

IV. Environmental Impact Analysis

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A. Air Quality

1. Introduction

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

2. Environmental Setting

a. Air Quality Background

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

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

on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

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

b. Air Pollution and Potential Health Effects

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

(1) Criteria Pollutants

(a) Ozone (O_3)

O_3 is a gas that is formed when volatile organic compounds (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

**Table IV.A-1
Ambient Air Quality Standards**

Pollutant	Averaging Period	California Standard ^{a,b}	Federal Standard ^{a,b}	SCAQMD Attainment Status ^c	
				California Standard ^d	Federal Standard ^d
Ozone (O ₃)	1 hour	0.09 ppm (180 µg/m ³)	—	Non-Attainment	—
	8 hour	0.07 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	Non-Attainment	Non-Attainment (Extreme)
Respirable Particulate Matter (PM ₁₀)	24 hour	50 µg/m ³	150 µg/m ³	Non-Attainment	Attainment
	Annual	20 µg/m ³	—		
Fine Particulate Matter (PM _{2.5})	24 hour	—	35 µg/m ³	Non-Attainment	Non-Attainment (Serious)
	Annual	12 µg/m ³	12 µg/m ³		
Carbon Monoxide (CO)	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	Attainment	Attainment
	8 hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)		
Nitrogen Dioxide (NO ₂)	1 hour	0.18 ppm (339 µg/m ³)	0.10 ppm (188 µg/m ³)	Attainment	Unclassified/ Attainment
	Annual	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)		
Sulfur Dioxide (SO ₂)	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	Attainment	Unclassified/ Attainment
	3 hour	—	0.5 ppm (1,300 µg/m ³)		
	24 hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)		
	Annual	—	0.03 ppm (80 µg/m ³)		
Lead (Pb)	30-day average	1.5 µg/m ³	—	Attainment	Partial Non- Attainment ^e
	Rolling 3-month average	—	0.15 µg/m ³		
Sulfates	24 hour	25 µg/m ³	—	Attainment	—
Hydrogen Sulfide (H ₂ S)	1 hour	0.03 ppm (42 µg/m ³)	—	Unclassified	—

ppm = parts per million by volume

µg/m³ = micrograms per cubic meter

^a An ambient air quality standard is a concentration level expressed in either parts per million or micrograms per cubic meter and averaged over a specific time period (e.g., 1 hour). The different averaging times and concentrations are meant to protect against different exposure effects. Some ambient air quality standards are expressed as a concentration that is not to be exceeded. Others are

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

Pollutant	Averaging Period	California Standard ^{a,b}	Federal Standard ^{a,b}	SCAQMD Attainment Status ^c	
				California Standard ^d	Federal Standard ^d
<i>expressed as a concentration that is not to be equaled or exceeded.</i>					
^b <i>Ambient Air Quality Standards based on the 2016 AQMP.</i>					
^c <i>“Attainment” means that the regulatory agency has determined based on established criteria, that the Air Basin meets the identified standard. “Non-attainment” means that the regulatory agency has determined that the Air Basin does not meet the standard. “Unclassified” means there is insufficient data to designate an area, or designations have yet to be made.</i>					
^d <i>California and Federal standard attainment status based on SCAQMD’s 2016 AQMP.</i>					
^e <i>An attainment re-designation request is pending.</i>					
<i>Source: Eyestone Environmental, 2019.</i>					

severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

(b) Particulate Matter (PM₁₀ 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 (PM₁₀) and even smaller particles with an aerodynamic diameter equal to or less than 2.5 microns (PM_{2.5}), can enter the body and are trapped in the nose, throat, and upper respiratory tract. These small particulates could potentially aggravate existing heart and lung diseases, change the body’s defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM₁₀ 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 (NO₂)

NO₂ 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 NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO₂ also contributes to the formation of PM₁₀. Nitrogen oxides irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_x is as a precursor to the formation of ozone.

(e) Sulfur Dioxide (SO₂)

Sulfur oxides (SO_x) are compounds of sulfur and oxygen molecules. SO₂ is the predominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO₂ include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of sulfur dioxide aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO₂ potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of sulfur dioxide, and long-term exposures to both pollutants leads to higher rates of respiratory illness.

(f) Lead (Pb)

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

(g) Sulfates (SO₄²⁻)

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

(h) Hydrogen Sulfide (H₂S)

H₂S 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 H₂S at levels above the state standard could result in exposure to a very disagreeable odor.

