IV. Environmental Impact Analysis
B. Air Quality

1. Introduction

This section of the Draft EIR addresses the air emissions generated by construction and operation of the Project. The analysis also addresses the consistency of the Project with the air quality policies set forth within the South Coast Air Quality Management District (SCAQMD)'s Air Quality Management Plan (AQMP) and the City of Los Angeles General Plan. The analysis of Project-generated air emissions focuses on whether the Project would cause an exceedance of an ambient air quality standard or SCAQMD significance threshold. Calculation worksheets, assumptions, and model outputs used in the analysis are included in Appendix B of this Draft EIR.

2. Environmental Setting

a. Air Quality Background

The Project is located within the South Coast Air Basin (Air Basin), an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and San Diego County to the south. The Air Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the Coachella Valley area in Riverside County. The regional climate within the Air Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Air Basin is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, and industry.

Air pollutant emissions within the Air Basin are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways.

Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect the public health and welfare. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted for them. The national and state standards have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The national and state criteria pollutants and the applicable ambient air quality standards are listed in Table IV.B-1 on page IV.B-3.

b. Air Pollution and Potential Health Effects

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in air quality within the Air Basin. The criteria air pollutants for which national and state standards have been promulgated and which are most relevant to current air quality planning and regulation in the Air Basin include ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), sulfates, and hydrogen sulfide (H_2S). In addition, volatile organic compounds (VOCs) and toxic air contaminants (TACs) are of concern in the Air Basin. Each of these is briefly described below.

(1) Criteria Pollutants

(a) Ozone (O_3)

O_3 is a gas that is formed when VOCs and nitrogen oxides (NO_X)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O_3 irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other

Table IV.B-1
Ambient Air Quality Standards

Pollutant	Averaging Period	California Standard[a,b]	Federal Standard[a,b]	SCAQMD Attainment Status[c]	
				California Standard[d]	Federal Standard[d]
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m^3)	—	Non-Attainment	—
	8 hour	0.07 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Non-Attainment	Non-Attainment (Extreme)
Respirable Particulate Matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3	Non-Attainment	Attainment
	Annual	20 µg/m^3	—		
Fine Particulate Matter ($PM_{2.5}$)	24 hour	—	35 µg/m^3	Non-Attainment	Non-Attainment (Serious)
	Annual	12 µg/m^3	12 µg/m^3		
Carbon Monoxide (CO)	1 hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	Attainment	Attainment
	8 hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)		
Nitrogen Dioxide (NO_2)	1 hour	0.18 ppm (339 µg/m^3)	0.10 ppm (188 µg/m^3)	Attainment	Unclassified/Attainment
	Annual	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)		
Sulfur Dioxide (SO_2)	1 hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	Attainment	Unclassified/Attainment
	3 hour	—	0.5 ppm (1,300 µg/m^3)		
	24 hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)		
	Annual	—	0.03 ppm (80 µg/m^3)		
Lead (Pb)	30-day average	1.5 µg/m^3	—	Attainment	Partial Non-Attainment[e]
	Rolling 3-month average	—	0.15 µg/m^3		
Sulfates	24 hour	25 µg/m^3	—	Attainment	—
Hydrogen Sulfide (H_2S)	1 hour	0.03 ppm (42 µg/m^3)	—	Unclassified	—

ppm = parts per million by volume

µg/m^3 = micrograms per cubic meter

[a] *Ambient Air Quality Standards Chart (www.arb.ca.gov/research/aaqs/aaqs2.pdf). Last updated May 4, 2016.*

[b] *An ambient air quality standard is a concentration level expressed in either parts per million or micrograms per cubic meter and averaged over a specific time period (e.g., 1 hour). The different*

Table IV.B-1 (Continued)
Ambient Air Quality Standards

Pollutant	Averaging Period	California Standard[a,b]	Federal Standard[a,b]	SCAQMD Attainment Status[c]	
				California Standard[d]	Federal Standard[d]
averaging times and concentrations are meant to protect against different exposure effects. Some ambient air quality standards are expressed as a concentration that is not to be exceeded. Others are expressed as a concentration that is not to be equaled or exceeded.					
[c] *"Attainment" means that the regulatory agency has determined based on established criteria, that the Air Basin meets the identified standard. "Non-attainment" means that the regulatory agency has determined that the Air Basin does not meet the standard. "Unclassified" means there is insufficient data to designate an area, or designations have yet to be made.*					
[d] *California and Federal standard attainment status based on the 2016 AQMP.*					
[e] *An attainment re-designation request is pending.*					
Source: Eyestone Environmental, 2019.					

respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

(b) Particulate Matter (PM_{10} and $PM_{2.5}$)

The human body naturally prevents the entry of larger particles into the body. However, small particles, with an aerodynamic diameter equal to or less than 10 microns (PM_{10}) and even smaller particles with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$), can enter the body and are trapped in the nose, throat, and upper respiratory tract. These small particulates could potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM_{10} and $PM_{2.5}$. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates could become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

(c) Carbon Monoxide (CO)

CO is primarily emitted from combustion processes and motor vehicles due to incomplete combustion of fuel. Elevated concentrations of CO weaken the heart's contractions and lower the amount of oxygen carried by the blood. It is especially dangerous for people with chronic heart disease. Inhalation of CO can cause nausea, dizziness, and headaches at moderate concentrations and can be fatal at high concentrations.

(d) Nitrogen Dioxide (NO_2)

NO_2 is a byproduct of fuel combustion and major sources include power plants, large industrial facilities, and motor vehicles. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), which reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10}. Nitrogen oxides irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_X is as a precursor to the formation of ozone.

(e) Sulfur Dioxide (SO_2)

Sulfur oxides (SO_X) are compounds of sulfur and oxygen molecules. SO_2 is the predominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of sulfur dioxide aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of sulfur dioxide, and long-term exposures to both pollutants leads to higher rates of respiratory illness.

(f) Lead (Pb)

Lead is emitted from industrial facilities and from the sanding or removal of old lead-based paint. Smelting or processing the metal is the primary source of lead emissions, which is primarily a regional pollutant. Lead affects the brain and other parts of the body's nervous system. Exposure to lead in very young children impairs the development of the nervous system, kidneys, and blood forming processes in the body.

(g) Sulfates

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized during the combustion process and subsequently converted to sulfate compounds in the atmosphere. Effects of sulfate exposure at levels above the state standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

(h) Hydrogen Sulfide (H_2S)

H_2S is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation. Breathing H_2S at levels above the state standard could result in exposure to a very disagreeable odor.

(2) Volatile Organic Compounds (VOCs)

VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids. Some VOCs are also classified by the state as toxic air contaminants. While there are no specific VOC ambient air quality standards, VOC is a prime component (along with NO_X) of the photochemical processes by which such criteria pollutants as ozone, nitrogen dioxide, and certain fine particles are formed. They are, thus, regulated as "precursors" to formation of those criteria pollutants.

(3) Toxic Air Contaminants (TACs)

TACs refer to a diverse group of "non-criteria" air pollutants that can affect human health but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above but because their effects tend to be local rather than regional. TACs are classified as carcinogenic and noncarcinogenic, where carcinogenic TACs can cause cancer and noncarcinogenic TAC can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular).

The California Air Resources Board (CARB)[1] and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in California. A complete list of these substances is maintained on CARB's website.[2]

Diesel particulate matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the state as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 micrometer (μm)), including a subgroup of ultrafine

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[1] *CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both state and federal air pollution control programs within California.*

[2] *CARB, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.*

particles (ultrafine particles have a diameter less than 0.1 µm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and cancer-causing substances.

Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher in close proximity to heavily traveled roadways with substantial truck traffic or near industrial facilities. According to CARB, DPM exposure may lead to the following adverse health effects: (1) aggravated asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease.[3,4]

To provide a perspective on the contribution that DPM has on the overall statewide average ambient air toxics potential cancer risk, CARB evaluated risks from specific compounds using data from CARB's ambient monitoring network. CARB maintains a 21-site air toxics monitoring network, which measures outdoor ambient concentration levels of approximately 60 air toxics. CARB has determined that, of the top ten inhalation risk contributors, DPM contributes approximately 68 percent of the total potential cancer risk.[5]

c. Regulatory Framework

The Project Site and vicinity are subject to federal, state, and local air quality laws and regulations. A number of plans and policies have been adopted by various agencies that address air quality concerns. Those laws, regulations, plans, and policies that are relevant to the Project are discussed below.

(1) Criteria Pollutants

(a) Federal

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments in 1990. At the federal level, the United States Environmental Protection Agency (USEPA) is responsible

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[3] *CARB, Overview: Diesel Exhaust and Health, https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health, accessed March 8, 2019.*

[4] *CARB, Fact Sheet: Diesel Particulate Matter Health Risk Assessment Study for the West Oakland Community: Preliminary Summary of Results, March 2008.*

[5] *SCAQMD, MATES IV Final Report, 2015.*

for implementation of some portions of the CAA (e.g., certain mobile source and other requirements). Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the National Ambient Air Quality Standard (NAAQS). These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA which are most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

Title I provisions are implemented for the purpose of attaining NAAQS. Table IV.B-1 on page IV.B-3 shows the NAAQS currently in effect for each criteria pollutant and their relative attainment status. The Air Basin fails to meet national standards for O_3 and $PM_{2.5}$ and, therefore, is considered a federal "non-attainment" area for these pollutants.[6]

Title II of the CAA pertains to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline and automobile pollution control devices are examples of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_X emissions have been lowered substantially and the specification requirements for cleaner burning gasoline are more stringent.

(b) State

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 practicable date. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. Table IV.B-1 includes the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the state. As shown in Table IV.B-1, the CAAQS include more stringent standards than the NAAQS.

