers and cooler, relatively damp winters. Inland areas typically experience a wider range of temperatures than areas on the coast, mainly because of the separation of regions by transformation in the terrain, such as the Santa Monica Mountains (Western Regional Climate Center 2001).

The speed and direction of winds in coastal areas, such as the City of Malibu, are influenced by the location and strength of the Pacific high-pressure system, topographical features, and circulation patterns resulting from temperature differences between land and sea. In the fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional weak offshore flow. Pollutants may accumulate more during this time of year, then remain over the ocean for a few days before being carried back onshore. Strong inversions can also form during the fall, trapping pollutants near the ground; this effect intensifies when the Pacific high weakens and moves inland to the east. This may produce a Santa Ana condition where air, often pollutant-laden, is transported toward foothills and coastal areas from the east and southeast. This condition generally breaks up within several days but may result in stagnant conditions and a build-up of pollutants offshore. The sea breeze can also bring these pollutants back onshore where they combine with local emissions and cause high pollutant concentrations.

#### Regional Air Quality

The Basin is characterized by a substantial pollution burden. Air pollution forms either directly or indirectly from pollutants emitted by a variety of sources. These sources can be natural, such as oil seeps, vegetation, or windblown dust, but most emissions in the Basin are related to human activity. Emissions result from fuel combustion sources, such as cars and trucks; the evaporation of organic liquids, such as those used in coating and cleaning processes; and abrasion processes, such as tires on roadways (SCAQMD 2004).

The Basin is currently designated as a nonattainment area for the federal O<sub>3</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and Pb standards. The Basin is in attainment for the federal SO<sub>2</sub>, CO, and NO<sub>2</sub> standards. In 2012, O<sub>3</sub>, PM<sub>2.5</sub>, and NO<sub>2</sub> exceeded the federal standard for concentration levels at one or more of the 25 routine monitoring stations in the Basin. Although the concentration level for the new 1-hour NO<sub>2</sub> federal standard (100 parts per billion [ppb]) was exceeded in the Basin at two stations (Central Los Angeles and Long Beach) on the same day in 2011, the NAAQS NO<sub>2</sub> design value has not been exceeded (the 3-year average of the annual 98<sup>th</sup> percentile of the daily 1-hour maximums). Therefore, the Basin remains in attainment for the NO<sub>2</sub> NAAQS. EPA designated the Los Angeles County portion of the Basin, including the Project area, as a nonattainment area for the recently revised (2008) federal Pb standard (0.15 micrograms per cubic meter [ $\mu\text{g}/\text{m}^3$ ], rolling 3-month average) because of the addition of source-specific monitoring under the new federal regulation (EPA 2012).

The greatest air pollution concerns in the Basin occur from June through September and are generally attributed to large amounts of pollutant emissions, light winds, and shallow vertical atmospheric mixing. These conditions frequently reduce the dispersion of pollutants, thus causing elevated air pollution levels. Pollutant concentrations in the Basin vary with location, season, and time of day. Ozone concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Basin and adjacent desert.

Over the past several years, substantial progress has been made in reducing air pollution levels in Southern California. For example, compared with previous studies of air toxics in the Basin, SCAQMD found a decreasing risk for air toxics exposure, with the population-weighted risk down by 17 percent from the analysis conducted approximately 15 years ago.

Although there has been marked improvement in air quality regarding air toxics, the risks are still unacceptable and higher near sources of emissions such as ports and transportation corridors. The highest risks are found near the ports of Los Angeles and Long Beach, central Los Angeles (downtown), and transportation corridors (freeways).