(2) Volatile Organic Compounds (VOCs)

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

(3) Toxic Air Contaminants (TACs)

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

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

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

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

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

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

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

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

c. Regulatory Framework

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

(1) Criteria Pollutants

(a) Federal

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

³ CARB, *Overview: Diesel Exhaust and Health*, www.arb.ca.gov/research/diesel/diesel-health.htm, accessed January 3, 2019.

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

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

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. Table IV.A-1 on page IV.A-3 shows the NAAQS currently in effect for each criteria pollutant and their relative attainment status. The Air Basin fails to meet national standards for O₃ and PM_{2.5} and, therefore, is considered a federal “non-attainment” area for these pollutants. In addition, Los Angeles County fails to meet the national standard for lead and, therefore, is considered a federal “non-attainment” area for lead.

(b) State

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. Table IV.A-1 includes the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the state. As shown in Table IV.A-1, the CAAQS include more stringent standards than the NAAQS. The Air Basin fails to meet state standards for O₃, PM₁₀, and PM_{2.5} and, therefore, is considered in “non-attainment” for these pollutants.

(i) Air Quality and Land Use Handbook

CARB published the Air Quality and Land Use Handbook (CARB Handbook) on April 28, 2005, to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions.⁶ 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,

⁶ CARB, *Air Quality and Land Use Handbook, a Community Health Perspective*, April 2005.

from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day;⁷ (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

(ii) California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by the state agencies pursuant to the Administrative Procedure Act. The 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)

SCAQMD shares responsibility with CARB for ensuring that all state and federal ambient air quality standards are achieved and maintained throughout the Air Basin. To meet the CAAQS and NAAQS, SCAQMD has adopted a series of Air Quality Management Plans (AQMPs). The 2016 AQMP incorporates the Southern California Association of Governments' (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) and updated emission inventory methodologies for various source categories. The 2016 AQMP also includes new federal

⁷ In November 2012, the Los Angeles City Planning Commission (CPC) issued an advisory notice (Zoning Information File No. 2427) regarding the siting of sensitive land uses within 1,000 feet of freeways. The CPC deemed 1,000 feet to be a conservative distance to evaluate projects that house populations considered to be more at-risk from the negative effects of air pollution caused by freeway proximity. The CPC advised that applicants of projects requiring discretionary approval, located within 1,000 feet of a freeway and contemplating residential units and other sensitive uses (e.g., hospitals, schools, retirement homes, etc.) perform a Health Risk Assessment (HRA). The Department of City Planning subsequently updated Zoning Information File No. 2427 on September 17, 2018 to no longer recommend preparation of HRAs for freeway-proximate projects, and to recommend consideration of various design features for projects within 1,000 feet of a freeway that may reduce air pollution exposure. The Project Site is not within 1,000 feet of a freeway and, therefore, would not be subject to this notice.

requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches.

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

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

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Air Basin, such as the Project. Instead, SCAQMD published the *CEQA Air Quality Handbook* in November 1993 to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects proposed in the Air Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*.⁸

In order to assist the CEQA practitioner in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/information is provided on the SCAQMD website (www.aqmd.gov/ceqa/hdbk.html) and includes: (1) 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. The SCAQMD also recommends using approved models to calculate emissions from land

⁸ SCAQMD, *Air Quality Analysis Handbook*, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed January 3, 2019.

use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

SCAQMD has also adopted land use planning guidelines in the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, which considers impacts to sensitive receptors from facilities that emit TAC emissions.⁹ SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity of freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

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

- SCAQMD Rule 403 requires projects to incorporate fugitive dust control measures at least as effectively as the following measures:
 - Use watering to control dust generation during the demolition of structures;
 - Clean-up mud and dirt carried onto paved streets from the site;
 - Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;
 - All haul trucks would be covered or would maintain at least 6 inches of freeboard;
 - All materials transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of spillage or dust;
 - Suspend earthmoving operations or implement additional watering to meet Rule 403 criteria if wind gusts exceed 25 mph; and
 - 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.

⁹ SCAQMD, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005.