[6] *SCAQMD, 2016 AQMP.*

(i) Air Quality and Land Use Handbook

CARB published the *Air Quality and Land Use Handbook* on April 28, 2005 (the "CARB Handbook"), to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions.[7] The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

(ii) California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by the state agencies pursuant to the Administrative Procedure Act (APA). The CCR includes regulations that pertain to air quality emissions. Specifically, CCR, Title 13, Section 2485 states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. In addition, CCR, Title 17, Section 93115 states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

(c) Regional

(i) South Coast Air Quality Management District (SCAQMD)

SCAQMD shares responsibility with CARB for ensuring that all state and federal ambient air quality standards are achieved and maintained throughout all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. SCAQMD has jurisdiction over an area of approximately 10,743 square miles. This area includes all of Orange County and Los Angeles County, except for the Antelope Valley; the non-desert portion of western San Bernardino County; and the western and Coachella

[7] *CARB, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.*

Valley portions of Riverside County. The Air Basin is a subregion of SCAQMD's jurisdiction.

To meet the CAAQS and NAAQS, SCAQMD has adopted a series of Air Quality Management Plans (AQMPs). The 2016 AQMP incorporates the Southern California Association of Governments' (SCAG) 2016–2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS) and updated emission inventory methodologies for various source categories.[8] The 2016 AQMP also includes the new federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches.

The AQMP provides emissions inventories, ambient measurements, meteorological episodes, and air quality modeling tools. The AQMP also provides policies and measures to guide responsible agencies in achieving federal standards for healthful air quality in the Air Basin. It also incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources.

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to project construction or operation. For example, SCAQMD Rule 403 requires the implementation of best available fugitive dust control measures during active construction periods capable of generating fugitive dust emissions from on-site earth-moving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Air Basin, such as the Project. Instead, SCAQMD published the *CEQA Air Quality Handbook* in November 1993 to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects proposed in the Air Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*.[9]

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[8] *SCAG, 2016 RTP/SCS.*

[9] *SCAQMD, Air Quality Analysis Handbook, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed March 8, 2019.*

In order to assist the CEQA practitioner in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/information is provided on the SCAQMD website (www.aqmd.gov/ceqa/hdbk.html) and includes: (1) EMission FActors (EMFAC) on-road vehicle emission factors; (2) background CO concentrations; (3) localized significance thresholds; (4) mitigation measures and control efficiencies; (5) mobile source toxics analysis; (6) off-road mobile source emission factors; (7) $PM_{2.5}$ significance thresholds and calculation methodology; and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

SCAQMD has also adopted land use planning guidelines in the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, which considers impacts to sensitive receptors from facilities that emit TAC emissions.[10] SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity of freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

The following SCAQMD rules and regulations would be applicable to the Project:

- SCAQMD Rule 403 requires projects to incorporate fugitive dust control measures at least as effectively as the following measures:
  - Use watering to control dust generation during the demolition of structures;
  - Clean-up mud and dirt carried onto paved streets from the site;
  - Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;
  - All haul trucks would be covered or would maintain at least 6 inches of freeboard;
  - All materials transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of spillage or dust;

[10] *SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.*

  - Suspend earthmoving operations or additional watering would be implemented to meet Rule 403 criteria if wind gusts exceed 25 mph;

  - The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind. All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions.

- SCAQMD Rule 1113 limits the volatile organic compound content of architectural coatings.

- SCAQMD Regulation XIII, New Source Review, requires new on-site facility nitrogen oxide emissions to be minimized through the use of emission control measures (e.g., use of best available control technology for new combustion sources such as boilers, emergency generators, and water heaters).

(ii) Southern California Association of Governments (SCAG)

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including applicable federal, state, and air district laws and regulations. As the federally designated Metropolitan Planning Organization (MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. In addition, SCAG is a co-producer, with SCAQMD, of the transportation strategy and transportation control measure sections of the 2016 AQMP.

SCAG's 2016 RTP/SCS, adopted on April 7, 2016, presents a long-term transportation vision through the year 2040 for the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The mission of the 2016 RTP/SCS is to provide "leadership, vision and progress which promote economic growth, personal well-being, and livable communities for all Southern Californians." The 2016 RTP/SCS places a greater emphasis on sustainability and integrated planning compared to previous versions of the RTP. These strategies include supporting projects that encourage diverse job opportunities for a variety of skills and education, recreation and culture and a full-range of shopping, entertainment and services all within a relatively short distance, while encouraging employment development around current and planned transit stations and neighborhood commercial centers.

(d) Local

Local jurisdictions, such as the City of Los Angeles, have the authority and responsibility to reduce air pollution through their police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions.

The City's General Plan was prepared in response to California law requiring that each city and county adopt a long-term comprehensive general plan. This plan must be integrated and internally consistent, and must present goals, objectives, policies, and implementation guidelines for decision makers to use. The General Plan includes an Air Quality Element, which was adopted on November 24, 1992, and covers the entire City, an area of about 465 square miles. The Air Quality Element serves to aid the City in attaining the state and federal ambient air quality standards at the earliest feasible date, while still maintaining economic growth and improving the quality of life. The Air Quality Element and the accompanying Clean Air Program acknowledge the interrelationships between transportation and land use planning in meeting the City's mobility and clean air goals. With the City's adoption of the Air Quality Element and the accompanying Clean Air Program, the City is seeking to achieve consistency with regional air quality growth management, mobility, and congestion management plans. The Air Quality Element sets forth the goals, objectives, and policies, which guide the City in the implementation of its air quality improvement programs and strategies.

The Air Quality Element establishes six goals:

- Good air quality in an environment of continued population growth and healthy economic structure;
- Less reliance on single-occupant vehicles with fewer commute and non-work trips;
- Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques;
- Minimal impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation and air quality;
- Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting; and

- Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

In accordance with CEQA requirements, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City uses SCAQMD's *CEQA Air Quality Handbook* and SCAQMD's supplemental online guidance/information for the environmental review of plans and development proposals within its jurisdiction.

(2) Toxic Air Contaminants (TAC)

(a) State

(i) Assembly Bill 1807

The California Air Toxics Program[11] was established in 1983, when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and OEHHA determine if a substance should be formally identified, or "listed," as a TAC in California. Since inception of the program, a number of such substances have been listed and include benzene, chloroform, formaldehyde, and particulate emissions from diesel-fueled engines, among others.[12] In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants (HAPs) as TACs.

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources. In 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given time.

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[11] *CARB, California Air Toxics Program, www.arb.ca.gov/toxics/toxics.htm, last reviewed by CARB May 3, 2018.*

[12] *CARB, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.*

In addition to limiting exhaust from idling trucks, CARB adopted regulations on July 26, 2007, for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles to reduce emissions by installation of diesel particulate filters and encouraging the replacement of older, dirtier engines with newer emission controlled models. Implementation is staggered based on fleet size, with the largest operators beginning compliance in 2014.[13]

The AB 1807 program is supplemented by the AB 2588 Air Toxics "Hot Spots" program, which was established by the California Legislature in 1987. Under this program, facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks if present. In 1992, the AB 2588 program was amended by Senate Bill (SB) 1731 to require facilities that pose a significant health risk to the community to reduce their risk through implementation of a risk management plan.

(ii) Air Quality and Land Use Handbook

CARB published the *Air Quality and Land Use Handbook* on April 28, 2005 (the "CARB Handbook"), to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions.[14] The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day;[15] (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

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[13] *CARB, In-Use Off-Road Diesel-Fueled Fleets Regulation, www.arb.ca.gov/msprog/ordiesel/ordiesel.htm, last reviewed by CARB March 5, 2019.*

[14] *CARB, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.*

[15] *In November 2012, the Los Angeles City Planning Commission (CPC) issued an advisory notice (Zoning Information File [ZI] No. 2427) regarding the siting of sensitive land uses within 1,000 feet of freeways. ZI No. 2427 was updated in September 2018 and now references the City's requirement, adopted pursuant to Ordinance No. 184,245, that all new mechanically ventilated buildings located within 1,000 feet of a freeway to install air filtration media that provides a Minimum Efficiency Reporting Value (MERV) of 13.*

Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory was released in April of 2017 as a supplement to CARB's Handbook. It is intended to provide planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies (e.g., solid barriers, vegetation buffers for pollutant dispersion, and indoor high efficiency filtration) to reduce exposure to traffic emissions near high-volume roadways in order to protect public health and promote equity and environmental justice.

(b) Regional

Pursuant to AB 1807, which directs CARB to identify substances as TACs and adopt ATCMs to control such substances, SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. SCAQMD has adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

(c) Local

In November 2012, the Los Angeles City Planning Commission (CPC) issued Zoning Information File (ZI) No. 2427 regarding the siting of sensitive land uses within 1,000 feet of freeways. The CPC deemed 1,000 feet to be a conservative distance to evaluate projects that house populations considered to be more at-risk from the negative effects of air pollution caused by freeway proximity. The CPC advised that applicants of projects requiring discretionary approval, located within 1,000 feet of a freeway and contemplating residential units and other sensitive uses (e.g., hospitals, schools, retirement homes, etc.) perform a Health Risk Assessment (HRA). However, in September 2018, ZI No. 2427 was updated to no longer recommend performing an HRA and to reference the City's requirement, adopted pursuant to Ordinance No. 184,245, that all new mechanically ventilated buildings located within 1,000 feet of a freeway to install air filtration media that provides a Minimum Efficiency Reporting Value (MERV) of 13. While the Project would not introduce residential units within 1,000 feet of a freeway, it would be subject to the requirements of Ordinance No. 184,245.

d. Existing Conditions

(1) Regional Air Quality

The Southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot

weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Air Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential.

The greatest air pollution throughout the Air Basin occurs from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Air Basin vary with location, season, and time of day. O_3 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 Air Basin and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California. However, the Air Basin still fails to meet the national standards for O_3 and $PM_{2.5}$. In addition, Los Angeles County still fails to meet the national standard for lead.

SCAQMD has released an Air Basin-wide air toxics study (MATES-IV).[16] The MATES-IV Study was aimed at estimating the cancer risk from toxic air emissions throughout the Air Basin by conducting a comprehensive monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to fully characterize health risks for those living in the Air Basin. The MATES-IV Study concluded that the average carcinogenic risk from air pollution in the Air Basin is approximately 420 in one million over a 70-year duration. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 68 percent of the risk is attributed to diesel particulate emissions, approximately 21 percent to other toxics associated with mobile sources (including benzene, butadiene, and carbonyls), and approximately 11 percent of all carcinogenic risk is attributed to stationary sources (which include large industrial operations, such as refineries and metal processing facilities, as well as smaller businesses, such as gas stations and chrome plating).