## Local Setting

### Criteria Pollutants

SCAQMD, which has divided the Basin into 35 air monitoring areas (i.e., source-receptor areas [SRAs]), maintains a network of air quality monitoring stations throughout the Basin. The proposed Project would be located in SRA 2 (Northwest Coastal Los Angeles County), which is monitored by the West Los Angeles-Veterans Affairs (VA) Hospital Monitoring Station. Because the West Los Angeles-VA Hospital station monitors only O<sub>3</sub>, CO, and NO<sub>2</sub>, the El Rio-Rio Mesa School No. 2 (Oxnard) Monitoring Station was used to approximate the background concentration for the remaining criteria pollutants (i.e., particulate matter [PM<sub>10</sub> and PM<sub>2.5</sub>]). The most recent complete data available cover 2010 to 2012. The monitoring data shown below in Table 4.2-3 indicate that state and/or federal standards have been exceeded for O<sub>3</sub> and PM<sub>10</sub>.

### Air Toxics

The Multiple Air Toxics Exposure Study III (MATES III) is an air toxics monitoring and evaluation study that was conducted in the Basin by SCAQMD. MATES III focuses on the carcinogenic risk from exposure to air toxics (SCAQMD 2008). The study is a follow-up to previous air toxics studies (MATES I and MATES II). The MATES III study concluded that the average carcinogenic risk throughout the Basin attributed to background toxic air contaminant (TAC) concentrations is approximately 1,194 in one million. About 84 percent of all risk associated with air toxics within the Basin is attributed to diesel particulate matter (DPM) emissions. The Project vicinity has an ambient risk of approximately 352 in one million.

It may be useful to compare risks estimated from assessments of environmental exposures to the overall rates of health effects in the general population. For example, it is often estimated that the incidence of cancer over a lifetime in the U.S. population is about 1 in 4, to 1 in 3. This translates into a risk of about 300,000 in one million (SCAQMD 2008). The inhalation cancer risk estimate identified above would comprise a fraction of total cancer risk from all sources, which would include lifestyle factors (e.g., diet, activity level, tobacco and alcohol use), and other non-inhalation environmental risk factors (e.g., sun, pesticide exposure).

**Table 4.2-3. Air Quality Data from the West Los Angeles-VA Hospital and El Rio-Rio Mesa School No. 2 (Oxnard) Ambient Air Monitoring Stations**

Pollutant Standards	2010	2011	2012
Ozone (O <sub>3</sub> ) West Los Angeles VA Hospital			
<i>State Standard (1-hour Average = 0.09 ppm)</i>			
<i>National Standard (8-hour Average = 0.075 ppm)</i>			
Maximum Concentration 1-hour Period (ppm)	<b>0.099</b>	<b>0.098</b>	<b>0.093</b>
Maximum Concentration 8-hour Period (ppm)	<b>0.078</b>	0.068	0.073
Days State 1-hour Standard Exceeded	2	2	0
Days National 8-hour Standard Exceeded	1	0	0
Carbon Monoxide (CO) West Los Angeles VA Hospital			
<i>State Standard (8-hour Average = 9 ppm)</i>			
<i>National Standard (8-hour Average = 9 ppm)</i>			
Maximum Concentration 8-hour Period (ppm)	1.44	1.74	1.15
Days State/National 8-hour Standard Exceeded	0	0	0
Nitrogen Dioxide (NO <sub>2</sub> ) West Los Angeles VA Hospital			
<i>State Standard (1-hour Average = 0.18 ppm)</i>			
<i>National Standard (1-hour Average = 0.1 ppm)</i>			
Maximum 1-hour Concentration	0.070	0.081	0.061
Days State/National Standard Exceeded	0	0	0
Suspended Particulates (PM <sub>10</sub> ) El Rio-Rio Mesa School No. 2 <sup>a</sup>			
<i>State Standard (24-hour Average = 50 µg/m<sup>3</sup>)</i>			
<i>National Standard (24-hour Average = 150 µg/m<sup>3</sup>)</i>			
Maximum State 24-hour Concentration	<b>61.5</b>	<b>51.7</b>	<b>56.9</b>
Maximum National 24-hour Concentration	59.9	50.6	56.3
Days Exceeding State Standard	1	1	1
Days Exceeding National Standard	0	0	0
Suspended Particulates (PM <sub>2.5</sub> ) El Rio-Rio Mesa School No. 2 <sup>a</sup>			
<i>National Standard (24-hour Average = 35 µg/m<sup>3</sup>)</i>			
Maximum 24-hour Concentration	21.4	18.3	30.8
Days Exceeding National Standard	0	0	0
Notes: Values in <b>bold</b> indicate exceedances of standard. <sup>a</sup> . Monitoring data summaries provided in Appendix B. ppm = parts per million µg/m <sup>3</sup> = microgram per cubic meter			
Source: California Air Resources Board, 2013.			