- SCAQMD Rule 1113 limits the volatile organic compound content of architectural coatings.
- SCAQMD Rule 1121 specifies NO_x emission limits from residential type, natural-gas fired water heaters. This rule applies to water heaters with heat input rates less than 75,000 British Thermal Units (BTUs) per hour.
- SCAQMD Rule 1403 requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.
- SCAQMD Regulation XIII, New Source Review, requires new on-site facility nitrogen oxide emissions to be minimized through the use of emission control measures (e.g., use of best available control technology for new combustion sources such as boilers, emergency generators, and water heaters).

(ii) *Southern California Association of Governments (SCAG)*

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including 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.

SCAG adopted the 2016 RTP/SCS on April 7, 2016.^{10,11} The 2016 RTP/SCS reaffirms the land use policies that were incorporated into the 2012–2035 RTP/SCS. These foundational policies, which guided the development of the 2016 RTP/SCS’s strategies for land use, include the following:

¹⁰ SCAG, *Final 2016 RTP/SCS*.

¹¹ CARB, *Executive Order G-16-066, SCAG 2016 SCS ARB Acceptance of GHG Quantification Determination, June 2016*.

- Identify regional strategic areas for infill and investment;
- Structure the plan on a three-tiered system of centers development;¹²
- Develop “Complete Communities”;
- Develop nodes on a corridor;
- Plan for additional housing and jobs near transit;
- Plan for changing demand in types of housing;
- Continue to protect stable, existing single-family areas;
- Ensure adequate access to open space and preservation of habitat; and
- Incorporate local input and feedback on future growth.

The 2016 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked, and continued recognition of this close relationship will help the region make choices that sustain existing resources and expand efficiency, mobility, and accessibility for people across the region. In particular, the 2016 RTP/SCS draws a closer connection between where people live and work, and it offers a blueprint for how Southern California can grow more sustainably. The 2016 RTP/SCS also includes strategies focused on compact infill development and economic growth by building the infrastructure the region needs to promote the smooth flow of goods and easier access to jobs, services, educational facilities, healthcare and more.

The 2016 RTP/SCS states that the SCAG region is home to about 18.3 million people in 2012 and currently includes approximately 5.9 million homes and 7.4 million jobs. By 2040, the integrated growth forecast projects that these figures will increase by 3.8 million people, with nearly 1.5 million more homes and 2.4 million more jobs. High-Quality Transit Areas¹³ (HQTAs) will account for 3 percent of regional total land but are projected to accommodate 46 percent and 55 percent of future household and employment growth respectively between 2012 and 2040. The 2016 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region’s HQTAs.

¹² Complete language: “Identify strategic centers based on a three-tiered system of existing, planned and potential relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment.” A more detailed description of these strategies and policies can be found on pp. 90–92 of the SCAG 2008 Regional Transportation Plan, adopted in May 2008.

¹³ Defined by the 2016 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 mile of a well-served transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.

HQTAs are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability.

(d) Local

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

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

The Air Quality Element establishes six goals:

- Good air quality in an environment of continued population growth and healthy economic structure;
- Less reliance on single-occupant vehicles with fewer commute and non-work trips;
- Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques;
- Minimal impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation and air quality;

- Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting; and
- Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

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

(2) Toxic Air Contaminants

(a) State

The California Air Toxics Program¹⁴ was established in 1983, when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and OEHHA determine if a substance should be formally identified, or "listed," as a TAC in California. Since inception of the program, a number of such substances have been listed and include benzene, chloroform, formaldehyde, and particulate emissions from diesel-fueled engines, among others.¹⁵ In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants (HAPs) as TACs.

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources. In 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of

¹⁴ CARB, *California Air Toxics Program*, www.arb.ca.gov/toxics/toxics.htm, last reviewed by CARB June 8, 2018.

¹⁵ CARB, *Toxic Air Contaminant Identification List*, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.

where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given time.

In addition to limiting exhaust from idling trucks, CARB adopted regulations on July 26, 2007 for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles to reduce emissions by installation of diesel particulate filters and encouraging the replacement of older, dirtier engines with newer emission controlled models. Implementation is staggered based on fleet size, with the largest operators beginning compliance in 2014.¹⁶

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.

The *Air Quality and Land Use Handbook: A Community Health Perspective* provides important air quality information about certain types of facilities (e.g., freeways, refineries, rail yards, ports, etc.) that should be considered when siting sensitive land uses such as residences.¹⁷ CARB provides recommended site distances from certain types of facilities when considering siting new sensitive land uses. The recommendations are advisory and should not be interpreted as defined “buffer zones.” If a project is within the siting distance, CARB recommends further analysis. Where possible, CARB recommends a minimum separation between new sensitive land uses and existing sources.