As part of the MATES-IV Study, SCAQMD prepared a series of maps that shows regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps' estimates represent the number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years) in parts of the area. The MATES-IV map is the most recently available map to represent existing conditions near the Project area. The

[16] *SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV) Final Report, May 2015.*

estimated cancer risk for the vast majority of the urbanized area within the Air Basin ranges from 200 to over 1,200 cancers per million over a 70-year duration.[17] Generally, the risk from air toxics is lower near the coastline and higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

(2) Local Air Quality

Air pollutant emissions are generated in the local vicinity by stationary and area-wide sources, such as commercial and industrial activity, space and water heating, landscape maintenance, consumer products, and mobile sources primarily consisting of automobile traffic. Motor vehicles are the primary source of pollutants in the local vicinity.

(a) Existing Pollutant Levels at Nearby Monitoring Stations

SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin and has divided the Air Basin into 38 source receptor areas (SRAs) in which 31 monitoring stations operate. Figure IV.B-1 on page IV.B-19 shows the locations of the SRAs located in Los Angeles County. The Project Site is located within SRA 1, which covers the Central Los Angeles area. The monitoring station most representative of the Project Site is the North Main Street Station, located at 1630 North Main Street in the City of Los Angeles, approximately 6.18 miles southeast of the Project Site. Criteria pollutants monitored at this station include PM_{10}, $PM_{2.5}$, O_3, CO, NO_2, lead, and sulfate. Table IV.B-2 on page IV.B-20 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at SRA 1 through the period of 2015–2017.

(b) Existing Health Risk in the Surrounding Area

As shown in Figure IV.B-2 on page IV.B-22, based on the MATES IV model, the calculated cancer risk in the Project area is approximately 1,150 in a million.[18] The cancer risk in this area is predominately related to nearby sources of diesel particulate (e.g., the Hollywood Freeway [US-101]). In general, the risk at the Project Site is comparable with other urbanized areas in Los Angeles.

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[17] *SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV), MATES IV Interactive Carcinogenicity Map, 2015.*

[18] *SCAQMD, "Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV)," MATES IV Interactive Carcinogenicity Map, 2015.*

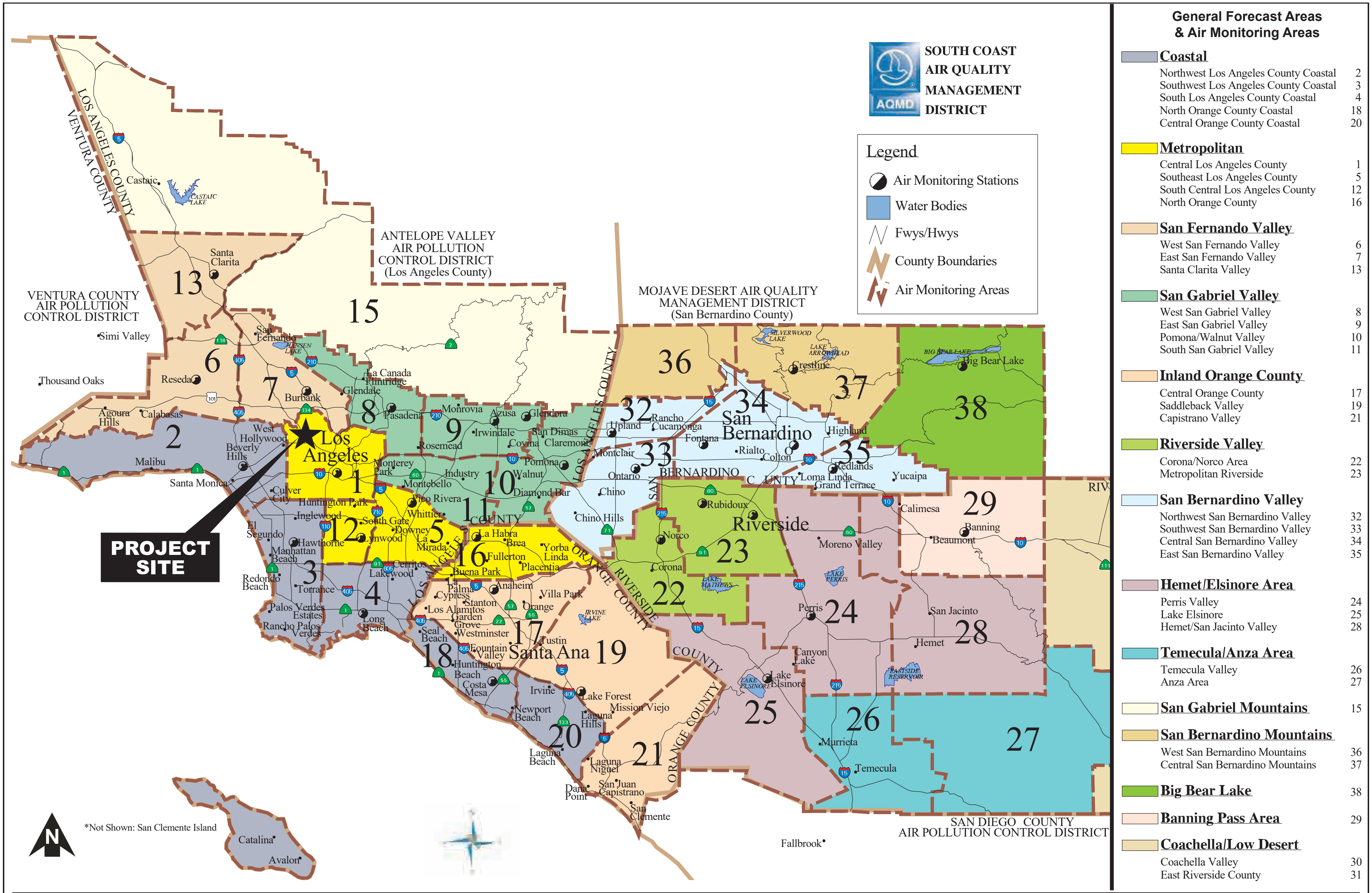

Figure IV.B-1
SCAQMD Source Receptor Areas

Source: Sierra Wade Associates, 2010.

Table IV.B-2
Summary of Ambient Air Quality in the Project Vicinity

Pollutant	Year		
	2015	2016	2017
Ozone (O_3)			
Maximum 1-hour Concentration (ppm)	0.10	0.10	0.12
Days exceeding CAAQS (0.09 ppm)	2	2	6
Maximum 8-hour Concentration (ppm)	0.07	0.08	0.09
Days exceeding NAAQS (0.070 ppm)	6	4	14
Days exceeding CAAQS (0.07 ppm)	6	4	14
Respirable Particulate Matter (PM_{10})			
Maximum 24-hour Concentration (µg/m^3)	88	67	96
Days exceeding NAAQS (150 µg/m^3)	0	0	0
Days exceeding CAAQS (50 µg/m^3)	26	18	41
Annual Arithmetic Mean (µg/m3)	33	32	34
Does measured AAM exceed CAAQS (20 µg/m^3)?	Yes	Yes	Yes
Fine Particulate Matter ($PM_{2.5}$)			
Maximum 24-hour Concentration (µg/m^3)	56	44	49
Days exceeding NAAQS (35 µg/m^3)	7	2	5
Annual Arithmetic Mean (µg/m^3)	12.4	11.8	11.9
Does measured AAM exceed NAAQS (12 µg/m^3)?	Yes	No	No
Does measured AAM exceed CAAQS (12 µg/m^3)?	Yes	No	No
Carbon Monoxide (CO)			
Maximum 1-hour Concentration (ppm)	3.2	1.9	1.9
Days exceeding NAAQS (35.0 ppm)	0	0	0
Days exceeding CAAQS (20.0 ppm)	0	0	0
Maximum 8-hour Concentration (ppm)	1.8	1.4	1.6
Days exceeding NAAQS and CAAQS (9 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour Concentration (ppm)	0.08	0.06	0.08
Days exceeding CAAQS (0.18 ppm)	0	0	0
Annual Arithmetic Mean (ppm)	0.02	0.02	0.02
Does measured AAM exceed NAAQS (0.0534 ppm)?	No	No	No
Does measured AAM exceed CAAQS (0.03 ppm)?	No	No	No
Sulfur Dioxide (SO_2)			
Maximum 1-hour Concentration (ppm)	0.01	0.01	0.01
Days exceeding CAAQS (0.25 ppm)	0	0	0
Maximum 24-hour concentration (ppm)	N/A	N/A	N/A
Days exceeding CAAQS (0.04 ppm)	0	N/A	N/A
Days exceeding NAAQS (0.14 ppm)	0	N/A	N/A
Annual Arithmetic Mean (ppm)	N/A	N/A	N/A
Does measured AAM exceed NAAQS (0.030 ppm)?	0	N/A	N/A

Table IV.B-2 (Continued)
Summary of Ambient Air Quality in the Project Vicinity

Pollutant	Year		
	2015	2016	2017
Lead			
Maximum 30-day Average Concentration (µg/m^3)	0.01	0.02	0.02
Does measured concentration exceed NAAQS (1.5 µg/m^3)	No	No	No
Maximum Calendar Quarter Concentration (µg/m^3)	0.01	0.01	0.01
Does measured concentration exceed CAAQS (1.5 µg/m^3)	No	No	No
Sulfate			
Maximum 24-hour Concentration (µg/m^3)	6.1	5.8	5.1
Does measured concentration exceed CAAQS (25 µg/m^3)	No	No	No

ppm = parts per million by volume
µg/m^3 = micrograms per cubic meter
AAM = annual arithmetic mean
— = not available
Source: South Coast Air Quality Management District Ambient Monitoring Data (2015–2017), www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed March 7, 2019.