### Sensitive Receptors

Some population groups, such as children, the elderly, people engaged in strenuous work or exercise, and persons who are acutely or chronically ill (especially those with cardio-respiratory diseases), are considered more sensitive to air pollution than others. The following sensitive receptors are located on parcels adjacent to or within 500 feet of the proposed wastewater treatment facility and the alignments of the conveyance system:

- Multi-family and single-family residences
- Webster Elementary School and Our Lady of Malibu School
- Malibu Bluffs Park
- Malibu Creek State Park
- Legacy Park
- Alumni Park
- Adamson House Park
- Perenchio Golf Course
- Surfrider Beach
- Malibu Racquet Club
- Bike Trails

## 4.2.2. Environmental Impact Analysis

### Thresholds of Significance

#### State of California

For the purposes of this EIR and in accordance with Appendix G of the State CEQA Guidelines, the Project would have a potentially significant effect on air quality if it 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 a cumulatively considerable net increase in any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

The State CEQA Guidelines also state that the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the determinations above. As such, the SCAQMD-adopted significance criteria are presented below.

## South Coast Air Quality Management District

### Construction Emissions

According to criteria set forth in the SCAQMD *CEQA Air Quality Handbook, Localized Significance Threshold Methodology for CEQA Evaluations, and Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* guidance documents, a project would have a significant impact related to construction emissions if any of the following were to occur:

- Regional emissions from both direct and indirect sources exceed any of the following SCAQMD prescribed threshold levels: (1) 75 pounds a day for reactive organic gases (ROGs); (2) 100 pounds per day for nitrogen oxides (NO<sub>x</sub>); (3) 550 pounds per day for CO; (4) 150 pounds per day for PM<sub>10</sub> or SO<sub>x</sub>; (5) 55 pounds per day for PM<sub>2.5</sub>; and (6) 3 pounds per day for Pb; or
- Localized emissions from on-site construction equipment and site disturbance activity exceed any of the following SCAQMD-prescribed threshold levels:
  - For the wastewater treatment facility: (1) 189 pounds per day for NO<sub>x</sub>; (2) 1,728 pounds per day for CO; (3) 33 pounds per day for PM<sub>10</sub>; and (4) 7 pounds per day for PM<sub>2.5</sub>.<sup>1</sup>
  - For the conveyance system: (1) 103 pounds per day for NO<sub>x</sub>; (2) 562 pounds per day for CO; (3) 4 pounds per day for PM<sub>10</sub>; and (4) 3 pounds per day for PM<sub>2.5</sub>.<sup>2</sup>

### Operational Emissions

According to criteria set forth in the SCAQMD *CEQA Air Quality Handbook*, a project would have a significant impact with regard to operational emissions if:

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD-prescribed threshold levels: (1) 55 pounds a day for ROG; (2) 55 pounds per day for NO<sub>x</sub>; (3) 550 pounds per day for CO; (4) 150 pounds per day for PM<sub>10</sub> or SO<sub>x</sub>; (5) 55 pounds per day for PM<sub>2.5</sub>; and (6) 3 pounds per day for Pb (SCAQMD 1993 and 2006).
- Localized emissions from on-site sources exceed any of the following SCAQMD-prescribed threshold levels: (1) 189 pounds per day for NO<sub>x</sub>; (2) 1,728 pounds per day for CO; (3) 8 pounds per day for PM<sub>10</sub>; and (4) 2 pounds per day for PM<sub>2.5</sub>.<sup>3</sup>
- The project would cause an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9 ppm, respectively, at an intersection or roadway within 0.25 mile of a sensitive receptor.<sup>4</sup>

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<sup>1</sup> Derived from SCAQMD Localized Significance Threshold Tables—SRA 2 (Northwest Coastal Los Angeles County), 50-meter receptor distance, interpolated for a 4-acre site.