(b) Regional

SCAQMD has adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

¹⁶ CARB, *In-Use Off-Road Diesel-Fueled Fleets Regulation*, www.arb.ca.gov/msprog/ordiesel/ordiesel.htm, last reviewed by CARB December 28, 2018.

¹⁷ CARB, *Air Quality and Land Use Handbook, a Community Health Perspective*, April 2005.

d. Existing Conditions

(1) Regional Air Quality

The Southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Air Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential.

The greatest air pollution throughout the Air Basin occurs from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Air Basin vary with location, season, and time of day. O₃ concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California. However, the Air Basin still fails to meet the national standards for O₃ and PM_{2.5}. In addition, Los Angeles County still fails to meet the national standard for lead.

SCAQMD has released an Air Basin-wide air toxics study (MATES-IV).¹⁸ The MATES-IV Study was aimed at estimating the cancer risk from toxic air emissions throughout the Air Basin by conducting a comprehensive monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to fully characterize health risks for those living in the Air Basin. The MATES-IV Study concluded that the average carcinogenic risk from air pollution in the Air Basin is approximately 420 in one million over a 70-year duration. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 68 percent of the risk is attributed to diesel particulate emissions, approximately 21 percent to other toxics associated with mobile sources (including benzene, butadiene, and carbonyls), and approximately 11 percent of all carcinogenic risk is attributed to stationary sources (which include large industrial operations, such as refineries and metal processing facilities, as well as smaller businesses, such as gas stations and chrome plating).

¹⁸ SCAQMD, *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV) Final Report*, May 2015.

As part of the MATES-IV Study, SCAQMD prepared a series of maps that shows regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps' estimates represent the number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years) in parts of the area. The MATES-IV map is the most recently available map to represent existing conditions near the Project area. The 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.¹⁹ Generally, the risk from air toxics is lower near the coastline and higher risks are concentrated near large diesel sources (e.g., freeways, airports, and ports).

