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 proposed Project. The analysis also addresses the consistency of the proposed Project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP) and the City of West Hollywood General Plan. The analysis of Project-generated air emissions focuses on whether the proposed 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 Site 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 Diego County to the south, and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. 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), hydrogen sulfide (H_2S), and vinyl chloride (VC). In addition, volatile organic compounds (VOC) and toxic air contaminants (TAC) 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]	Federal Standard[a]	SCAQMD Attainment Status[b]	
				California Standard[c]	Federal Standard[d]
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	—	Non-Attainment (Extreme)	—
	8-hour	0.07 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Non-Attainment	Non-Attainment
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
	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	Unclassified/ 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	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	Non-Attainment
	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	—
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m^3)	—	Unclassified	—

ppm = parts per million by volume
µg/m^3 = micrograms per cubic meter

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

Pollutant	Averaging Period	California Standard[a]	Federal Standard[a]	SCAQMD Attainment Status[b]	
				California Standard[c]	Federal Standard[d]

[a] *Ambient Air Quality Standards Chart (www.arb.ca.gov/research/aaqs/aaqs2.pdf). Last accessed July 28, 2016, and last updated May 4, 2016.*

[b] *"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.*

[c] *California standard attainment status based on 2013 State Area Designations maps (www.arb.ca.gov/desig/adm/adm.htm). Last reviewed May 5, 2016.*

[d] *Federal standard attainment status based on 2013 National Area Designations maps (www.arb.ca.gov/desig/adm/adm.htm). Last reviewed on May 5, 2016.*

Source: Eyestone Environmental, 2016.

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 (µm) (PM_{10}) and even smaller particles with an aerodynamic diameter equal to or less than 2.5 µm ($PM_{2.5}$), 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}. NO_X 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.

Effective April 12, 2010, the United States Environmental Protection Agency (USEPA) set a new 1-hour NO_2 standard at 0.10 part per million (188 $\mu g/m^3$).[1] To attain this standard, the three-year average of the 98th percentile of the daily maximum 1-hour average must not exceed 0.10 ppm. The USEPA cited evidence that short-term NO_2 exposures could contribute to adverse respiratory effects, including increased asthma symptoms, worsened control of asthma, and an increase in respiratory illnesses and symptoms. The USEPA also identified that NO_2 concentrations on or near major roads can be approximately 30 to 100 percent higher than concentrations in the surrounding community, which could contribute to health effects for at-risk populations, including people with asthma, children, and the elderly.

(e) Sulfur Dioxide (SO_2)

Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of SO_2 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)

Pb 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 Pb emissions, which is primarily a regional pollutant. Pb affects the brain and other parts of the body's

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[1] *USEPA, Final Revisions to the Primary National Ambient Air Quality Standard for Nitrogen Dioxide (NO_2), General Overview, Office of Air and Radiation Office of Air Quality Planning and Standards, January 2010, pp. 11–12.*

nervous system. Exposure to Pb in very young children impairs the development of the nervous system, kidneys, and blood forming processes in the body.

(g) 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.

(h) Vinyl Chloride (VC)

VC is a chemical building block, or monomer, used in the production of polyvinyl chloride (PVC). PVC is used to make materials, including pipes, used in the construction, packaging, electrical, and transportation industries. Major sources of VC include PVC production and fabrication facilities and, at the other end of PVC's life cycle, as PVC deteriorates, landfills and publicly-owned treatment works. VC is carcinogenic. Exposure to VC has been associated with a rare cancer, liver angiosarcoma, in workers, and with tumors of the liver, lungs, mammary glands and the nervous system in animals. The state ambient air quality standard reflects the limit of detection for VC in ambient air when the standard was promulgated in 1978. By 1990, when state staff prepared the technical support document for identifying VC as a TAC, VC had not been detected in ambient air at any of the samplers in California Air Resources Board's (CARB) TAC monitoring network, although ambient hot spot sampling had detected VC at levels up to 150 percent of the standard. VC is primarily of concern as a carcinogenic TAC at hot spots. It is regulated as a TAC to allow implementation of health-protective control measures at levels below the ambient standard.[2]

(2) Precursor to Criteria Pollutants

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 TACs. 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 O_3, NO_2, and certain fine particles are formed. They are, thus, regulated as "precursors" to formation of those criteria pollutants.

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[2] *CARB, Proposed Identification of Vinyl Chloride as a Toxic Air Contaminant, Staff Report/Executive Summary, October 1990.*

(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 non-carcinogenic, where carcinogenic TACs can cause cancer and non-carcinogenic TAC can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular). CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in California. The complete list of such substances is maintained on CARB's website.[3]

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 ($PM_{2.5}$), including a subgroup of ultrafine particles (i.e., particles that 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.[4,5]

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

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[3] *CARB, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed July 18, 2011, accessed August 23, 2016.*

[4] *CARB, Diesel and Health Research, www.arb.ca.gov/research/diesel/diesel-health.htm, accessed June 9, 2016.*

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

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 10 inhalation risk contributors, DPM contributes approximately 68 percent of the total potential cancer risk.[6]

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 proposed 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 USEPA is responsible 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 proposed 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. On June 11, 2007, the USEPA reclassified the Air Basin as a federal "attainment" area for CO and approved the Air Basin's CO maintenance plan.[7] 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. The only air monitoring station that is currently exceeding or projected to exceed the 24-hour $PM_{2.5}$ standard is within western

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

[7] *"Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes: California, Final Rule." Federal Register 72 (11 May 2007):26718-26721.*

Riverside.[8] In addition, Los Angeles County fails to meet the national standard for lead and, therefore, is considered a federal "non-attainment" area for lead. Los Angeles County exceeded the lead NAAQS as the result of a large lead-acid battery recycling facility near downtown Los Angeles.

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 the statewide 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 on page IV.B-3 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.

(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. 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

[8] *South Coast Air Quality Management District, 2016 AQMP.*

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) includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR 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, Section 93115 in Title 17 of the CCR 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)

The SCAQMD shares responsibility with CARB for ensuring that all state and federal ambient air quality standards are achieved and maintained throughout its jurisdiction, which covers 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 Valley portions of Riverside County. The Air Basin is a subregion of the SCAQMD 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 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS) and updated emission inventory methodologies for various source categories. 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 will apply to the proposed Project's construction and 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 proposed 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]

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 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* (May 2005), which considers impacts to sensitive receptors from facilities that emit TAC emissions. 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

[9] *SCAQMD, Air Quality Analysis Handbook, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed June 9, 2016.*

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 proposed 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;
  - Suspend earthmoving operations or additional watering would be implemented to meet Rule 403 criteria if wind gusts exceed 25 miles per hour (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; and
  - An information sign shall be posted at the entrance to the construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive fugitive dust generation. A construction relations officer shall be appointed to act as a community liaison concerning on-site activity, including investigation and resolution of issues related to fugitive dust generation.
- 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 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 the Transportation Conformity Rule and other 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 AQMP for the Air Basin. With regard to future growth, SCAG adopted the 2016–2040 RTP/SCS in April 2016, which provides population, housing, and employment projections for cities under its jurisdiction. The growth projections in the 2016–2040 RTP/SCS are based in part on projections originating under County and City General Plans. These growth projections were utilized in the preparation of the air quality forecasts and consistency analysis included in the 2016 AQMP.