<sup>2</sup> Derived from SCAQMD Localized Significance Threshold Tables—SRA 2 (Northwest Coastal Los Angeles County), 1-acre site, 25-meter receptor distance.

<sup>3</sup> Derived from SCAQMD Localized Significance Threshold Tables—SRA 2 (Northwest Coastal Los Angeles County), 50-meter receptor distance, interpolated for a 4-acre site.

<sup>4</sup> Where the CO standard is exceeded at the intersection, a project would result in a significant impact if the incremental increase due to the project is equal to or greater than 1.0 ppm for the California 1-hour CO standard or 0.45 ppm for the 8-hour CO standard.

### **Toxic Air Contaminants**

According to guidelines provided in the SCAQMD *CEQA Air Quality Handbook*, a project would have a significant impact from TACs if:

- On-site stationary sources emit TACs that individually or cumulatively exceed the maximum individual cancer risk of 10 in one million ( $1.0 \times 10^{-5}$ ) or an acute or chronic hazard index of 1.0 (SCAQMD 1998);
- Hazardous materials associated with on-site stationary sources result in an accidental release of air toxic emissions or acutely hazardous materials, posing a threat to public health and safety; or
- The project would be occupied primarily by sensitive individuals within 0.25 mile of any existing facility that emits TACs, which could result in a health risk from pollutants identified in District Rule 1401 (SCAQMD 1993).

### **Odors**

According to guidelines provided in the SCAQMD *CEQA Air Quality Handbook*, a project would have a significant impact from odors if:

- The project creates an odor nuisance pursuant to SCAQMD Rule 402 (i.e., emit odiferous compounds that create a nuisance or annoyance to any considerable number of persons or to the public).

## **Impacts**

### **Impact AQ-1: Would the Project Conflict with or Obstruct Implementation of the Applicable Air Quality Plan?**

SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the Basin is in nonattainment (i.e.,  $O_3$ , PM10, and PM2.5). The Project would be subject to SCAQMD's AQMP, which contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG).

A project is consistent with the AQMP if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. The most recent AQMP adopted by SCAQMD incorporates SCAG's 2012–2035 Regional Transportation Plan (RTP) socioeconomic forecast projections of regional population and employment growth. The 2012–2035 RTP projects that population in the region will grow with the addition of approximately 1.5 million new households by 2035. As the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, SCAG addresses regional issues related to transportation, the economy, community development, and the environment. With regard to air quality planning, SCAG has prepared the Regional Comprehensive Plan (RCP), which includes Land Use and Housing and Transportation chapters that form the basis for the land use and transportation control portions of the AQMP. These documents are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. Both the RCP and AQMP are based, in part, on projections originating with county and city general plans.<sup>5</sup>

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<sup>5</sup> SCAG serves as the federally designated metropolitan planning organization for the Southern California region.

The site of the proposed wastewater treatment facility is currently developed, in part, with ~~the Winter Canyon Wastewater Treatment Facility~~, a small-scale, privately owned and operated wastewater treatment facility that serves the Malibu Colony Plaza shopping center, located on the south side of PCH, as well as several other uses. According to the Local Coastal Program (LCP), the site of the proposed wastewater treatment facility is currently zoned for Commercial Visitor-Serving 2 (CV-2) uses, but the proposed LCP amendment and Zoning Text Amendment (ZTA) would create the Civic Center Wastewater Treatment Facility Institutional Overlay District.