(c) Surrounding Uses

As shown in Figure IV.B-3 on page IV.B-23, the Project Site is located in a highly urbanized area. Surrounding uses immediately adjacent to the Project Site include a surface parking lot to the north; the Pantages Theatre to the east; multi-family residential and restaurant uses to the south; and the Redbury Hollywood Hotel to the west across Vine Street. Other uses in close proximity to the Project Site include the W Hotel located approximately 300 feet to the south, and the Capitol Records Building located approximately 300 feet to the north. Some population groups, including children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to air pollution than others. As shown in Figure IV.B-3, the closest sensitive land uses to the Project Site are residential uses immediately adjacent and south of the Project Site. As such, these residences would experience the highest levels of Project emissions. While there are other sensitive receptors in the Project vicinity, they are farther away than the residences to the south of the Project Site and emission levels and impacts would be less.

(d) Existing Project Site Emissions

The Project Site is currently occupied by a 6,393 square foot low-rise commercial restaurant and nightclub building and adjacent paved surface areas.

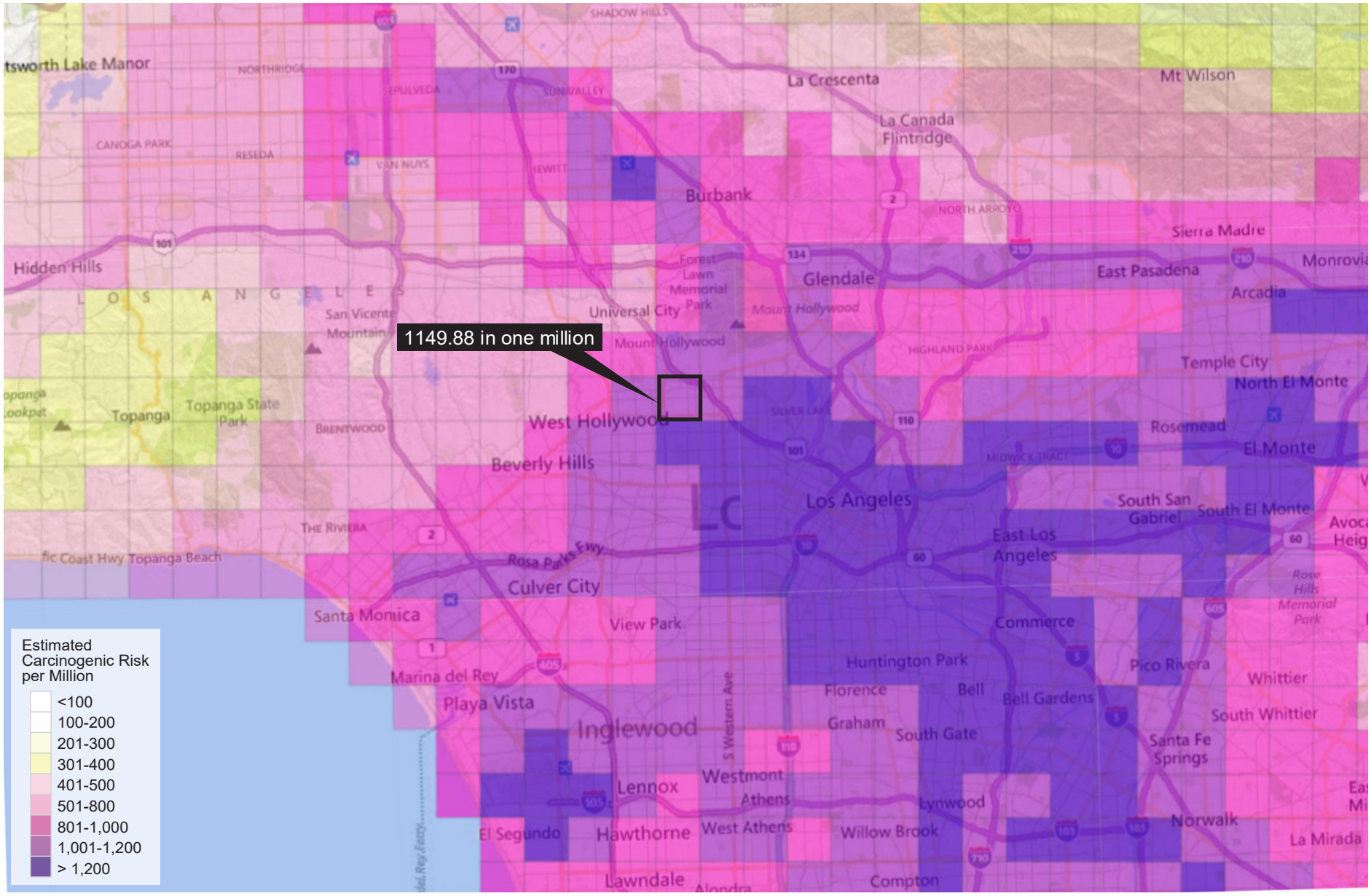

Figure IV.B-2
MATES IV Total Cancer Risk for Project Area

Source: South Coast AQMD, 2016.

Figure IV.B-3
Air Quality Sensitive Receptors Locations

Source: Google Earth, 2016.

Area source emissions are generated through the use of products that contain solvents and use of landscape equipment. Energy source emissions are associated with building natural gas usage at the Project Site. In addition, mobile source emissions from the existing uses are generated by motor vehicle trips to and from the Project Site. Table IV.B-3 below presents an estimate of the existing emissions within the Project Site.

Table IV.B-3
Estimated Daily Regional Operational Criteria Pollutant Emissions—Existing Project Site Land Uses[a]
(pounds per day)

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	1	3	8	<1	1	<1
Total Existing Emissions	**1**	**4**	**8**	**<1**	**1**	**<1**

Numbers may not add up exactly due to rounding.

[a] *Pollutant emissions are calculated using the CalEEMod emissions model version 2016.3.2.*

Source: Eyestone Environmental, 2019.

3. Project Impacts

a. Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to air quality if it would:

Threshold (a): Conflict with or obstruct implementation of the applicable air quality plan.

Threshold (b): Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Threshold (c): Expose sensitive receptors to substantial pollutant concentrations.

Threshold (d): Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

(2) 2006 L.A. CEQA Thresholds Guide

To assist in answering the Appendix G Threshold questions and thresholds provided by AQMD, this analysis utilizes factors and considerations identified below from the 2006 *L.A. CEQA Thresholds Guide*, as appropriate. The *L.A. CEQA Thresholds Guide* identifies the following criteria to evaluate air quality impacts:

(a) Construction

(i) Combustion Emissions from Construction Equipment

- Type, number of pieces and usage for each type of construction equipment;
- Estimated fuel usage and type of fuel (diesel, natural gas) for each type of equipment; and
- Emission factors for each type of equipment.

(ii) Fugitive Dust—Grading, Excavation and Hauling

- Amount of soil to be disturbed on-site or moved off-site;
- Emission factors for disturbed soil;
- Duration of grading, excavation and hauling activities;
- Type and number of pieces of equipment to be used; and
- Projected haul route.

(iii) Fugitive Dust—Heavy-Duty Equipment Travel on Unpaved Roads

- Length and type of road;
- Type, number of pieces, weight and usage of equipment; and
- Type of soil.

(iv) Other Mobile Source Emissions

- Number and average length of construction worker trips to Project Site, per day; and
- Duration of construction activities.

(b) Operation

- Operational emissions exceed 10 tons per year of volatile organic gases or any of the daily thresholds presented below (as reprinted from the CEQA Air Quality Handbook):

Pollutant	Significance Threshold (lbs/day)
ROG	55
NO_X	55
CO	550
PM_{10}	150
SO_X	150

- Either of the following conditions would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:
  - The proposed project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 parts per million (ppm), respectively; or
  - 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.
- The project creates an objectionable odor at the nearest sensitive receptor.

(c) Toxic Air Contaminants

The determination of significance shall be made on a case-by-case basis, considering the following factors:

- The regulatory framework for the toxic material(s) and process(es) involved;
- The proximity of the toxic air contaminants to sensitive receptors;
- The quantity, volume and toxicity of the contaminants expected to be emitted;
- The likelihood and potential level of exposure; and
- The degree to which project design will reduce the risk of exposure.

(3) SCAQMD's CEQA Air Quality Handbook

To assist in answering the Appendix G Threshold questions and thresholds provided by SCAQMD, the City of Los Angeles utilizes SCAQMD's CEQA Air Quality Handbook and the thresholds of significance below as the guidance documents for the environmental review of development proposals within the Air Basin. Table IV.B-4 on page IV.B-28 shows the currently recommended supplemental thresholds by SCAQMD in the CEQA Air Quality Handbook, which is intended to translate the CEQA Guidelines thresholds into numerical values or performance standards.

(a) Construction

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*,[19] the Project may have a significant impact with regard to construction emissions if the Project's estimated emissions would cause any of the following would occur:

- Regional emissions from both direct and indirect sources would exceed any of the SCAQMD prescribed threshold levels identified in Table IV.B-4.
- Maximum on-site daily localized emissions exceed the Localized Significance Thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m^3] over a 1-hour period or 9.0 ppm [10,350 µg/m^3] averaged over an 8-hour period) and NO_2 (0.18 ppm [338.4 µg/m^3] over a 1-hour period, 0.1 ppm [188 µg/m^3] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [56.4 µg/m^3] averaged over an annual period).
- Maximum on-site localized PM_{10} or $PM_{2.5}$ emissions during construction exceed the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed the incremental 24-hr threshold of 10.4 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.

(b) Operation

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*,[20] the Project may have a significant impact with regard to operational emissions if the Project's estimated emissions would cause any of the following would occur:

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[19] *SCAQMD, CEQA Air Quality Handbook, 1993.*

[20] *SCAQMD, CEQA Air Quality Handbook, 1993.*

Table IV.B-4
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds[a]		
Pollutant	**Construction**[b]	**Operation**[c]
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants		
NO_2 1-hour average Annual Arithmetic Mean	SCAQMD is in attainment; project is significant if It causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average Annual Average	10.4 μg/m3 (construction)e & 2.5 μg/m3 (operation) 1.0 μg/m3	
$PM_{2.5}$ 24-hour average	10.4 μg/m3 (construction)e & 2.5 μg/m3 (operation)	
SO_2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal—99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 μg/m3 (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average Rolling 3-month average	1.5 μg/m3 (state) 0.15 μg/m3 (federal)	

lbs/day = pounds per day

[a] *SCAQMD CEQA Handbook (SCAQMD, 1993)*

[b] *Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).*

[c] *For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.*

Source: South Coast Air Quality Management District, 2015 (see www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf).