(2) Local Air Quality

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

(a) Existing Pollutant Levels at Nearby Monitoring Stations

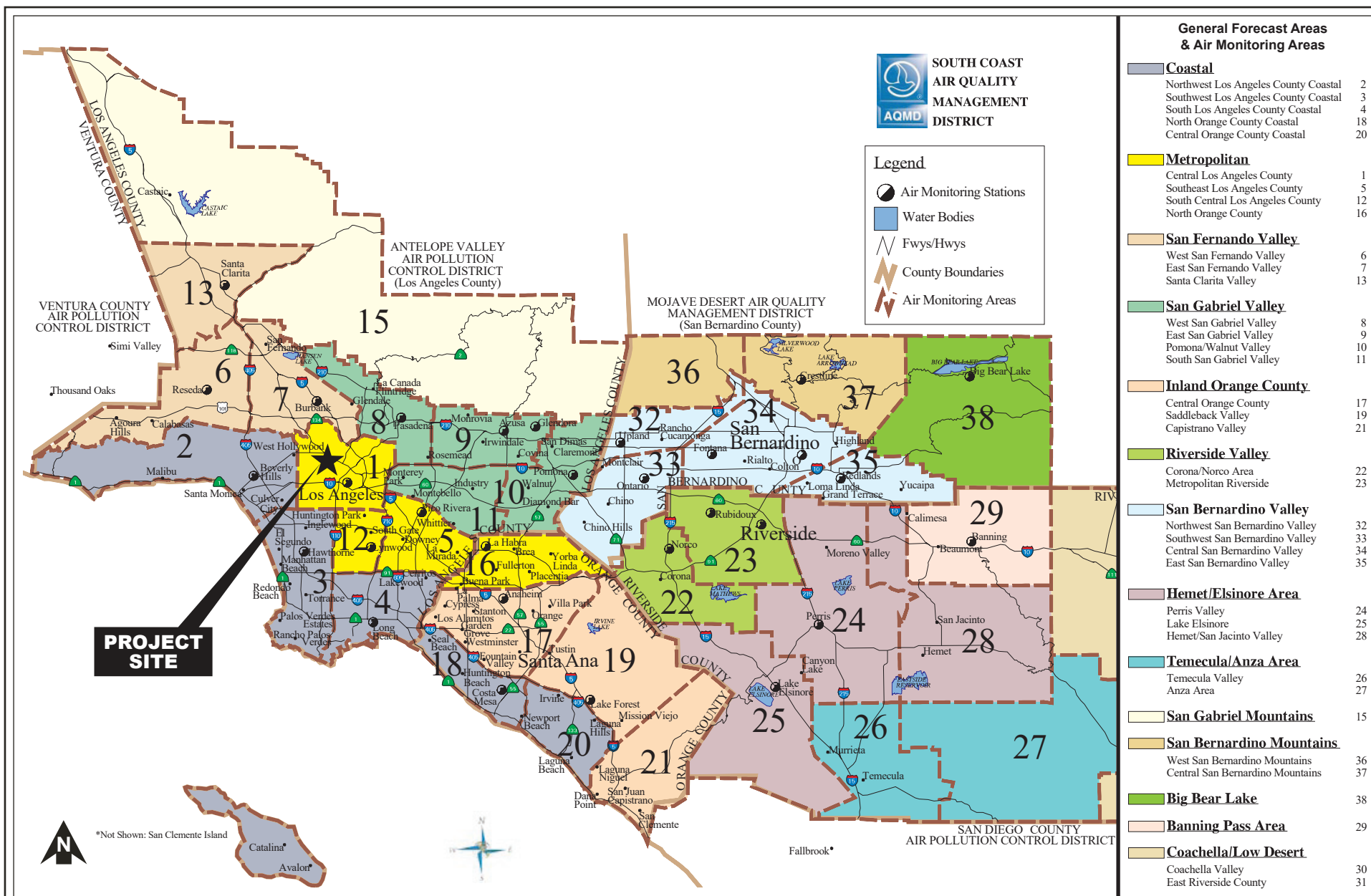
SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin and has divided the Air Basin into 27 source receptor areas (SRAs) in which 31 monitoring stations operate. Figure IV.A-1 on page IV.A-19 shows the locations of the SRAs located in Los Angeles County. The Project Site is located within SRA 1, which covers the Central Los Angeles area. The monitoring station most representative of the Project Site is the North Main Street Station, located at 1630 North Main Street in the City of Los Angeles, approximately six miles southeast of the Project Site. Criteria pollutants monitored at this station include PM₁₀, PM_{2.5}, O₃, CO, NO₂, lead, and sulfate. Table IV.A-2 on page IV.A-20 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at these stations through the period of 2015–2017.

(b) Existing Health Risk in the Surrounding Area

As shown in Figure IV.A-2 on page IV.A-22, based on the MATES-IV model, the calculated cancer risk in the Project area is approximately 1,150 in one million.²⁰ The

¹⁹ SCAQMD, *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV), MATES IV Interactive Carcinogenicity Map*, 2015.

²⁰ SCAQMD, *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV), MATES IV Interactive Carcinogenicity Map*, 2015.



Source: Sierra Wade Associates, 2010.

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

Pollutant	Year		
	2015	2016	2017
Ozone (O₃)			
Maximum 1-hour Concentration (ppm)	0.10	0.10	0.12
Days exceeding CAAQS (0.09 ppm)	2	2	6
Maximum 8-hour Concentration (ppm)	0.07	0.08	0.09
Days exceeding NAAQS (0.070 ppm)	6	4	14
Days exceeding CAAQS (0.07 ppm)	6	4	14
Respirable Particulate Matter (PM₁₀)			
Maximum 24-hour Concentration (µg/m ³)	88	67	96
Days exceeding NAAQS (150 µg/m ³)	0	0	0
Days exceeding CAAQS (50 µg/m ³)	26	18	41
Annual Arithmetic Mean (µg/m ³)	33	32.4	34
Does measured AAM exceed CAAQS (20 µg/m ³)?	Yes	Yes	Yes
Fine Particulate Matter (PM_{2.5})			
Maximum 24-hour Concentration (µg/m ³)	56	44	49
Days exceeding NAAQS (35 µg/m ³)	7	2	5
Annual Arithmetic Mean (µg/m ³)	12.4	11.8	11.9
Does measured AAM exceed NAAQS (12 µg/m ³)?	Yes	No	No
Does measured AAM exceed CAAQS (12 µg/m ³)?	Yes	No	No
Carbon Monoxide (CO)			
Maximum 1-hour Concentration (ppm)	3.2	1.9	1.9
Days exceeding NAAQS (35.0 ppm)	0	0	0
Days exceeding CAAQS (20.0 ppm)	0	0	0
Maximum 8-hour Concentration (ppm)	1.8	1.4	1.6
Days exceeding NAAQS and CAAQS (9 ppm)	0	0	0
Nitrogen Dioxide (NO₂)			
Maximum 1-hour Concentration (ppm)	0.08	0.06	0.08
Days exceeding CAAQS (0.18 ppm)	0	0	0
Annual Arithmetic Mean (ppm)	0.02	0.02	0.02
Does measured AAM exceed NAAQS (0.0534 ppm)?	No	No	No
Does measured AAM exceed CAAQS (0.03 ppm)?	No	No	No
Sulfur Dioxide (SO₂)			
Maximum 1-hour Concentration (ppm)	0.01	0.01	0.01
Days exceeding CAAQS (0.25 ppm)	0	0	0
Maximum 24-hour concentration (ppm)	N/A	N/A	N/A
Days exceeding CAAQS (0.04 ppm)	0	N/A	N/A
Days exceeding NAAQS (0.14 ppm)	0	N/A	N/A
Annual Arithmetic Mean (ppm)	N/A	N/A	N/A
Does measured AAM exceed NAAQS (0.030 ppm)?	0	N/A	N/A