(d) Local

Local jurisdictions, such as the City of West Hollywood (City), 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 Infrastructure, Resources, and Conservation Chapter of the City of West Hollywood General Plan sets forth the goals, objectives, and policies, which guide the City in the implementation of its air quality improvement programs and strategies. The Infrastructure, Resources, and Conservation Chapter of the General Plan acknowledges improving air quality requires the collaboration of various agencies and jurisdictions. Policies relevant to the proposed Project are as follows:

- Goal IRC-7: Improve air quality and reduce emission of air pollution.

- Policy IRC-7.1: Seek to improve overall respiratory health for residents through regulation of stationary and mobile sources of air pollution, as feasible.

- Policy IRC-7.2: Support land use and transportation strategies to reduce driving rates and resulting air pollution, including pollution from commercial and passenger vehicles.

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)

The California Air Toxics Program[10] 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.[11] 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 the results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources.[12] 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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[10] *CARB, California Air Toxics Program, www.arb.ca.gov/toxics/toxics.htm, last reviewed September 24, 2015, accessed August 23, 2016.*

[11] *CARB, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed July 18, 2011, accessed August 23, 2016.*

[12] *CARB, Airborne Toxic Control Measures, www.arb.ca.gov/toxics/atcm/atcm.htm, last reviewed June 7, 2016, accessed August 23, 2016.*

In addition to limiting exhaust from idling trucks, CARB recently promulgated emission standards for off-road diesel construction equipment, such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation, adopted by CARB on July 26, 2007, aims 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.

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.

d. Existing Air Quality 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, all affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential.

The greatest level of 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

[13] *CARB, In-Use Off-Road Diesel Vehicle Regulation, www.arb.ca.gov/msprog/ordiesel/ordiesel.htm, last reviewed April 11, 2016, accessed June 9, 2016.*

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 national standards for lead, O_3, and $PM_{2.5,}$ as well as the state standards for PM_{10}.

The SCAQMD has released an Air Basin-wide air toxics study (MATES-IV, Multiple Air Toxics Exposure Study, May 2015). 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 TACs, 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).[14]

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 Site. The 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.[15] 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

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

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

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-18 shows the locations of the SRAs located in Los Angeles County. The Project Site is located within SRA 2, which covers the Northwest Coastal Los Angeles area. The monitoring station most representative of the Project Site is the Los Angeles–VA Hospital Station, located at the site of the West Los Angeles Medical Center (a veterans hospital) along Wilshire Boulevard, 4.5 miles southwest of the Project Site. Criteria pollutants monitored at this station include O_3, CO, and NO_2. Criteria pollutants not monitored at this station include PM_{10}, $PM_{2.5}$, and SO_2. The second most representative monitoring stations for these pollutants is the Los Angeles–LAX Station, located approximately 9.5 miles south of the Project Site (for PM_{10} and SO_2) and North Main Street Station, located approximately 9.2 miles southeast of the Project Site (for $PM_{2.5}$). Table IV.B-2 on page IV.B-19 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured in SRA 2 through the period of 2013 to 2015, the most recent period for which data are available.

(b) Existing Health Risk in the Surrounding Area

As shown in Figure IV.B-2 on page IV.B-21, based on the MATES-IV model, the calculated cancer risk in the vicinity of the Project Site is approximately 954 in a million.[16] The cancer risk in this area is predominately related to nearby sources of diesel particulate (e.g., the Hollywood Freeway [US-101] or the San Diego Freeway [I-405]). In general, the risk at the Project Site is comparable with other surrounding urbanized areas.

(c) Surrounding Uses

As shown in Figure IV.B-3 on page IV.B-22, the Project Site is located in a highly urbanized area. The Project Site is bordered by Sunset Boulevard to the north, Hilldale Avenue to the west, commercial uses to the east, and multi-family residential uses to the east and south. Sunset Boulevard, including the area to the north of the Project Site, is comprised predominantly of commercial uses, including hotels, restaurants, night clubs,

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[16] *SCAQMD, "Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV)," MATES IV Interactive Carcinogenicity Map, 2015, www3.aqmd.gov/webappl/OI.Web/OI.aspx?jurisdictionID=AQMD.gov&shareID=73f55d6b-82cc-4c41-b779-4c48c9a8b15b, accessed July 28, 2016.*