- Regional emissions from both direct and indirect sources would exceed any of the SCAQMD prescribed threshold levels identified in Table IV.B-4 on page IV.B-28.

- Maximum on-site daily localized emissions exceed the Localized Significance Thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an 8-hour period) and NO_2 (0.18 ppm over a 1-hour period, 0.1 ppm over a 3-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm averaged over an annual period).[21]

- Maximum on-site localized operational PM_{10} and $PM_{2.5}$ emissions exceed the incremental 24-hr threshold of 2.5 $\mu g/m^3$ or 1.0 $\mu g/m^3$ PM_{10} averaged over an annual period.[22]

- The Project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively; or

- The Project creates an odor nuisance pursuant to SCAQMD Rule 402 (i.e., objectionable odor at the nearest sensitive receptor).

(c) Toxic Air Contaminants

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*, the Project may have a significant toxic air contaminant impact, if:[23]

- The Project emits carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk as provided in Table IV.B-4.

In assessing impacts related to TACs in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the *L.A. CEQA Thresholds Guide* will be used where applicable and relevant to assist in analyzing the Appendix G thresholds. In addition, the following criteria set forth in SCAQMD's *CEQA Air Quality*

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[21] *SCAQMD, LST Methodology.*

[22] *SCAQMD, Final-Methodology to Calculate Particulate Matter (PM) 2.5 and $PM_{2.5}$ Significance Thresholds, October 2006.*

[23] *SCAQMD, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a project) and Chapter 10 (Assessing Toxic Air Pollutants), April 1993.*

Handbook serve as quantitative air quality standards to be used to evaluate project impacts under Appendix G thresholds:[24]

- The Project results in the exposure of sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0.[25] For projects with a maximum incremental cancer risk between 1 in one million and 10 in one million, a project would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

(d) Consistency with Applicable Air Quality Plans

Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with SCAQMD's *CEQA Air Quality Handbook*,[26] the following criteria were used to evaluate the Project's consistency with the SCAQMD and SCAG regional plans and policies, including the AQMP:

- Criterion 1: Will the Project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations;
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP?
- Criterion 2: Will the Project exceed the assumptions utilized in preparing the AQMP?
  - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the Project include air quality mitigation measures; or

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[24] *SCAQMD, CEQA Air Quality Handbook, April 1993, Chapter 6 (Determining the Air Quality Significance of a Project) and Chapter 10 (Assessing Toxic Air Pollutants).*

[25] *Hazard index is the ratio of a toxic air contaminant's concentration divided by its Reference Concentration, or safe exposure level. If the hazard index exceeds one, people are exposed to levels of TACs that may pose noncancer health risks.*

[26] *SCAQMD, CEQA Air Quality Handbook, Chapter 12, Assessing Consistency with Applicable Regional Plans, 1993.*

- To what extent is Project development consistent with the control measures set forth in the AQMP?

The Project's impacts with respect to these criteria are discussed to assess the consistency with SCAQMD's AQMP and SCAG regional plans and policies. In addition, the Project's consistency with the City of Los Angeles General Plan Air Quality Element is discussed.

b. Methodology

This analysis focuses on the potential change in the air quality environment due to implementation of the Project. Air pollutant emissions would result from both construction and operation of the Project. Specific methodologies used to evaluate these emissions are discussed below.

(1) Construction

(a) Regional Emissions

Daily regional emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from the SCAQMD-recommended California Emissions Estimator Model (CalEEMod) (Version 2016.3.2). Details of the modeling assumptions and emission factors are provided in Appendix B of this Draft EIR. The calculations of the emissions generated during Project construction activities reflect the types and quantities of construction equipment that would be used to remove the existing pavement, grade and excavate the Project Site, construct the proposed building and related improvements, and plant new landscaping within the Project Site.

(b) Localized Emissions

The localized effects from the on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to SCAQMD's localized significance thresholds (LST) methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling, where appropriate.[27] SCAQMD provides LSTs applicable to the following criteria pollutants, which were identified as emissions of concern per the SCAQMD LST Methodology: NO_X, CO, PM_{10}, and $PM_{2.5}$.[28] SCAQMD does not provide an LST for SO_2 since land use development projects typically result in

[27] *SCAQMD, LST Methodology Appendix C--Mass Rate LST Look-Up Table, October 2009.*

[28] *SCAQMD, LST Methodology, p. 1-4.*

negligible construction and long-term operation emissions of this pollutant. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and the distance to the nearest sensitive receptor. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to five acres.

(2) Operation

(a) Regional Emissions

Analysis of the Project's likely impact on regional air quality during long-term Project operations (i.e., after construction is complete) takes into consideration four types of sources: (1) area; (2) energy; (3) mobile; and (4) stationary. Area source emissions are generated by, among other things, landscape equipment, fireplaces, and the use of consumer products. Energy source emissions are generated as a result of activities in buildings for which natural gas is used (e.g., natural gas for heat or cooking). Mobile source emissions are generated by the increase in motor vehicle trips to and from the Project Site associated with operation of the Project. Stationary source emissions are generated from proposed emergency generators during routine maintenance/testing.

Similar to construction, SCAQMD's CalEEMod software was used for the evaluation of Project emissions during operation. CalEEMod was used to calculate on-road fugitive dust, architectural coatings, landscape equipment, energy use, mobile source, and stationary source emissions. To determine if a significant air quality impact would occur, the net increase in regional operational emissions generated by the Project was compared against the SCAQMD's significance thresholds.[29]

[29] *SCAQMD, SCAQMD Air Quality Significance Thresholds, revised March 2015. SCAQMD based these thresholds, in part, on the federal Clean Air Act and, to enable defining "significant" for CEQA purposes, defined the setting as the South Coast Air Basin. (See SCAQMD, CEQA Air Quality Handbook, April 1993, pp. 6-1–6-2.).*

(b) Localized Emissions

(i) On-Site Emissions

Localized impacts from Project operations include calculation of on-site emissions (e.g., combustion from natural gas usage) using SCAQMD's recommended CalEEMod and evaluation of these emissions consistent with the SCAQMD's LST methodology.

(ii) Off-Site Emissions

Potential localized CO concentrations from induced traffic at nearby intersections are also addressed, consistent with the methodologies and assumptions used in the consistency analysis provided in the 2003 AQMP.

It has long been recognized that CO exceedances are caused by vehicular emissions,[30] primarily when idling at intersections.[31,32] Accordingly, vehicle emissions standards have become increasingly more stringent. Before the first vehicle emission regulations, cars in the 1950s were typically emitting about 87 grams of CO per mile.[33]

Since the first regulation of CO emissions from vehicles (model year 1966) in California, vehicle emissions standards for CO applicable to light duty vehicles have decreased by 96 percent for automobiles,[34,35] and new cold weather CO standards have been implemented, effective for the 1996 model year.[36] Currently, the CO standard in California is a maximum of 3.4 grams/mile for passenger cars (with provisions for certain cars to emit even less).[37] With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the Air Basin have steadily declined.

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30 *USEPA, Air Quality Criteria for Carbon Monoxide, 2000, EPA 600/P-099/001F.*

31 *SCAQMD, CEQA Air Quality Handbook, 1993, Section 4.5.*

32 *SCAQMD, Air Quality Management Plan, 2003.*

33 *USEPA, Milestone in Auto Emissions Control, August 1994.*

34 *National Academy Board on Energy and Environmental Systems, Review of the 21st Century Truck Partnership, 2008, Appendix D: Vehicle Emission Regulations [excerpt from http://books.nap.edu/openbook.php?record_id=12258&page=107].*

35 *Kavanagh, Jason, Untangling U.S. Vehicle Emissions Regulations, 2008.*

36 *Title 13, California Code of Regulations, Section 1960.1(f)(2) [for 50,000-mile half-life].*

37 *CARB, California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-duty Trucks, and Medium-duty Vehicles, amended September 27, 2010.*

The analysis prepared for CO attainment in the Air Basin by SCAQMD can be used to assist in evaluating the potential for CO exceedances in the Air Basin. CO attainment was thoroughly analyzed as part of the 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).[38] As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of the 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in the Los Angeles area at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which had a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.[39] The Los Angeles County Metropolitan Transportation Authority (Metro) evaluated the Level of Service (LOS) in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level E at peak morning traffic and Level F at peak afternoon traffic.[40] If a project intersection does not exceed 400,000 vehicles per day, then the project does not need to prepare a detailed CO hot spot analysis using California LINE Source Dispersion Model, version 4 (CALINE4), which is a model used to assess air quality impacts near transportation facilities (i.e., roadways, intersections, street canyons, and parking facilities).

(3) Toxic Air Contaminants Impacts (Construction and Operations)

Potential TAC impacts are evaluated by conducting a qualitative analysis consistent with the CARB Handbook followed by a more detailed analysis (i.e., dispersion modeling), as necessary. The qualitative analysis consists of reviewing the Project to identify any new or modified TAC emissions sources. If the qualitative evaluation does not rule out significant impacts from a new source, or modification of an existing TAC emissions

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[38] *SCAQMD, Federal Attainment Plan for Carbon Monoxide,1992.*

[39] *Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).*

[40] *Metropolitan Transportation Authority, Congestion Management Program for Los Angeles County, 2004, Exhibit 2-6 and Appendix A.*

source, a more detailed analysis is conducted. For the detailed analysis, downwind sensitive receptor locations are identified, and site-specific dispersion modeling is conducted to estimate Project impacts.

c. Project Design Features

No specific project design features are proposed with regard to air quality. The Project would incorporate project design features to support and promote environmental sustainability as discussed under Section IV.F, Greenhouse Gas Emissions, of this Draft EIR. While these features are designed primarily to reduce greenhouse gas emissions, they would also serve to reduce criteria air pollutants discussed herein and were accounted for in this analysis.

d. Analysis of Project Impacts

Threshold (a): Would the Project conflict with or obstruct implementation of the applicable air quality plan?