Although a primary objective of the proposed Project is to meet the City's obligations under its MOU with the Regional Water Quality Control Board, the development of wastewater infrastructure has the potential to facilitate future growth and development indirectly within the Prohibition Zone. Such growth would be subject to requirements established by the City's LCP, Malibu Municipal Code (M.M.C.) Zoning Ordinance, and General Plan. Given that growth projections for the City of Malibu from the SCAG 2012 RTP/Sustainable Communities Strategy (SCS) were incorporated into the AQMP, Project-related growth has been accounted for and would be consistent with the projections in the AQMP. Additionally, all construction activities would be in compliance with AQMP regulatory measures, including the following SCAQMD rules:

- Rule 212 – Standards for Approving Permits and Issuing Public Notices
- Rule 401 – Visible Emissions
- Rule 402 – Nuisance
- Rule 403 – Fugitive Dust
- Rule 431.1 – Sulfur Content of Gaseous Fuels
- Rule 1108 – Limitation of VOCs in Asphalt Coatings
- Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines
- Rule 1113 – Limitation of VOCs in Architectural Coatings
- Regulation XIII – New Source Review
- Rule 1401 – New Source Review of Toxic Air Contaminants

~~pertaining to fugitive dust (Rule 403), visibility of emissions (Rule 401), nuisance activities (Rule 402), and the limiting of VOC content in both asphalt and architectural coatings (Rules 1108 and 1113).~~ Finally, as discussed below under Impact AQ-2, Project operational emissions would fall below the SCAQMD thresholds of significance. No impact would occur with respect to AQMP implementation, and no mitigation measures are required.

### **Impact AQ-2: Would the Project Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation?**

As discussed above, the Project site is located within the Basin, an area where state and federal air quality standards are occasionally exceeded. The proposed Project would contribute to regional air pollutant emissions during short-term construction and short- and long-term operations.

## Construction Impacts

Construction of the proposed Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers while traveling to and from the Project site. In addition, fugitive dust emissions would result from work at the proposed wastewater treatment facility site and installation of the wastewater conveyance and recycled water distribution systems. The CalEEMod model was used to estimate emissions related to wastewater treatment facility construction, and the Road Construction Emissions Model was used to estimate emissions related to installation of the conveyance and distribution systems, which would be generally installed within existing roadway rights-of-way. Modeling printouts/worksheets are provided in Appendix B of this EIR. Fugitive dust emissions of PM<sub>10</sub> and PM<sub>2.5</sub> assume compliance with SCAQMD Rule 403, which requires that actions be taken to prevent, reduce, or mitigate man-made fugitive dust emissions to the extent feasible. These actions typically include the use of dust control and requiring the use of exhaust filters, and would be implemented as part of construction best management practices and in coordination with requirements set forth in the State's NPDES General Permit for Construction Activities (General Construction Permit). A copy of Rule 403 is provided in Appendix B of this EIR.

As provided in Table 4.2-4, the estimate of construction-period daily emissions would not exceed SCAQMD regional or local significance thresholds. As such, impacts would be less than significant, and no mitigation measures are necessary.