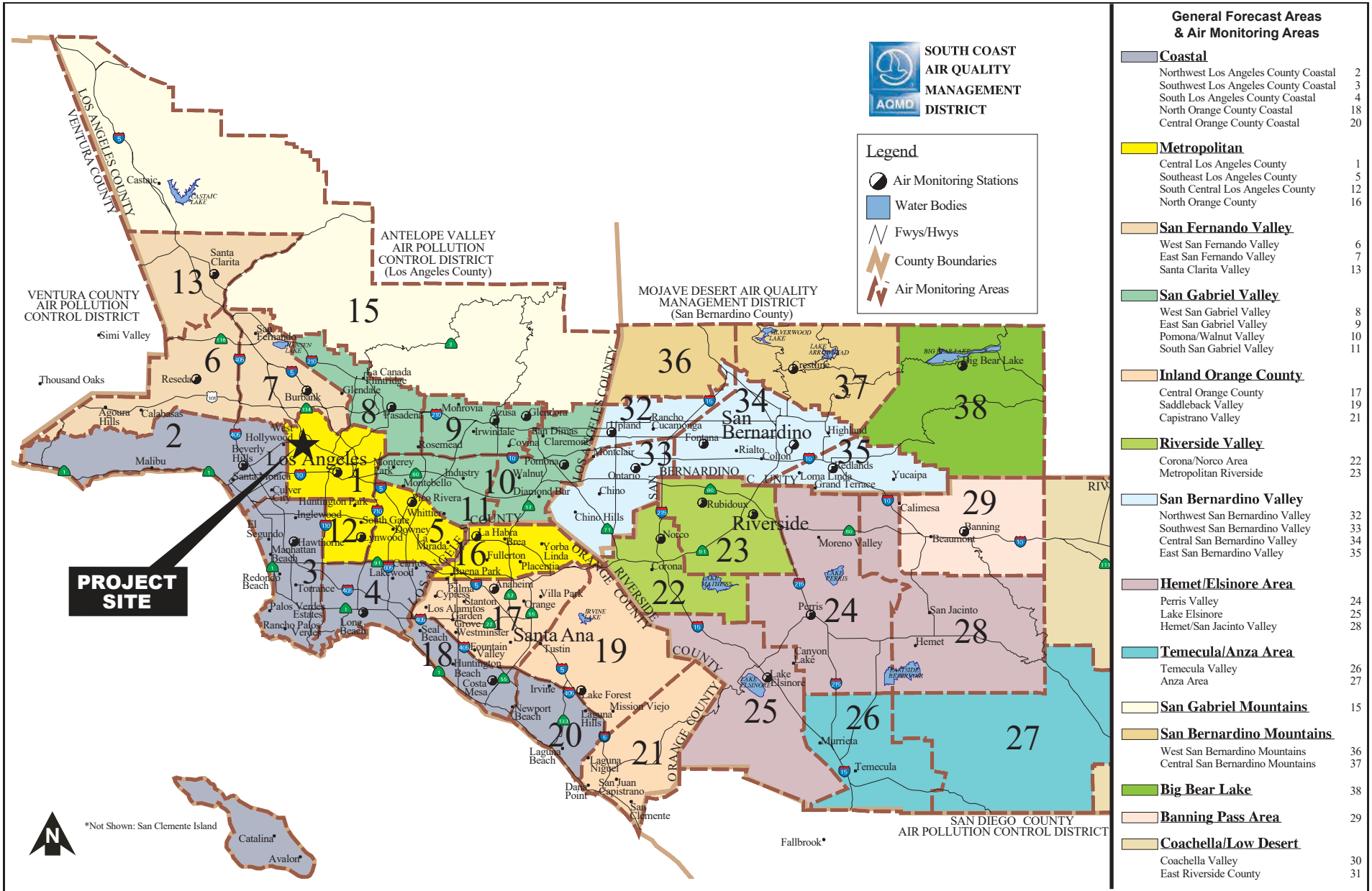

Figure IV.B-1
SCAQMD Source Receptor Areas

Source: Sierra Wade Associates, 2010.

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

Pollutant	Year		
	2013	2014	2015
Ozone (O_3)			
Maximum 1-hour Concentration (ppm)	0.088	0.116	0.102
Days exceeding NAAQS (0.12 ppm)	0	0	0
Days exceeding CAAQS (0.09 ppm)	0	1	2
Maximum 8-hour Concentration (ppm)	0.075	0.094	0072
Days exceeding NAAQS (0.075 ppm)	0	4	0
Days exceeding CAAQS (0.07 ppm)	1	6	3
Respirable Particulate Matter (PM_{10})			
Maximum 24-hour Concentration (µg/m^3)	38	46	43
Days exceeding NAAQS (150 µg/m^3)	0	0	0
Days exceeding CAAQS (50 µg/m^3)	0	0	0
Annual Arithmetic Mean (µg/m3)	20.8	22	21.2
Does Measured AAM exceed NAAQS (50 µg/m^3)?	No	No	No
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)	43.1	59.9	56.4
Days exceeding NAAQS (35 µg/m^3)	1	6	7
Annual Arithmetic Mean (µg/m^3)	11.95	12.36	12.38
Does measured AAM exceed NAAQS (15 µg/m^3)?	No	No	No
Does measured AAM exceed CAAQS (12 µg/m^3)?	No	No	No
Carbon Monoxide (CO)			
Maximum 1-hour Concentration (ppm)	—	2	1.6
Days exceeding NAAQS (35.0 ppm)	0	0	0
Days exceeding CAAQS (20.0 ppm)	0	0	0
Maximum 8-hour Concentration (ppm)	1.3	1.3	1.4
Days exceeding NAAQS and CAAQS (9 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour CAAQS Concentration (ppm)	0.05	0.06	0.07
Days exceeding CAAQS (0.25 ppm)	0	0	0
Maximum 1-hour NAAQS Concentration (98^{th}%) (ppm)	0.05	0.05	0.05
Days exceeding NAAQS (0.10 ppm)	0	No	No
Annual Arithmetic Mean (ppm)	0.014	0.013	0.012
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
Lead (Pb)			

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

Pollutant	Year		
	2013	2014	2015
Maximum 30-day Average Concentration (µg/m^3)	0.005	0.008	0.008
Does measured concentration exceed NAAQS (1.5 µg/m^3)	No	No	No
Maximum Calendar Quarter Concentration (µg/m^3)	0.004	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)	4.5	5.1	6.5
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, Historical Data by Year, www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year, accessed February 24, 2017.

offices, and various retail uses. Further to the north of Sunset Boulevard are single-family and multi-family residential uses. A vacant lot that is proposed to be developed as a hotel is located to the immediate west of Hilldale Avenue along Sunset Boulevard. Additionally, West Hollywood Elementary School is located one block south of the Project Site.

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 on page IV.B-22, the nearest sensitive land uses to the Project Site are the residential uses immediately south of and adjacent to the Project Site.

(d) Existing Project Site Emissions

The Project Site is currently developed with a 19,670 square-foot, two-story commercial building with surface and subterranean parking that is accessed from Hilldale Avenue. Landscaping within the Project Site is limited, with ornamental landscaping along Sunset Boulevard and Hilldale Avenue.

Existing area source emissions at the Project Site are generated primarily by maintenance equipment, landscape equipment, and use of products that contain solvents. Energy source emissions are associated with the existing building's natural gas usage at the Project Site. In addition, mobile source emissions from the existing uses are generated