(1) SCAQMD CEQA Air Quality Handbook Policy Analysis

The following analysis addresses the Project's consistency with applicable SCAQMD and SCAG policies, inclusive of regulatory compliance. In accordance with the procedures established in SCAQMD's *CEQA Air Quality Handbook*, the following criteria are required to be addressed in order to determine the Project's consistency with applicable SCAQMD and SCAG policies:

- Would the project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations; or
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Would the project exceed the assumptions utilized in preparing the AQMP?
  - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the Project include air quality mitigation measures; or
  - To what extent is Project development consistent with the control measures set forth in the AQMP?

(a) Criterion 1

With respect to the first criterion, as discussed under the analysis for Threshold (c), below, localized concentrations of NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ have been analyzed for the Project. SO_2 emissions would be negligible during construction and long-term operations, and therefore would not have the potential to cause or affect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

Particulate matter is the primary pollutant of concern during construction activities, and therefore, the Project's PM_{10} and $PM_{2.5}$ emissions during construction were analyzed: (1) to ascertain potential effects on localized concentrations; and (2) to determine if there is a potential for such emissions to cause or affect a violation of the ambient air quality standards for PM_{10} and $PM_{2.5}$. As shown in Table IV.B-7 on page IV.B-48 in the analysis below, **the increases in PM_{10} and $PM_{2.5}$ emissions during construction would not exceed the SCAQMD-recommended significance thresholds at sensitive receptors in proximity to the Project Site.**

Additionally, the Project's maximum potential NO_X and CO daily emissions during construction were analyzed to ascertain potential effects on localized concentrations and to determine if there is a potential for such emissions to cause or affect a violation of an applicable ambient air quality standard. As shown in Table IV.B-7 in the analysis below, NO_X and CO would not exceed the SCAQMD-recommended significance thresholds and would not have a long-term impact on the region's ability to meet state and federal air quality standards. **Therefore, Project construction would not result in a significant impact with regard to localized air quality.**

Because the Project would not introduce any substantial stationary sources of emissions, CO is the preferred benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.[41] As indicated below, under the analysis for Threshold (c), no intersections would require a CO hotspot analysis, and impacts would be less than significant. **Therefore, the Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.**

[41] *SCAQMD, CEQA Air Quality Handbook, Chapter 12, Assessing Consistency with Applicable Regional Plans, 1993.*

An analysis of potential localized operational impacts from on-site activities was conducted. As shown in Table IV.B-8 on page IV.B-49 in the analysis below, localized NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ operational impacts would be less than significant. **Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.**

(b) Criterion 2

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies (would the Project exceed the assumptions utilized in preparing the AQMP?), the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016 RTP/SCS regarding population, housing, and growth trends. Thus, SCAQMD's second criterion for determining project consistency focuses on whether or not the Project exceeds the assumptions utilized in preparing the forecasts presented in the AQMP. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) Project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

- Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

A project is consistent with the AQMP in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2016 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's 2016 RTP/SCS.

As described in Section IV.G, Land Use, of this Draft EIR, the General Plan of the City of Los Angeles serves as a comprehensive, long-term plan for future development of the City. The 2016 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review.

According to the 2016 RTP/SCS, the employment forecast for the City of Los Angeles Subregion in 2016 is approximately 1,763,929 employees.[42] In 2022, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have approximately 1,865,221 employees.[43] Thus, the Project's estimated 65 net new employees would constitute approximately 0.06 percent of the Subregion's employment growth forecasted between 2016 and 2022. **Because similar projections form the basis of the 2016 AQMP, it can be concluded that the Project would be consistent with the projections in the AQMP.**

- Does the project implement feasible air quality mitigation measures?

The Project would comply with all applicable regulatory standards (e.g., SCAQMD Rule 403, etc.) as required by SCAQMD, as summarized above. The Project also would incorporate project design features to support and promote environmental sustainability as discussed in Section IV.F, Greenhouse Gas Emissions, of this Draft EIR. While these features are designed primarily to reduce greenhouse gas emissions, they would also serve to reduce the criteria air pollutants discussed herein. Furthermore, with compliance with the regulatory requirements identified above and in Section IV.E, Greenhouse Gas Emissions, of this Draft EIR, no significant air quality impacts would occur. **As such, the Project meets this AQMP consistency criterion.**

- To what extent is project development consistent with the control measures set forth in the AQMP?

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the Plan with those prepared by SCAG. The RTP/SCS and Transportation Control Measures (TCMs), included as Appendix IV-C of the 2016 AQMP/SIP for the Basin, are based on SCAG's Final 2016 RTP/SCS.

The Project represents an infill development within an existing urbanized area that would concentrate new hotel and restaurant uses within an HQTA. Therefore, the Project would be consistent with SCAG's 2016 RTP/SCS, as it is located within an HQTA. The

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[42] *Based on a linear interpolation of 2012–2040 data. The 2016 extrapolated value is calculated using SCAG's 2012 and 2040 values to find the average increase between years and then applying that annual increase to 2016: (((2,169,100 – 1,696,400) ÷ 28)*4) + 1,696,400 = 1,736,929.*

[43] *Based on a linear interpolation of 2012–2040 data. The 2022 extrapolated value is calculated using SCAG's 2012 and 2040 values to find the average increase between years and then applying that annual increase to 2016: (((2,169,100 – 1,696,400) ÷ 28)*8) + 1,696,400 = 1,831,457.*

Project would be designed and constructed with sustainability and transit orientation as guiding principles. The Project Site is located approximately 300 feet from the Metro Red Line Hollywood/Vine Station. In addition, approximately 15 Metro, Los Angeles Department of Transportation Downtown Area Shuttle (DASH), and Los Angeles Department of Transportation Commuter Express bus lines serve the Project Site, including 10 Metro bus lines, three DASH bus lines, and two Commuter Express bus lines. The Project would provide bicycle storage areas for Project hotel guests and visitors. As shown in Appendix B, of this Draft EIR, the Project design includes characteristics that would reduce trips and VMT as calculated internal to the air quality model (CalEEMod). While these Project characteristics primarily reduce greenhouse gas emissions, they would also reduce criteria air pollutants discussed herein. These relative reductions in vehicle trips and VMT as compared to a standard project within the air basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project in any infill, HQTA area that promotes alternative modes of transportation. Specifically, the Project characteristics listed below are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures.* These Project characteristics were input into CalEEMod to identify the VMT and vehicle trips reductions for the Project Site relative to the standard trip and VMT rates in CalEEMod, which corresponds to reduction in relative GHG emissions. Measures applicable to the Project include the following:

- **CAPCOA Measure LUT-3—Increase Diversity of Urban and Suburban Developments (Mixed-Uses):** The Project would introduce new uses on the Project Site, including new hotel uses. The Project would co-locate complementary hotel and restaurant land uses in proximity to other existing off-site commercial and residential uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions.

- **CAPCOA Measure LUT-5—Increase Transit Accessibility:** The would be located approximately 300 feet from the Metro Red Line Hollywood/Vine Station and along several Metro, DASH, and Commuter Express routes. The Project would also provide adequate bicycle parking spaces for guest and commercial uses to encourage utilization of alternative modes of transportation.

- **CAPCOA Measure LUT-9—Improve Design of Development:** The Project would include improved design elements including developing ground floor restaurant uses and improved streetscape which would enhance walkability in the project vicinity. The Project would also locate a development in an area with approximately 127 intersections per square mile which improves street accessibility and connectivity.

- **CAPCOA Measure SDT-1—Provide Pedestrian Network Improvements:** Project design would provide pedestrian access that minimizes barriers and links the Project Site with existing or planned external streets to encourage people to

walk instead of drive. The Project would provide direct access to the existing off-site pedestrian network including existing off-site sidewalks, to encourage and increase pedestrian activities in the area, which would further reduce VMT and associated transportation-related emissions.

As discussed in Section IV.F, Greenhouse Gas Emissions, of this Draft EIR, the Project results in a VMT reduction of approximately 53 percent in comparison to a Project without Reduction Measures as estimated by CalEEMod, and a corresponding decrease in GHG emissions from mobile sources of 48-percent. This reduction in GHG emissions is substantially better that the goals of the 2016 RTP/SCS with an estimated 18-percent decrease in per capita GHG emissions from passenger vehicles by 2035 and 21-percent decrease in per capita GHG emissions from passenger vehicles by 2040.[44] Implementation of these sustainability features would contribute to a reduction in air quality emissions via a reduction in VMT. **Accordingly, as the Project would support SCAG's and SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project is consistent with the 2016 RTP/SCS (control measures of the AQMP).**

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of the Project on air quality in the Air Basin. The Project represents an infill development near transit within an existing urbanized area that would concentrate new residential and commercial retail and restaurant uses within an HQTA, thus reducing VMT. The Project would not have a significant long-term impact on the region's ability to meet state and federal air quality standards. The Project would comply with SCAQMD Rule 403 and would implement measures for control of NO_X, PM_{10}, and $PM_{2.5}$. The Project would also be consistent with the goals and policies of the AQMP for the control of fugitive dust. As discussed above, the Project's would be consistent with the goals and policies of the AQMP and, therefore, is considered consistent with SCAQMD's AQMP.

(2) City of Los Angeles Policies

As discussed above, the Air Quality Element of the City's General Plan was adopted on November 24, 1992, and sets forth the goals, objectives, and policies, which guide the City in the implementation of its air quality improvement programs and strategies. The Air Quality Element acknowledges the interrelationships among transportation and land use planning in meeting the City's mobility and air quality goals.

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[44] *CARB updated the SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035. Implementation of the 2016 RTP/SCS or the next plan is expected to fulfill and exceed the region's obligations under SB 375 with respect to meeting the State's VMT and related GHG emission reduction goals.*

To achieve these goals, performance-based standards have been adopted to provide flexibility in implementation of the policies and objectives of the Air Quality Element. The following Air Quality Element goals, objectives, and policies are relevant to the Project:

Goal 2—Less reliance on single-occupant vehicles with fewer commute and non-work trips.

Objective 2.1—It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.

Policy 2.1.1—Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce Vehicle Trips and/or Vehicle Miles Traveled (VMT) as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.

Goal 4—Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

Objective 4.1—It is the objective of the City of Los Angeles to include regional attainment of ambient air quality standards as a primary consideration in land use planning.

Policy 4.1.1—Coordinate with all appropriate regional agencies in the implementation of strategies for the integration of land use, transportation, and air quality policies.