**Table 4.2-4. Estimate of Construction Emissions in Pounds per Day**

	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM10 <sup>a</sup>	PM2.5 <sup>a</sup>
<b>Regional Emissions</b>						
Phase 1: Wastewater Treatment Facility Only	10	24	18	< 1	3	2
Phase 1: Conveyance System Only	8	49	62	< 1	4	3
Concurrent Phase 1 Emissions	18	73	80	< 1	7	5
SCAQMD Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Phase 2: Wastewater Treatment Facility Only	2	28	21	< 1	3	2
Phase 2: Conveyance System Only	7	47	56	< 1	4	3
Concurrent Phase 2 Emissions	9	75	77	< 1	7	5
SCAQMD Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Phase 3: Conveyance System Only	6	45	48	< 1	3	2
SCAQMD Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
<b>Local Emissions<sup>b</sup></b>						
Phase 1: Wastewater Treatment Facility Only	2	28	21	< 1	3	2
SCAQMD Localized Significance Threshold	N/A	189	1,728	N/A	33	7
Exceed Threshold?	N/A	No	No	N/A	No	No
Phase 1: Conveyance System Only	7	57	35	< 1	3	3
SCAQMD Localized Significance Threshold	N/A	103	562	N/A	4	3
Exceed Threshold?	N/A	No	No	N/A	No	No
Phase 2: Wastewater Treatment Facility Only	2	15	11	< 1	2	1
SCAQMD Localized Significance Threshold	N/A	189	1,728	N/A	33	7
Exceed Threshold?	N/A	No	No	N/A	No	No
Phase 2: Conveyance System Only	6	49	33	< 1	3	3
SCAQMD Localized Significance Threshold	N/A	103	562	N/A	4	3
Exceed Threshold?	N/A	No	No	N/A	No	No
Phase 3: Conveyance System Only	6	45	48	< 1	3	2
SCAQMD Localized Significance Threshold	N/A	103	562	N/A	4	3
Exceed Threshold?	N/A	No	No	N/A	No	No
Notes:						
CalEEMod and Road Construction Emissions Model output sheets are provided in Appendix B						
<sup>a</sup> PM10 and PM2.5 emissions assume compliance with SCAQMD Rule 403, provided in Appendix B						
<sup>b</sup> SCAQMD's Localized Significance Thresholds focus on the generation of on-site emissions that have the potential to affect receptors in the immediately surrounding vicinity. Given that wastewater treatment facility and conveyance system construction activities would occur almost entirely at different locations, their effects would not be cumulative; therefore, the emissions have not been summed.						
Source: ICF, 2013.						

## Operations Impacts

Regional air pollutant emissions associated with Project operations would be generated as a result of energy consumption, which would be required for pumping, aeration, and other activities necessary for treating and transporting wastewater. In addition, energy would be used for interior lighting and minor exterior security lighting of the proposed wastewater treatment facility. Furthermore, the on-site use of solvents may result in the release volatile organic compound (VOC) emissions, and the operation of on-road vehicles while traveling to and from the wastewater treatment facility site and along the conveyance/distribution system alignments would emit pollutants. And finally, mobile-source emissions would result from employee work trips and hauling trips related to the transport and disposal of solids.

Emissions from the wastewater treatment processes would be minimal because emissions from the influent pump station, headworks, and equalization basin would be captured and filtered through an organic media bed, which would remove volatile organic compounds. Additionally, current emissions related to the operation of existing septic tank systems (i.e., VOC off-gassing and haul trips) would no longer occur with development of the proposed Project. Since these existing emissions are not quantified as part of this analysis, “net Project emissions” would be less than the operations-period emissions presented below.

Emissions related to wastewater treatment facility and conveyance/distribution system operations at Project build-out are based on the Project engineer’s estimate of system energy demand, totaling approximately 3.05 million kilowatt-hours (kWh) and 221.92 British thermal units (BTUs) equivalent of natural gas annually. Vehicle trip generation rates are also based on estimates provided by the Project engineer. As shown in Table 4.2-5, the estimate of operations-period daily emissions, based on the energy demand and trip generation estimates presented above, would not exceed SCAQMD regional or local significance thresholds. As such, impacts would be less than significant, and no mitigation measures are necessary.

**Table 4.2-5. Estimate of Operational Emissions in Pounds per Day**

	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM10	PM2.5
On-site Area Source <sup>a</sup>	< 1	< 1	< 1	< 1	< 1	< 1
Off-site Electricity Sources	< 1	< 1	< 1	< 1	< 1	< 1
On-road Mobile Sources	< 1	< 1	< 1	< 1	< 1	< 1
<b>Total Operational Emissions</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>&lt; 1</b>
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceed Significant Threshold?	No	No	No	No	No	No
<b>Total On-site Emissions</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>&lt; 1</b>	<b>&lt; 1</b>
SCAQMD Localized Significance Threshold	N/A	189	1,728	N/A	33	7
Exceed Significant Threshold?	N/A	No	No	N/A	No	No
Notes:						
<sup>a</sup> Area sources include natural gas combustion, landscape equipment emissions, and miscellaneous sources (e.g., detergents and cleaning compounds).						
Source: ICF 2013.						