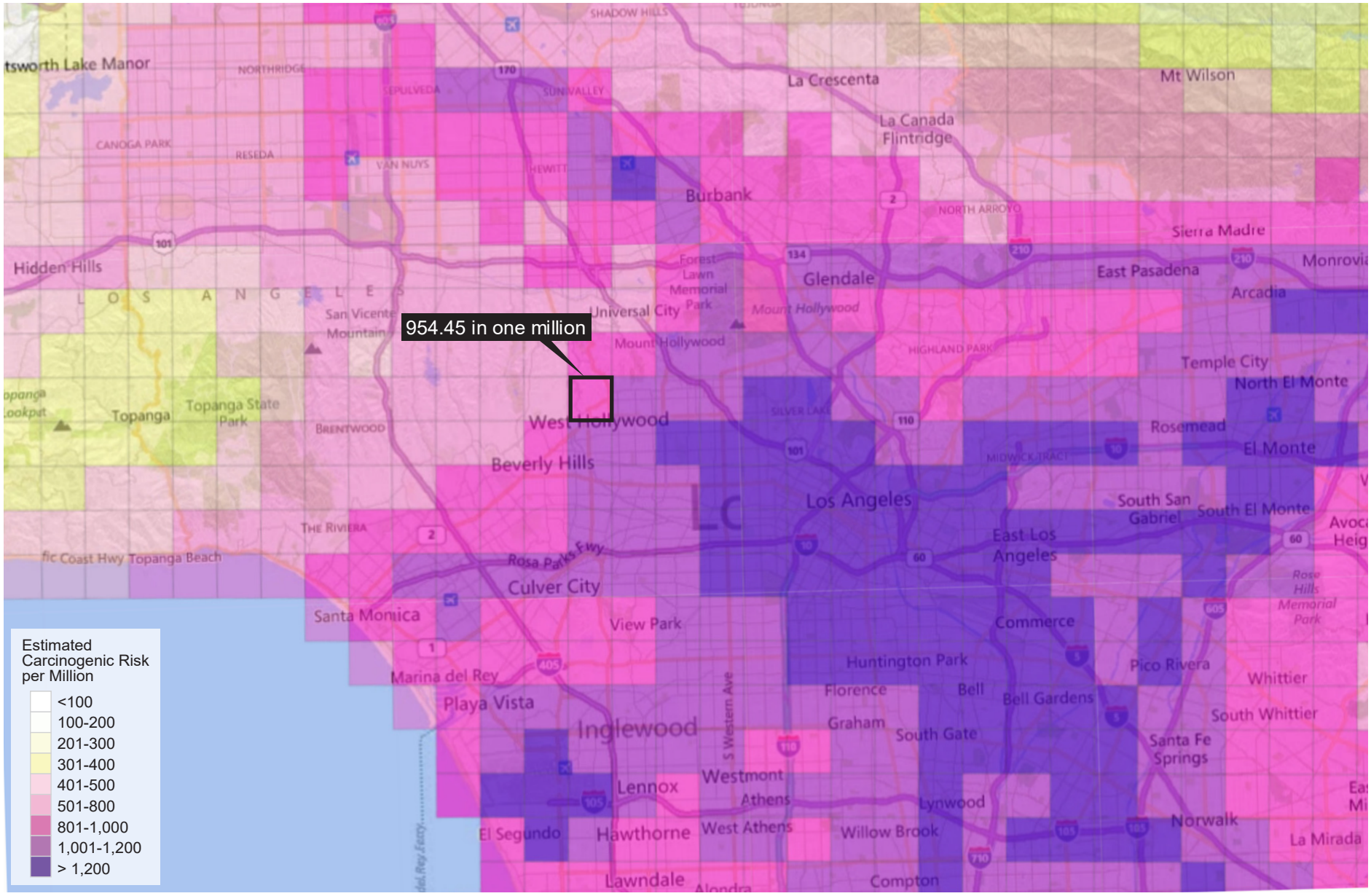

Figure IV.B-2
MATES IV Total Cancer Risk for Project Area

Source: South Coast AQMD, 2016.

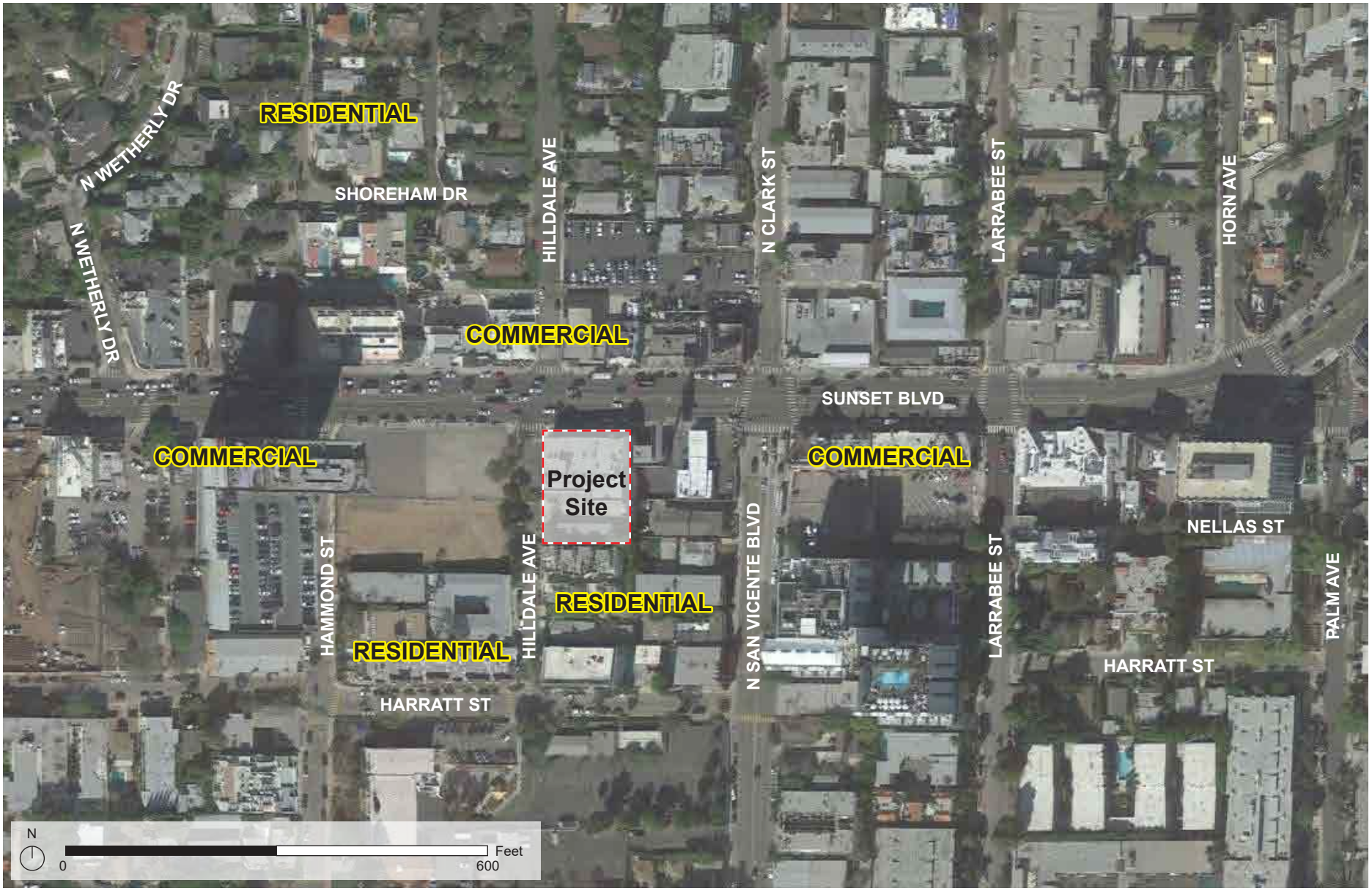

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Figure IV.B-3
Air Quality Sensitive Receptors Locations

Source: Google Earth, 2016.