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

Pollutant	Year		
	2015	2016	2017
Lead			
Maximum 30-day Average Concentration ($\mu\text{g}/\text{m}^3$)	0.01	0.02	0.02
Does measured concentration exceed NAAQS ($1.5 \mu\text{g}/\text{m}^3$)	No	No	No
Maximum Calendar Quarter Concentration ($\mu\text{g}/\text{m}^3$)	0.01	0.01	0.01
Does measured concentration exceed CAAQS ($1.5 \mu\text{g}/\text{m}^3$)	No	No	No
Sulfate			
Maximum 24-hour Concentration ($\mu\text{g}/\text{m}^3$)	6.1	5.8	5.1
Does measured concentration exceed CAAQS ($25 \mu\text{g}/\text{m}^3$)	No	No	No
<p>AAM = annual arithmetic mean ppm = parts per million by volume $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter Source: South Coast Air Quality Management District Ambient Monitoring Data (2015–2017), www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed January 3, 2019.</p>			

cancer risk in this area is predominately related to nearby sources of diesel particulate (e.g., the US-101 freeway). In general, the risk at the Project Site is comparable with other urbanized areas in Los Angeles.

The OEHHA, on behalf of the CalEPA, provides a screening tool (CalEnviroScreen) that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution. According to CalEnviroScreen, the Project Site is located in the 91st to 100th percentile, which means that the Project Site is worse than average in terms of pollution in comparison to other communities within California.²¹

SCAQMD developed a web tool which allows one to search for public information about SCAQMD-regulated facilities that are required to have a permit to operate equipment that release pollutants into the air.²² Potential sources of TACs within the Project Site vicinity were identified using SCAQMD's Facility Information Database (FIND) search and site reconnaissance to identify potential non-permitted air toxic emitting sources (e.g., freeways, diesel trucks idling at warehouse distribution facilities in excess of 100 trucks per

²¹ OEHHA, *CalEnviroScreen 3.0 MAP*, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>, accessed March 7, 2019.

²² SCAQMD, *Facility Information Detail (F.I.N.D.)*, www.aqmd.gov/nav/FIND, accessed March 7, 2019.