Objective 4.2—It is the objective of the City of Los Angeles to reduce vehicle trips and vehicle miles traveled associated with land use patterns.

Policy 4.2.2—Improve accessibility for the City's residents to places of employment, shopping centers, and other establishments.

Policy 4.2.3—Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.

Policy 4.2.4—Require that air quality impacts be a consideration in the review and approval of all discretionary projects.

Policy 4.2.5—Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.

The Project, which represents an infill development within an existing urbanized area that would concentrate new hotel and restaurant uses within an HQTA, would promote the General Plan Air Quality Element goals, objectives and policies, as discussed at length in Section IV.G, Land Use, of this Draft EIR. In particular, the Project includes 72 bicycle parking spaces for Project residents and visitors in compliance with the requirements of the LAMC. As such, the Project would provide opportunities for the use of alternative modes of transportation, including convenient access to public transit and opportunities for walking and biking, thereby facilitating a reduction in vehicle miles traveled. Furthermore, the Project includes a restaurant/bar use that would primarily serve Project guests, thereby reducing vehicle miles traveled that would otherwise be required to travel to similar restaurant or bar uses elsewhere in the community. In addition, the Project would be consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near transit options. The Project also includes a primary entrance for pedestrians and bicyclists that would be safe, easily accessible, and a short distance from transit stops.

Based on the above, the Project would be consistent with applicable policies of the Air Quality Element. As discussed above, the Project would implement numerous sustainability features that would reduce vehicular trips, reduce VMT, and encourage use of alternative modes of transportation.

(3) Conclusion

In conclusion, analysis of Threshold (a) was based on the Project's consistency with the AQMP as well as the City of Los Angeles policies. With regard to AQMP consistency, which is primarily concerned with the long-term influence of the Project on air quality in the Air Basin, the Project would not increase the frequency or severity of an existing air quality violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. In addition, because the Project includes employment growth that is consistent with the growth projections that form the basis of the 2016 AQMP, it can be concluded that the Project would be consistent with the projections in the AQMP. Furthermore, while the Project does not exceed any air quality thresholds, the Project does incorporate project design features to support and promote environmental sustainability that would serve to reduce criteria air pollutants and would comply with the regulatory requirements identified above. Thus, the Project meets the AQMP consistency criterion to implement all feasible air quality mitigation measures. The AQMP includes transportation control measures that are intended to reduce mobile source emission. While the majority of measures are implemented by cities (City of Los Angeles Air Quality Element), counties and other regional agencies, the Project would support measures related to reducing vehicle trips for residents. In addition, as the Project would support the City of Los Angeles and

SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project would be consistent with AQMP control measures. Thus, the Project would not conflict with or obstruct implementation of the AQMP. With regard to the City of Los Angeles policies, as discussed above, the Project would serve to implement applicable policies of the City of Los Angeles pertaining to air quality. **Based on the above, impacts related to Threshold (a) would be less than significant.**

Threshold (b): Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

(1) Regional Emissions

(a) Construction

As described in Section II, Project Description, of this Draft EIR, Project construction is anticipated to occur over an approximate period of 21 months, beginning in 2020, and is estimated to be completed in 2022. The Project would have a maximum excavation depth of 55 feet and require a total of approximately 29,300 cubic yards of soil removal from the Project Site. For additional construction assumptions, see Appendix B of this Draft EIR.

Construction of the Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment, such as dozers, loaders, and cranes. During the finishing phase of a building, paving operations and the application of architectural coatings (e.g., paints) and other building materials would potentially release VOCs. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

The emissions levels in Table IV.B-5 on page IV.B-44 represent the highest daily emissions projected to occur during each year of construction. As presented in Table IV.B-5, construction-related daily maximum regional construction emissions would not exceed any of the SCAQMD daily significance thresholds. Therefore, regional construction emissions resulting from the Project would result in a less-than-significant air quality impact.

Table IV.B-5
Estimate of Regional Project Construction Emissions[a]
(pounds per day)

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2020	5	90	40	<1	9	4
2021	39	26	30	<1	6	2
2022	39	9	13	<1	2	1
Maximum Construction Emissions	**39**	**90**	**40**	**<1**	**9**	**4**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(36)**	**(10)**	**(510)**	**(150)**	**(141)**	**(51)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this document.*

[b] *Please note that the SCAQMD significance threshold is in terms of VOC while CalEEMod calculates reactive organic compounds (ROG) emissions. For purposes of this analysis, VOC and ROG are used interchangeably since ROG represents approximately 99.9 percent of VOC emissions.*

Source: Eyestone Environmental, 2019.

(b) Operation

As discussed above, SCAQMD's CalEEMod was used to calculate regional area source, energy source, mobile source, and stationary source emissions. The Project would incorporate project design features to support and promote environmental sustainability, as discussed under Section IV.E, Greenhouse Gas Emissions, of this Draft EIR, including Project Design Feature GHG-PDF-1, which requires the Project to achieve LEED Silver® Rating equivalence. While these features are designed primarily to reduce greenhouse gas emissions, they would also serve to reduce criteria air pollutants discussed herein. Project characteristics incorporated in this analysis include the Project Site's accessibility to job centers and transit, increase in diversity of uses and density, and implementation of a Transportation Demand Management (TDM) Program, as required by Mitigation Measure TR-MM-1. These project characteristics are explained further in Section IV.E, Greenhouse Gas Emissions, and Section IV.I, Transportation, of this Draft EIR, respectively.

As shown in Table IV.B-6 on page IV.B-45, regional emissions resulting from operation of the Project would not exceed any of SCAQMD's daily regional operational thresholds. Therefore, regional air quality impacts from Project operational emissions would be less than significant.

Table IV.B-6
Project Regional Operational Emissions— At Project Buildout[a]
(pounds per day)

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	8	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	2	2	<1	<1	<1
Mobile	3	11	22	<1	5	1
Stationary	<1	<1	1	<1	1	<1
Total Project Emissions	**11**	**14**	**25**	**<1**	**6**	**2**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(44)**	**(41)**	**(525)**	**(150)**	**(144)**	**(53)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *Values in this table reflect the net Project emissions (Project emissions minus the existing Baseline at build out emissions). The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this Draft EIR.*

Source: Eyestone Environmental, 2019.

(2) Localized Emissions

As previously discussed, SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project Site as a result of Project construction and operations. The thresholds are based on applicable short-term state and federal ambient air quality standards.

(a) Construction

Project-related localized construction impacts are evaluated based on SCAQMD LST methodology which takes into account ambient pollutant concentrations. Based on SCAQMD methodology, localized emissions which exceed LSTs would also cause an exceedance of ambient air quality standards. As analyzed in Threshold (c) below, Project-related construction emissions would not exceed localized thresholds. **Therefore, localized construction emissions resulting from the Project would result in a less-than-significant air quality impact.**

(b) Operation

Project-related operational emissions were also evaluated based on SCAQMD LST methodology. While SCAQMD LST methodology evaluates emissions from on-site sources (e.g., water heaters, cooking appliances, HVAC), off-site sources, such as Project-related vehicle trips, were also evaluated for potential exceedances of ambient air quality

standards. As analyzed in Threshold (c) below, Project-related operational emissions from on-site and off-site sources would not exceed localized thresholds. **Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.**

(3) Conclusion

According to SCAQMD, individual projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As shown in Table IV.B-5 and Table IV.B-6 on pages IV.B-44 and IV.B-45, respectively, Project construction and operational daily emissions at the Project Site would not exceed any of SCAQMD's regional thresholds, respectively. Therefore, the Project's contribution to cumulative construction-related regional emissions would not be cumulatively considerable and therefore would be less than significant. As analyzed under Threshold (c) below, construction and operation of the Project also would have a less-than-significant impact with regard to localized emissions. **Therefore, the Project's contribution to cumulative air quality impacts due to localized emissions would also not be cumulatively considerable.**

Based on the above, the Project would not 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, and impacts with respect to Threshold (b) would be less than significant.

Threshold (c): Would the Project expose sensitive receptors to substantial pollutant concentrations?

(1) Construction

(a) On-Site Construction Activities (Criteria Pollutants)

As discussed above in the methodology subsection, the localized construction air quality analysis was conducted using the methodology promulgated by SCAQMD. Look-up tables provided by SCAQMD were used to determine localized construction emissions thresholds for the Project.[45] LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are based on the most recent background ambient air quality monitoring data (2015–2017) for the Project area presented in

[45] *SCAQMD, LST Methodology Appendix C-Mass Rate LST Look-up Table, revised October 2009.*

Table IV.B-2 on page IV.B-20. Although the trend shown in Table IV.B-2 demonstrates that ambient air quality is generally improving in the area, the localized construction emissions analysis conservatively did not apply a reduction in background pollutant concentrations for subsequent years of construction (i.e., 2020–2022). By doing so, the allowable pollutant increment to not exceed an ambient air quality standard is more stringent. The analysis is based on existing background ambient air quality monitoring data (2015–2017).

Maximum on-site daily construction emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for SRA 1 (Central LA) based on the Project's construction site acreage of less than one acre. Potential impacts were evaluated at the closest sensitive receptor, which are residential uses immediately adjacent and south of the Project Site. As stated on Page 3-3 of the LST methodology: "[T]he closest receptor distance on the mass rate LST lookup tables is 25 meters. It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters."[46] Based on this guidance, potential impacts at the residential uses were evaluated using the 25 meter mass rate LST lookup tables.