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—2016[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	6	16	<1	3	1
Total Existing Emissions	**2**	**6**	**16**	**<1**	**3**	**1**

Numbers may not add up exactly due to rounding.

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

Source: Eyestone Environmental, 2017.

3. Project Impacts

a. Methodology

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

(1) Construction Emissions Methodology

(a) Regional

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 California Emissions Estimator Model® (CalEEMod) Version 2016.3.1, as recommended by the SCAQMD. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. Details of the modeling assumptions and emission factors are provided in Appendix B of this Draft EIR. The calculations of the emissions generated during the proposed Project's construction activities reflect the types and quantities of construction equipment that would be used to remove the existing buildings and pavement,

grade and excavate the Project Site, construct the proposed building and related improvements, and plant new landscaping on the Project Site.

(b) Localized

The localized effects from the on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the proposed Project according to the SCAQMD's localized significance thresholds (LST) methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling, where appropriate.[17] SCAQMD provides LSTs applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. 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. 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 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 5 acres.

(2) Operational Emissions Methodology

(a) Regional

Analysis of the proposed Project's likely impact on regional air quality during long-term Project operations (i.e., after construction is complete) looks at three types of sources: (1) mobile; (2) area; and (3) energy. Mobile source emissions are generated by the motor vehicle trips to and from the Project Site associated with operation of the proposed Project. Area source emissions are generated by, among other things, landscape equipment, emergency generators, 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).

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

Similar to construction, SCAQMD's CalEEMod software was used for the evaluation of Project operational emissions and was supplemented for potential on-site sources that are not included in the model (i.e., emergency generator). CalEEMod was used to calculate mobile source emissions, on-road fugitive dust, architectural coatings, landscape equipment, and energy use. To determine if a significant air quality impact would occur, the net increase in regional operational emissions generated by the proposed Project was compared against SCAQMD's significance thresholds.[18]

(b) Localized

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 SCAQMD's LST methodology. Potential localized CO concentrations from induced traffic at nearby intersections are also addressed.

It has long been recognized that CO exceedances are caused by vehicular emissions,[19] primarily when idling at intersections.[20,21] 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.[22]

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,[23,24] and new cold weather CO standards have been implemented, effective for the 1996 model year.[25] Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (with provisions for

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[18] *SCAQMD Air Quality Significance Thresholds (Rev. March 2011). 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.).*

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

[20] *SCAQMD, CEQA Air Quality Handbook, 1993, Section 4.5.*

[21] *SCAQMD, Air Quality Management Plan, 2003.*

[22] *USEPA, Milestone in Auto Emissions Control, August 1994.*

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

[24] *Kavanagh, Jason, Untangling U.S. Vehicle Emissions Regulations, 2008.*

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

certain cars to emit even less).[26] With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in SCAQMD's jurisdiction have steadily declined.

The analysis prepared for CO attainment in the Air Basin by the 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 SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).[27] As discussed in the 1992 CO Plan, peak CO 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 1992 CO Plan and subsequent plan updates and AQMPs.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles 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 has 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.[28] The Los Angeles County Metropolitan Transportation Authority (Metro) evaluated the level of service (LOS) in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection[29] and found it to be LOS E at peak morning traffic and LOS F at peak afternoon traffic.[30] If an intersection analyzed in the applicable traffic study prepared for a proposed project does not exceed 400,000 vehicles per day, then the project does not need to prepare a detailed CO hot spot

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[26] *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.*

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

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

[29] *Metro measured traffic volumes and calculated the LOS for the intersection Wilshire Boulevard/ Sepulveda Avenue, east of the San Diego Freeway (I-405).*

[30] *Los Angeles County Metropolitan Transportation Authority, Congestion Management Program for Los Angeles County. Exhibit 2-6 and Appendix A. July 22, 2004..*

analysis. If the screening method does not rule out significant impacts for an intersection, then detailed analysis using California Line Source Dispersion Model 4 (CALINE4) is conducted.

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

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. CARB has published and adopted the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005), 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). SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* (2005). 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.

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 screening-level analysis consists of reviewing the proposed 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 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.

b. Thresholds of Significance

The City utilizes SCAQMD's *CEQA Air Quality Handbook*.[31]

(1) Consistency with Applicable Air Quality Plans

Section 15125 of the CEQA Guidelines requires an analysis of a project's consistency with applicable governmental plans and policies. In accordance with the SCAQMD's *CEQA Air Quality Handbook*, the following questions were used to evaluate the

[31] *As discussed further in Section VII, Effects Found Not to Be Significant, of this Draft EIR, no objectionable odors are anticipated as a result of either construction or operation of the proposed Project. Therefore, no further analysis regarding this significance threshold is provided below.*

proposed Project's consistency with SCAQMD and SCAG regional plans and policies, including the AQMP.

- 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?
- Will the project exceed the assumptions utilized in preparing the AQMP? Specifically:
  - 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 AQMP land use policies?

The proposed Project's impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's AQMP and SCAG regional plans and policies. In addition, the proposed Project's consistency with the Infrastructure, Resources, and Conservation Chapter of the City's General Plan is discussed.

(2) Construction

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

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 100 pounds per day for NO_X; (2) 75 pounds a day for VOC; (3) 150 pounds per day for PM_{10} or SO_X; (4) 55 pounds per day for $PM_{2.5}$; and (5) 550 pounds per day for CO.
- Maximum on-site daily localized emissions exceed the 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 [339 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 [57 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-hour threshold of 10.4 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.

(3) Operation

Based on criteria set forth in the SCAQMD's CEQA Air Quality Handbook, the proposed Project would have a significant impact with regard to operation emissions if any of the following would occur:

- Operational emissions exceed any of the following SCAQMD prescribed threshold levels: (1) 55 pounds a day for VOC; (2) 55 pounds per day for NO_X; (3) 550 pounds per day for CO; (4) 150 pounds per day for PM_{10} or SO_X; and (5) 55 pounds per day for $PM_{2.5}$.

- Maximum on-site daily localized emissions exceed the 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).

- Maximum on-site localized operational PM_{10} and $PM_{2.5}$ emissions exceed the incremental 24-hour threshold of 2.5 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.

- 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.