### **Impact AQ-3: Would the Project Result in a Cumulatively Considerable Net Increase in Any Criteria Pollutant for which the Project Region Is a Nonattainment Area for an Applicable Federal or State Ambient Air Quality Standard (Including Releasing Emissions that Exceed Quantitative Thresholds for Ozone Precursors)?**

SCAQMD's approach for assessing cumulative impacts is based on AQMP forecasts of attainment of ambient air quality standards made in accordance with the requirements of the federal and state Clean Air Acts. As discussed above, the proposed Project would be consistent with the AQMP, which is intended to bring the Basin into attainment for all criteria pollutants.<sup>6</sup>

In addition, the estimates of construction-period and operational emissions presented in Table 4.2-4 and Table 4.2-5 would not exceed the applicable SCAQMD daily significance thresholds, which factor in cumulative effects and are designed to assist the region in attaining the applicable state and national ambient air quality standards. As such, cumulative impacts would be less than significant, and no mitigation measures are necessary,

### **Impact AQ-4: Would the Project Expose Sensitive Receptors to Substantial Pollutant Concentrations?**

The proposed Project would contribute to localized air pollutant emissions during construction (short term) and operations (long term). A discussion of the Project's localized potential construction- and operations-period air quality impacts is provided below.

#### **Local Construction Impacts**

SCAQMD has developed a set of mass emissions rate look-up tables that can be used to evaluate localized impacts that may result from construction-period emissions. If the on-site emissions from proposed construction activities are below the Localized Significance Threshold (LST) emission levels found in the LST mass rate look-up tables for the Project site's SRA, then Project emissions would not have the potential to cause a significant localized air quality impact.

As discussed previously, mass daily emissions during construction were compiled using the CalEEMod emissions inventory model. However, only on-site construction emissions were considered for purposes of comparison with the LST mass rate look-up tables (consistent with SCAQMD LST guidelines, off-site delivery/haul truck activity and employee trips were not considered in the evaluation of localized impacts). A conservative estimate of the Project's construction-period on-site mass emissions is presented in Table 4.2-4. As shown therein, local emissions would not exceed SCAQMD significance thresholds. [Additionally, the implementation of construction best management practices such as dust control and requiring the use of exhaust filters](#)

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<sup>6</sup> State CEQA Guidelines Section 15064(h)(3) states that "A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program, which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency."

on engines would aid in additional reduction of dust and odors resulting from project construction. As such, impacts would be less than significant, and no mitigation measures are necessary.

### Local Operational Impacts

Odors, dust and other air-borne discharges are not expected as a result of project operations as the Project would be fully odor-scrubbed. Therefore, wWithin an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations are generally found close to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (i.e., congested intersection) increases. For purposes of providing a conservative worst-case impact analysis, CO concentrations are typically analyzed at congested intersection locations, because if impacts are less than significant close to congested intersections, impacts will also be less than significant at more distant sensitive receptor locations.

Project traffic during the operational phase of the Project would not have the potential to create local area CO impacts. Wastewater treatment facility and conveyance system operation would involve approximately 23 vehicle trips per week for all regular staffing, waste disposal, and inspection activities. Additional vehicle trips would occur on monthly, quarterly, and annual bases to provide testing, cleaning, and other maintenance services but would not result in a noticeable effect on traffic operations in the area. Given the low level of vehicle trips associated with Project operation, congestion and related CO concentrations are unlikely to measurably increase.

With respect to the Project's on-site mass emissions, Table 4.2-4 above shows that on-site operational emissions would be below SCAQMD's localized significance thresholds. As such, localized impacts would be less than significant, and no mitigation measures are necessary.