The maximum daily localized emissions from Project construction and LSTs are presented in Table IV.B-7 on page IV.B-48. As presented in Table IV.B-7, maximum localized construction emissions for offsite sensitive receptors would not exceed any of the SCAQMD-recommended localized screening thresholds. **Therefore, localized construction emissions resulting from the Project would result in a less-than-significant air quality impact.**

(b) Off-Site Construction Activities (Toxic Air Contaminants)

The greatest potential for TAC emissions during construction would be from diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk-assessment methodology. Because the construction schedule estimates that the phases which require the most heavy-duty diesel vehicle usage, such as site grading/excavation, would last for a much shorter duration (e.g., approximately two months), construction of the Project would not result in a substantial, long-term (i.e., 70-year) source of TAC emissions. Additionally, the SCAQMD CEQA guidance does not require an HRA for short-term construction emissions. It is, therefore, not therefore not necessary to evaluate long-term cancer

[46] *SCAQMD. Final Localized Significance Threshold Methodology, June 2003, Revised July 2008.*

Table IV.B-7
Estimate of Localized Project Construction Emissions[a]
(pounds per day)

Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$
2020	30	23	4	2.7
2021	21	22	1	1
2022	5	7	<1	<1
Maximum Daily Localized Emissions	**30**	**23**	**4**	**2.7**
SCAQMD Localized Significance Thresholds[b,c]	**43**	**680**	**5**	**3**
Over/(Under)	**(13)**	**(657)**	**(1)**	**(0.3)**
Exceed Threshold?	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this Draft EIR.*

[b] *Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1 (Central LA). Maximum active construction activities would occur on less than one acre at a distance of approximately 25 meters from sensitive land uses (the shortest distance available for LSTs).*

[c] *Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. In addition, SCAQMD does not provide an LST for SO_2 since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant.*

Source: Eyestone Environmental, 2019.

impacts from construction activities which occur over a relatively short duration. In addition, there would be no residual emissions or corresponding individual cancer risk after construction. **As such, Project-related TAC impacts during construction would be less than significant.**

(2) Operation

(a) On-Site Operational Activities (Criteria Pollutants)

Operation of the Project would not introduce any major new sources of air pollution within the Project Site. Emissions estimates for criteria air pollutants from on-site sources are presented in Table IV.B-8 on page IV.B-49. The SCAQMD LST mass rate look-up tables, which apply to projects that have active areas that are less than or equal to 5 acres in size, were used to evaluate potential localized impacts. As shown in Table IV.B-8, on-site operational emissions would not exceed any of the LSTs. Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.

Table IV.B-8
Project Localized Operational Emissions—At Project Buildout[a]
(pounds per day)

Emission Source	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	<1	<1	<1	<1
Energy (Natural Gas)	2	2	<1	<1
Stationary	<1	1	1	<1
On-Site Total	**2**	**3**	**1**	**<1**
SCAQMD Significance Threshold[b,c]	**43**	**680**	**2**	**1**
Over/(Under)	**(41)**	**(677)**	**(1)**	**(1)**
Exceed Threshold?	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *Values in this table reflect the net Project emissions (Project emissions minus the existing Baseline at build out emissions). The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this Draft EIR.*

[b] *Potential localized operational impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1. Maximum active operational activities would occur on less than one acre at a distance of approximately 25 meters from sensitive land uses (the shortest distance available for LSTs).*

[c] *Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. In addition, SCAQMD does not provide an LST for SO_2 since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant.*

Source: Eyestone Environmental, 2019.

(b) Off-Site Operational Activities (CO "Hot Spots" Analysis)

Consistent with the CO methodology above, if a project intersection does not exceed 400,000 vehicles per day, then the project does not need to prepare a detailed CO hot spot analysis.

At buildout of the Project, the highest average daily trips at an intersection would be approximately 66,890 at the Vine Street and Sunset Boulevard intersection,[47] which is significantly below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP.[48] This daily trip estimate is based on the

[47] *Gibson Transportation Consulting, Inc., Traffic Impact Analysis for the Revised citizenM Hotel Project, Hollywood, May 18, 2018.*

[48] *As discussed above in Section 3.a., Methodology, the 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day. If a project intersection does not exceed 400,000 vehicles per day, then*
(Footnote continued on next page)

peak-hour conditions of the intersection. There is no reason unique to the Air Basin meteorology to conclude that the CO concentrations at the Vine Street and Sunset Boulevard intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP.[49] Therefore, the Project does not trigger the need for a detailed CO hotspots model and would not cause any new or exacerbate any existing CO hotspots. **As a result, impacts related to localized mobile-source CO emissions are considered less than significant.** The supporting data for this analysis is included in Appendix B of this Draft EIR.

(c) Toxic Air Contaminants

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. As shown in Figure IV.B-3 on page IV.B-23, the closest sensitive land uses to the Project Site are residential uses immediately adjacent and south of the Project Site. CARB has published and adopted the *Air Quality and Land Use Handbook: A Community Health Perspective*, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).[50] SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*.[51] Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to TAC sources and the addition of new TAC sources in proximity to existing sensitive land uses.

The primary sources of potential air toxics associated with Project operations include diesel particulate matter from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets). However, these activities, and the land uses associated with the Project, would not generate substantial TAC emissions based on review of the air toxic sources listed in SCAQMD's and CARB's guidelines.

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the project does not need to prepare a detailed CO hot spot analysis using California LINE Source Dispersion Model, version 4 (CALINE4).

[49] *It should be noted that CO background concentrations within the vicinity of the modeled intersection have substantially decreased since preparation of the 2003 AQMP. In 2003, the 1-hour background CO concentration was 5 ppm and has decreased to 2 ppm in 2014.*

[50] *CARB, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.*

[51] *SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.*

Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes (e.g., chrome plating, electrical manufacturing, petroleum refinery). The Project would not include these types of potential industrial manufacturing process sources. Therefore, it is expected that quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the types of proposed land uses would be below thresholds warranting further study under California Accidental Release Program.

As the Project would not contain substantial TAC sources and is consistent with the CARB and SCAQMD guidelines, the Project would not result in the exposure of off-site sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0, and potential TAC impacts would be less than significant.

Based on the above, Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts to Threshold (c) would be less than significant.

Threshold (d): Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As discussed in Section VI, Other CEQA Considerations (Subsection VI.6.c.), of this Draft EIR, and in the Initial Study prepared for the Project, which is included as Appendix A of this Draft EIR, the Project would not create objectionable odors impacting a substantial number of people. **Thus, the Project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. Impacts to Threshold (d) would be less than significant.**

4. Cumulative Impacts

a. Construction

The following cumulative impacts analysis is based on the recommendations included in SCAQMD's *CEQA Air Quality Handbook*. According to SCAQMD, individual projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment.

As identified in Section III, Environmental Setting, of this Draft EIR, a total of 106 related projects located within the vicinity of the Project Site and the Hollywood

Community Plan Update (Related Project No. 107).[52] Much of this growth is anticipated by the City and will be incorporated into the Hollywood Community Plan area. A map of the related project locations is provided in Figure III-1 in Section III, Environmental Setting, of this Draft EIR.

With respect to the Project's construction-period air quality emissions and cumulative Air Basin-wide conditions, SCAQMD has developed strategies (e.g., SCAQMD Rule 403) to reduce criteria pollutant emissions outlined in the AQMP pursuant to Federal CAA mandates. As such, the Project would comply with regulatory requirements, including SCAQMD Rule 403 requirements, as discussed above. In addition, the Project would comply with adopted AQMP emissions control measures. Per SCAQMD rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, all construction projects Air Basin-wide would comply with these same requirements (i.e., SCAQMD Rule 403 compliance) and would also implement all feasible mitigation measures when significant impacts are identified.

As noted above, according to SCAQMD, individual construction projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. Construction-related daily emissions at the Project Site would not exceed any of SCAQMD's regional or localized significance thresholds. Therefore, the Project's contribution to cumulative construction-related regional emissions would not be cumulatively considerable and therefore would be less than significant. Construction of the Project also would have a less-than-significant impact with regard to localized emissions. Therefore, the Project's contribution to cumulative air quality impacts due to localized emissions would also not be cumulatively considerable and therefore would be less than significant.

Similar to the Project, the greatest potential for TAC emissions with respect to each related project would generally involve diesel particulate emissions associated with heavy equipment operations during demolition and grading/excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Construction activities with respect to each related project would not result in a long-term (i.e., 70-year) substantial source of TAC

[52] *As described in Section III, Environmental Setting, of this Draft EIR, the projected growth reflected by Related Project Nos. 1 through 106, which itself is a conservative assumption, would account for any initial amount of growth that may occur between the adoption of the Hollywood Community Plan Update and Project buildout.*

emissions. In addition, SCAQMD's *CEQA Air Quality Handbook* and SCAQMD's supplemental online guidance/information do not require a health risk assessment for short-term construction emissions. It is therefore not required or meaningful to evaluate long-term cancer impacts from construction activities which occur over relatively short durations. As such, cumulative toxic emission impacts during construction would be less than significant.

In conclusion, during construction, the Project would have a less-than-significant cumulative impact to regional, localized, and TAC emissions and impacts would not be cumulatively considerable.

b. Operation

According to SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. Operational emissions from the Project would not exceed any of SCAQMD's regional or localized significance thresholds at project buildout or under the existing conditions analysis. Therefore, the emissions of non-attainment pollutants and precursors generated by project operation would not be cumulatively considerable.

With respect to TAC emissions, neither the Project nor any of the related projects (which primarily include residential, retail/commercial, office, and hotel uses), would represent a substantial source of TAC emissions, which are more typically associated with large-scale industrial, manufacturing, and transportation hub facilities. The Project and related projects would be consistent with the recommended screening level siting distances for TAC sources, as set forth in CARB's Land Use Guidelines, and the Project and related projects would not result in a cumulative impact requiring further evaluation. However, the Project and each of the related projects would likely generate minimal TAC emissions related to the use of consumer products and landscape maintenance activities, among other things. Pursuant to AB 1807, which directs CARB to identify substances as TACs and adopt ATCMs to control such substances, SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Air Basin-wide TAC emissions reductions. As such, cumulative TAC emissions during long-term operations would be less than significant. In addition, the Project would not result in any substantial sources of TACs that have been identified by CARB's Land Use Guidelines, and thus, would not result in a cumulatively considerable impact or a cumulatively significant impact.

In conclusion, during operation, the Project would not result in a cumulative impact to air quality as the Project's contributions to regional, localized, and TAC emissions would not be cumulatively considerable.

5. Mitigation Measures

Project-level and cumulative impacts with regard to air quality would be less than significant with implementation of the regulatory requirements and project design features discussed above. Therefore, no mitigation measures are required.

6. Level of Significance After Mitigation

(1) Construction

Project-level and cumulative impacts with regard to air quality during construction would be less than significant and no mitigation measures are required.

(2) Operations

Project-level and cumulative impacts with regard to air quality during operation would be less than significant and no mitigation measures are required.