(4) Toxic Air Contaminants

Based on these factors and criteria set forth in the SCAQMD's *CEQA Air Quality Handbook*, there would be a significant toxic air contaminant impact, if:

- 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. 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.

c. Project Design Features

The following project design feature is proposed with regard to air quality emissions:

Project Design Feature B-1: The Project shall use paints with no volatile organic compounds (VOCs) on interior applications, low-VOC sealants and adhesives, and composite wood with no added urea formaldehyde for counters and cabinets.

In addition, the proposed Project would incorporate additional project design features to support and promote environmental sustainability as discussed under Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, and listed below.

Project Design Feature D-1: The Project shall achieve 90 points in the City's Green Points System.

Project Design Feature D-2: The Project shall achieve 15 percent better than the minimum standards of the California Energy Code.

While these features are designed primarily to reduce greenhouse gas emissions, they would also serve to reduce criteria air pollutants discussed herein.

d. Analysis of Project Impacts

(1) Applicable Plans and Policies

(a) SCAQMD CEQA Air Quality Handbook Policy Analysis

The following analysis addresses the proposed Project's consistency with applicable SCAQMD and SCAG policies, inclusive of regulatory compliance and the project design features discussed above and in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR. In accordance with the procedures established in the SCAQMD's *CEQA Air Quality Handbook*, the following criteria are required to be addressed in order to determine the proposed 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?

As discussed below, localized concentrations of NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ have been analyzed for the proposed 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 proposed 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 below in Table IV.B-4 on page IV.B-32, the increases in PM_{10} and $PM_{2.5}$ emissions during construction would not exceed the SCAQMD-recommended significance thresholds at sensitive receptors near the Project Site.

Additionally, the proposed 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 below in Table IV.B-4, CO and NO_X 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, construction of the proposed Project would not result in a significant impact with regard to localized air quality.

Because the proposed 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.[32] As indicated earlier, no intersections would require a CO hotspot analysis, and impacts would be less than significant. Therefore, the proposed Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.

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

Table IV.B-4
Estimate of Localized Project Construction Emissions[a]
(pounds per day)

Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$
2017	24	13	1	1
2018	22	17	1	1
2019	20	17	1	1
2020	18	16	1	1
Maximum Daily Localized Emissions	**24**	**17**	**1**	**1**
SCAQMD Localized Significance Thresholds	**56**	**562**	**4**	**3**
Over/(Under)	**(32)**	**(544)**	**(3)**	**(2)**
Exceed Threshold?	**No**	**No**	**No**	**No**

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

Source: Eyestone Environmental, 2017.

As discussed above, an analysis of potential localized operational impacts from on-site activities was conducted. As shown below in Table IV.B-5 on page IV.B-33, localized NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ operational impacts would be less than significant. Therefore, the proposed Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the proposed Project would not exceed any of the state or federal standards, the proposed Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.

An analysis of daily operational on-site emissions of existing conditions without the proposed Project versus with the proposed Project (2016) was also conducted (existing conditions analysis). The results of these calculations and associated SCAQMD thresholds are presented in Table IV.B-6 on page IV.B-34. As shown in Table IV.B-6, the net overall operational on-site emissions associated with the proposed Project under existing conditions (2016) would be similar to the estimated emissions during Project buildout (2020) provided in Table IV.B-5. Under both the 2016 and 2020 analysis years, on-site operational emissions would not exceed any of the LSTs. Therefore, under the existing conditions analysis, the proposed Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the proposed Project under existing conditions would not exceed any of the state or federal standards, the proposed Project under existing conditions would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.

Table IV.B-5
Project Localized Operational Emissions—At Project Buildout (2020)
(pounds per day)

Emission Source	NO_X	CO	PM_{10}	$PM_{2.5}$
Proposed Project				
Area	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary	<1	1	<1	<1
On-Site Total	**<1**	**2**	**<1**	**<1**
SCAQMD Significance Threshold[a]	**56**	**562**	**1**	**1**
Over/(Under)	**(56)**	**(560)**	**(1)**	**(1)**
Exceed Threshold?	**No**	**No**	**No**	**No**

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

Source: Eyestone Environmental, 2017.

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies (i.e., would the proposed 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 2016-2040 RTP/SCS regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the proposed 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's General Plan and SCAG's *Regional Transportation Plan (RTP)*. As described in Section IV.G, Land Use, of this Draft EIR, the City originally adopted the West Hollywood General Plan in 1988, to establish a comprehensive

Table IV.B-6
Project Localized Operational Emissions—Existing Conditions (2016)
(pounds per day)

Emission Source	NO_X	CO	PM_{10}	$PM_{2.5}$
Proposed Project				
Area	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary	2	1	**<1**	**<1**
On-Site Total	**1**	**1**	**<1**	**<1**
SCAQMD Significance Threshold[a]	**56**	**562**	**1**	**1**
Over/(Under)	**(56)**	**(561)**	**(1)**	**(1)**
Exceed Threshold?	**No**	**No**	**No**	**No**

[a] *Potential localized operational impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1. Maximum active operational activities would occur on approximately 0.5 acre at a distance of approximately 25 meters from sensitive land uses (the shortest distance available for LSTs).*

Source: Eyestone Environmental, 2017.

community vision for the City with regard to land use, housing, circulation, open space/ conservation, noise, economic development, public safety, community services and governance. The West Hollywood General Plan 2035 (General Plan) is an update to the 1988 West Hollywood General Plan and was adopted in September 2011, and serves as a comprehensive, long-term plan for future development of the City.

The 2016–2040 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. The proposed Project's consistency with applicable goals, objectives, and policies of the City's General Plan Infrastructure, Resources, and Conservation Chapter is discussed below.

As discussed in Section VII, Effects Found Not to Be Significant, of this Draft EIR, the proposed Project would not directly contribute to population growth in the Project area as the proposed Project does not include new housing. In addition, as some of the employment opportunities generated by the proposed Project would be filled by people already residing in the vicinity of the Project Site, the potential growth associated with Project employees who may relocate their place of residence would not be substantial. As such, the proposed Project would not result in a notable increase in demand for new housing, and any new demand, should it occur, would be minor in the context of forecasted growth for the City. Such levels of population and employment growth are consistent with

the population and employment forecasts for the Subregion as adopted by SCAG. Because these same projections form the basis of the 2016 AQMP, it can be concluded that the proposed Project would be consistent with the projections in the AQMP.

- Does the project implement all feasible air quality mitigation measures?

As discussed below in Subsection 3.d(2) and subsection 3.d(3), the proposed Project would not result in any significant impacts and would therefore not require implementation of any mitigation measures. In addition, the proposed Project would comply with all applicable regulatory standards as required by SCAQMD, as summarized above. The proposed Project also would incorporate project design features to support and promote environmental sustainability as discussed above and in Section IV.D, 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.D, Greenhouse Gas Emissions, of this Draft EIR, no significant air quality impacts would occur. As such, the proposed Project meets this AQMP consistency criterion.