### Toxic Air Contaminants

The greatest potential for TAC emissions would be related to diesel particulate emissions associated with heavy equipment operations during grading activities on the proposed wastewater treatment facility site and excavation for the conveyance and distribution systems. SCAQMD does not consider diesel-related cancer risks from construction equipment to be an issue because of the short-term nature of construction activities. Construction activities associated with the Project would be sporadic, transitory, and short term in nature. The assessment of cancer risk is typically based on a 70-year exposure period. Because exposure to diesel exhaust during construction would be short-term, and well below the 70-year exposure period, construction of the Project is not anticipated to result in an elevated cancer risk to exposed persons. With respect to long-term Project operations, no meaningful TAC emissions sources would be present, because emissions from treatment processes would be captured and filtered through an organic media bed. Project-related toxic emission impacts during construction and operation would not be significant, and no mitigation measures are necessary.

### Impact AQ-5: Would the Project Create Objectionable Odors Affecting a Substantial Number of People?

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment facilities, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. The proposed

Project includes construction and operation of a use identified by SCAQMD as being associated with odors. However, as stated in the Project description, the wastewater treatment facility would be fully odor-scrubbed and compliance with SCAQMD Rule 402 (regarding nuisance odors) would eliminate odor-related impacts.

All potential odor-generating processes would be completely covered and connected to an odor control system. The odor control system would be comprised of piping/ductwork, fans, and organic media beds. The fans would create a vacuum condition at each process facility, and move foul air to and through organic media beds that remove odorous compounds. This process would occur via underground piping and ductwork. The organic media bed would be a biological odor treatment process that establishes the proper environment for microorganisms to consume and remove odor compounds. The biological process was selected over chemical treatment to minimize the need for chemical transportation to the site.

All process facilities that have the potential to generate wastewater related odors would be connected to the odor bed/treatment system, including:

- Legacy Park Pump Station
- Influent Pump Station
- Headworks (Coarse Screen, Grit Chamber, Fine Screens)
- Equalization Basin and Intermediate Pump Station
- Biological Reactors
- Membrane Tanks
- Solids Storage Tank

The treatment plant site would have two odor control systems, including an Upper Area Odor Control System for the biological reactors and membrane tanks; and a Lower Area Odor Control System for the influent pump station, headworks, equalization basin, and solids storage tank. The UV disinfection process, recycled water storage tank and pump station will not generate wastewater odors and would not be connected to the odor control system. The Legacy Park pump station has a dedicated fan and odor bed system at the site. Odor control facilities are not planned for the Bluffs Park pump station because the station is at the end of the line and its wet well would be emptied daily; therefore, odor is not anticipated to be an issue at this location. The collection system manholes are being designed with sealed covers to prevent any foul air from escaping the system. Odors are not anticipated from the air release valves because of the relatively small size of the vents and the limited volume of air to be vented on a daily basis. Odor-related impacts associated with Project operation would be less than significant, and no mitigation measures are required.

Odors resulting from the construction of the proposed Project are not likely to affect a substantial number of people because construction activities do not typically emit offensive odors. Potential odor emitters during construction activities include asphalt paving and the use of architectural coatings and solvents. SCAQMD Rules 1108 and 1113 limit the amount of VOCs from cutback asphalt and architectural coatings and solvents. Additionally, SCAQMD Rule 402 manages the potential for nuisance odors, and compliance with this rule would minimize the potential for odors to be released during construction. Given mandatory compliance with SCAQMD rules, no construction activities or

materials are proposed that would create a significant level of objectionable odors. As such, potential impacts during short-term construction would be less than significant. No mitigation measures are required.

### **4.2.3. Mitigation Measures**

No mitigation measures are required.

### **4.2.4. Unavoidable Significant Adverse Impacts**

There would be no unavoidable significant adverse impacts related to air quality occurring as a result of Project construction and operation.

### **4.2.5. Cumulative Impacts**

SCAQMD's approach for assessing cumulative impacts is based on AQMP forecasts of attainment of ambient air quality standards made in accordance with the requirements of the federal and state Clean Air Acts. As discussed above, the proposed Project would be consistent with the AQMP, which is intended to bring the Basin into attainment for all criteria pollutants. Therefore, the Project would not result in a cumulatively considerable contribution to a significant cumulative impact.