- To what extent is project development consistent with the land use policies set forth in the AQMP?

With regard to land use developments such as the proposed Project, air quality policies focus on the reduction of vehicle trips and vehicle miles traveled (VMT). As discussed in Section IV.G, Land Use, of this Draft EIR and in the next section below, the proposed Project's characteristics and programmatic elements would be consistent with, and would help further the goals of, a number of air quality-related policies under the City's General Plan and SCAG's 2016–2040 RTP/SCS. As noted in Section IV.G, Land Use, of this Draft EIR, the Project Site is located within a designated High-Quality Transit Area (HQTA) and accessible to multiple public transit opportunities via transit bus service including eight Metro bus lines (five local bus lines, two limited bus lines, and one Rapid bus line) and two CityLine routes (Blue Route and Orange Route) with stops along Sunset Boulevard, San Vicente Boulevard, and Santa Monica Boulevard within 0.5 mile of the Project Site. As the proposed Project implements SCAQMD's objective of reducing VMT and related vehicular air emissions, the proposed Project would be consistent with AQMP land use policies.

In conclusion, Project development would not increase the frequency or severity of existing air quality violations or cause or contribute to new air quality violations. As a result, the proposed Project would not delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP. As discussed above, the proposed

Project's long-term influence would be consistent with the goals and policies of the AQMP and would not exceed the assumptions used in the preparation of the AQMP. Therefore, the proposed Project is considered consistent with the AQMP.

(b) City of West Hollywood Policies

The Infrastructure, Resources, and Conservation Chapter of the General Plan describes the City's management and provision of infrastructure resources in a sustainable manner. This chapter of the General Plan provides background information and policy guidance for air quality, among other topics. The Infrastructure, Resources, and Conservation Chapter of the General Plan acknowledges improving air quality requires the collaboration of various agencies and jurisdictions. Policies relevant to the proposed Project are as follows:

Goal IRC-7: Improve air quality and reduce emission of air pollution.

Policy IRC-7.1: Seek to improve overall respiratory health for residents through regulation of stationary and mobile sources of air pollution, as feasible.

Policy IRC-7.2: Support land use and transportation strategies to reduce driving rates and resulting air pollution, including pollution from commercial and passenger vehicles.

The proposed Project would promote these goals, objectives, and policies. Specifically, the proposed Project would not exceed any SCAQMD thresholds during construction or operation, which would help improve overall respiratory health for residents in West Hollywood. In addition, the proposed Project will provide bicycle parking spaces in compliance with the requirements of the WHMC. In addition, employees, guests, and visitors of the proposed Project would be well-served by existing transit services as the Project Site is located in an area well-served by public transit provided by Metro, including eight Metro bus lines (five local bus lines, two limited bus lines, and one Rapid bus line) and two CityLine routes (Blue Route and Orange Route) with stops along Sunset Boulevard, San Vicente Boulevard, and Santa Monica Boulevard. The nearest public transit stops are located approximately one block away at the intersections of Sunset Boulevard and Hammond Street and Sunset Boulevard and San Vicente Boulevard. Thus, the proposed 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 VMT. Based on the above, the proposed Project would serve to implement applicable goals and policies under the City's General Plan pertaining to air quality.

(2) Construction

(a) Regional Construction Impacts

As described in Section II, Project Description, of this Draft EIR, construction of the proposed Project is anticipated to occur in a single phase over approximately 32 months, beginning in late 2017/early 2018 and ending in 2020. Construction of the proposed Project would consist of demolition of the existing buildings and the surface and subterranean parking areas, followed by excavation/grading, foundation, building construction, and landscaping. The proposed Project anticipates to export up to approximately 48,000 cubic yards of export material (e.g., concrete and asphalt surfaces) and soil from the Project Site during construction.

Construction of the proposed Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site (see Appendix B of this Draft EIR which include construction assumptions made for the Project). 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 construction, paving operations and the application of architectural coatings (e.g., paints) and other building materials would potentially release VOCs. The assessment of air quality impacts during construction of the proposed Project 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. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts. For additional construction assumptions (e.g., number of worker vehicle trips and haul truck trips), CalEEMod model printout sheets are presented in Appendix B of this Draft EIR.

The emissions levels in Table IV.B-7 on page IV.B-38 represent the highest daily emissions projected to occur during each year of construction. As presented in Table IV.B-7, construction-related daily maximum regional construction emissions would not exceed any of the SCAQMD daily significance thresholds. Therefore, regional construction emissions resulting from the proposed Project would result in a less-than-significant air quality impact, and no mitigation measures would be required.

(b) Localized Impacts from On-Site Construction Activities

As discussed above in the Methodology subsection, above, the localized construction air quality analysis was conducted using the methodology developed by SCAQMD. Look-up tables provided by SCAQMD were used to determine localized

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

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2017	3	40	19	<1	4	2
2018	4	48	23	<1	5	2
2019	3	23	22	<1	2	1
2020	12	21	21	<1	2	1
Maximum Construction Emissions	**12**	**48**	**23**	**<1**	**5**	**2**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(63)**	**(52)**	**(527)**	**(150)**	**(147)**	**(53)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[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, 2017.

construction emissions thresholds for the proposed Project.[33] 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 for the Project area presented in Table IV.B-2 on page IV.B-19. The analysis is based on existing background ambient air quality monitoring data (2013–2015[34]). Although the trend shown in Table IV.B-2 demonstrates that ambient air quality is 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., 2017–2020). By doing so, the allowable pollutant increment to not exceed an ambient air quality standard is more stringent.

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 2

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

[34] *South Coast Air Quality Management District Ambient, Historical Data by Year www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year, accessed February 24, 2017.*

based on a construction site acreage of 1 acre.[35] Potential impacts were evaluated at the closest sensitive receptor, which are residential uses south of, and adjacent to, 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."[36,37] Based on this guidance, potential impacts at the residential uses were evaluated using the 25-meter mass rate LST lookup tables.[38]

The unmitigated maximum daily localized emissions from Project construction and LSTs are presented in Table IV.B-4 on page IV.B-32. As presented in Table IV.B-4, maximum localized construction emissions for off-site sensitive receptors would not exceed any of the SCAQMD-recommended localized screening thresholds. Therefore, localized construction emissions resulting from the proposed Project would result in a less-than-significant air quality impact, and no mitigation measures would be required.

(c) 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 would contract cancer based on the use of standard risk-assessment methodology. Because the construction schedule estimates that the construction periods which require the most heavy-duty diesel vehicle usage, such as site grading/excavation, would last for a much shorter duration (e.g., up to approximately four months), construction of the proposed 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 a health risk assessment (HRA) for short-term construction emissions. It is, therefore, not necessary to evaluate long-term cancer impacts from construction activities which occur over a relatively short duration. In addition, there would be no residual emissions or corresponding

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[35] *A construction site acreage of 1 acre was used as SCAQMD recommends the 1-acre look-up table values for projects less than or equal to 1 acre.*

[36] *SCAQMD, Final Localized Significance Threshold Methodology, June 2003, revised July 2008.*

[37] *Twenty-five (25) meters = approximately 82 feet.*

[38] *SCAQMD, Appendix C (Mass Rate LST Look-up Table) of the Final Localized Significance Threshold Methodology, June 2003, revised October 2009.*

individual cancer risk after construction. As such, Project-related TAC impacts during construction would be less than significant, and no mitigation measures would be required.

(3) Operation

(a) Regional Operational Impacts

As discussed above, SCAQMD's CalEEMod was used to calculate regional mobile source emissions, on-road fugitive dust, and emissions from architectural coatings, landscape equipment, and energy use.

As shown in Table IV.B-8 on page IV.B-41, regional emissions resulting from operation of the proposed Project would not exceed any of the SCAQMD's daily regional operational thresholds. Therefore, air quality impacts from Project operational emissions would be less than significant, and no mitigation measures would be required.

An analysis of daily operational emissions of existing conditions without the proposed Project versus with the proposed Project (2016) was also conducted (existing conditions analysis). The results of these calculations and associated SCAQMD thresholds are presented in Table IV.B-9 on page IV.B-42. As shown in Table IV.B-9, the net overall operational emissions associated with the proposed Project under existing conditions (2016) would be slightly higher than the estimated emissions at Project buildout (2020) provided in Table IV.B-8. This increase is exclusively a function of the change in default CalEEMod emission factors from 2016 to 2020 (i.e., vehicular fleet mix is cleaner in subsequent years as a result of cleaner newer vehicles). Similar to the proposed Project under future conditions, the existing conditions analysis would not exceed SCAQMD daily regional operational threshold. Therefore, air quality impacts from Project operational emissions would be less than significant under the existing conditions analysis. Note that this analysis overstates emissions as the proposed Project would was not developed in 2016.

(b) Localized Impacts from On-Site Operational Activities

Operation of the proposed 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-5 on page IV.B-33. 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-5, on-site operational emissions would not exceed any of the LSTs.

Table IV.B-8
Project Regional Operational Emissions—Buildout (2020)
(pounds per day)

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project						
Area	3	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Stationary	<1	<1	1	<1	<1	<1
Mobile	3	16	40	<1	10	3
Total Project Emissions	**6**	**16**	**41**	**<1**	**10**	**3**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(49)**	**(39)**	**(509)**	**(150)**	**(140)**	**(52)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Eyestone Environmental, 2017.

An analysis of daily operational on-site emissions of existing conditions without the Project versus with the Project (2016) was also conducted (existing conditions analysis). As shown in Table IV.B-6 on page IV.B-34, the net overall operational on-site emissions associated with the Project under existing conditions (2016) would be similar to the estimated emissions during Project buildout (2020) provided in Table IV.B-5 on page IV.B-33. Under both the 2016 and 2020 analysis years, on-site operational emissions would not exceed any of the LSTs.

(c) CO "Hot Spots" Analysis

Consistent with the CO methodology above, if a project intersection does not exceed 400,000 daily trips, then a project does not need to prepare a detailed CO hot spot analysis. The proposed Project does not generate more than 400,000 trips per day.

Upon buildout of the proposed Project, the greatest number of average daily trips at any intersection near the Project Site would be approximately 42,640 daily trips at the San Vicente Boulevard and Santa Monica Boulevard intersection,[39,40] which is significantly below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP. This daily trip estimate is based on the peak hour conditions

[39] *Gibson Transportation Consulting, Inc., Draft Transportation Study for the Arts Club West Hollywood Project, West Hollywood, CA, June 2017.*

[40] *The daily trip estimate is based on peak hour traffic volumes.*

Table IV.B-9
Project Regional Operational Emissions—Existing Conditions (2016)
(pounds per day)

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project						
Area	3	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Stationary	1	2	1	<1	<1	<1
Mobile	5	21	60	<1	10	3
Total Project Emissions	**9**	**23**	**62**	<1	**10**	**3**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(46)**	**(32)**	**(488)**	**(150)**	**(140)**	**(52)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Eyestone Environmental, 2017.

of the intersection following buildout of the proposed Project. Therefore, a CO hot spot analysis is not required for the proposed Project. Therefore, the proposed 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, and no mitigation measures would be required. The supporting data for this analysis are included in Appendix B of this Draft EIR.

(d) Toxic Air Contaminants

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 proposed Project, are not considered land uses that generate substantial TAC emissions. It should be noted that SCAQMD only recommends that HRAs be conducted for substantial sources of diesel particulate matter (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.[41] Based on this guidance, the proposed Project is not considered to be a substantial source of diesel particulate matter warranting a refined HRA since daily truck

[41] *SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, 2002.*

trips to the Project Site would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. In addition, CARB-mandated ATCM limits diesel-fueled commercial vehicles (delivery trucks) to idle for no more than 5 minutes at any given time, which would further limit diesel particulate emissions.

4. Cumulative Impacts

a. Construction

With respect to the proposed 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 proposed Project would comply with regulatory requirements, including SCAQMD Rule 403 requirements, as discussed above. In addition, the proposed 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.

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 proposed Project's cumulative impacts related to regional emissions would not be significant. Construction of the proposed Project also would not be significant with regard to localized emissions. Therefore, the proposed Project's cumulative air quality impacts due to localized emissions would not be significant.

Similar to the proposed 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. As noted above, according to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk," which 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. As with the proposed Project, construction activities with respect to each related project would not result in a long-term (i.e., 70-year) substantial source of TAC emissions. In addition, the SCAQMD's *CEQA Air Quality Handbook* and SCAQMD's supplemental online guidance/information do not require an HRA 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. Cumulative TAC emission impacts during construction would not be significant.

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 that project would also result in a cumulatively considerable net increase of these criteria pollutants. Operational emissions from the proposed Project and all related projects 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 together with the related projects would not be considered significant.

With respect to TAC emissions, neither the proposed 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 proposed 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 proposed Project and related projects would not result in a cumulative impact requiring further evaluation. However, the proposed 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 proposed 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 significant impact.

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 and in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR. Therefore, no mitigation measures are required.

6. Level of Significance After Mitigation

Project-level and cumulative impacts with regard to air quality would be less than significant without mitigation.