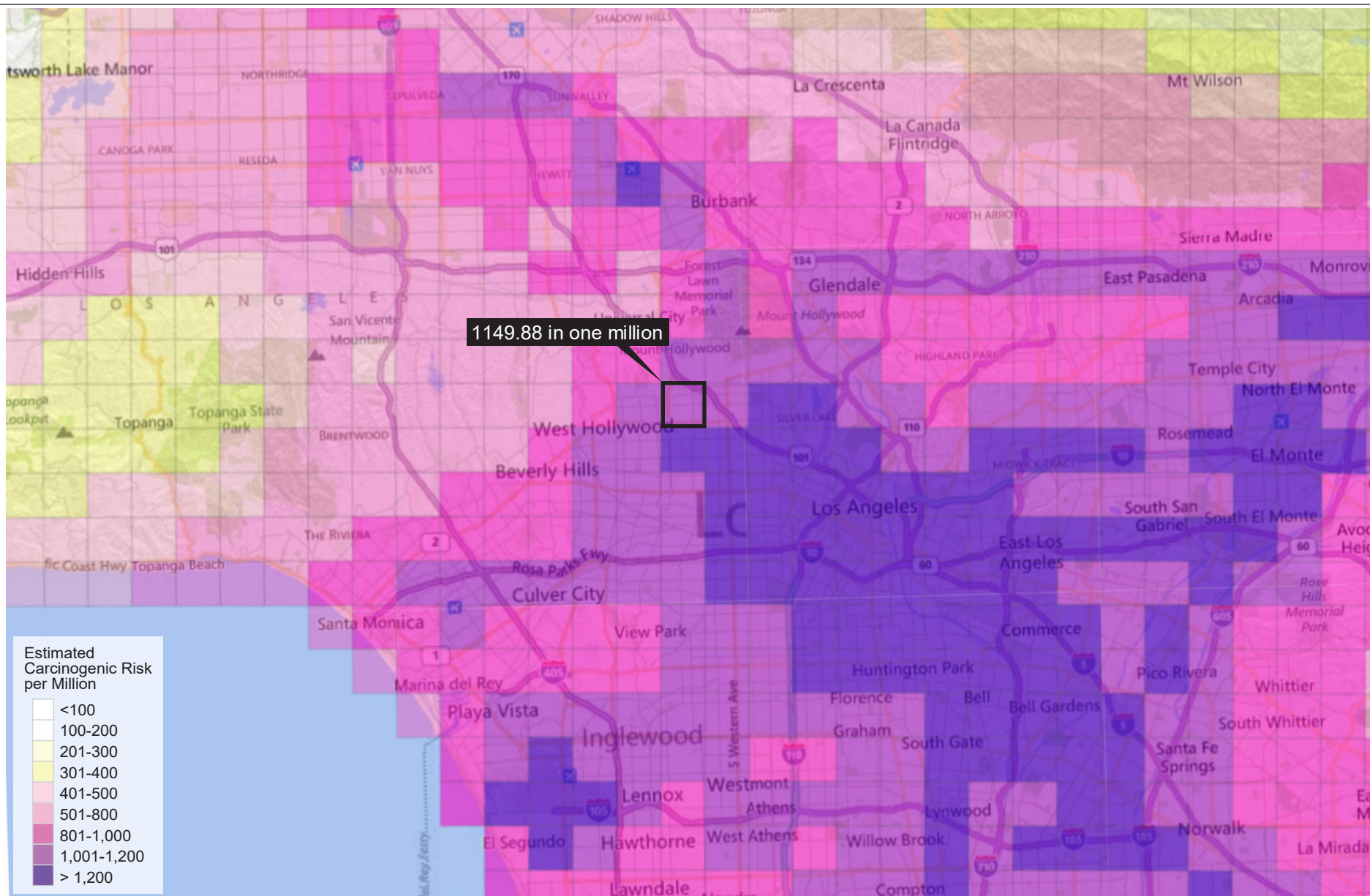


Figure IV.A-2
MATES IV Total Cancer Risk for Project Area

day). Based on this information, no substantial permitted stationary sources (e.g., gasoline stations, dry cleaners, chrome plating operations) of TAC emissions within the Project Site vicinity were identified.

(c) Surrounding Uses

As shown in Figure II-2 on page II-4, in Section II, Project Description, of this Draft EIR, the Project Site is located in an urbanized area. The Project Site is surrounded by a mix of residential and commercial uses. Uses to the south of the Project Site include the Hollywood Palladium and the site of the recently approved Palladium Residences. The Columbia Square mixed-use project is located one block east and the Camden Hollywood mixed-use project is to the west. To the north are the Eastown Apartments, 1600 Vine, and W Hollywood, all of which contain residential uses.

(d) Sensitive Uses

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. Existing and future sensitive land uses near the Project Site are shown in Figure IV.A-3 on page IV.A-24, and include the following:

- Residential uses located west and northwest of the Project Site, across Argyle Avenue
- Residential uses located east of the Project site, across El Centro Avenue.
- Future multi-family residential uses: A future mixed use project (Palladium Residences) is located adjacent to the southern boundary of the Project Site.

All other air quality sensitive receptors are located at greater distances from the Project Site, and would be less impacted by Project emissions. Therefore, Project impacts are quantified for these sensitive receptors.

(e) Existing Project Site Emissions

The Project Site is currently developed with six commercial buildings which are occupied by audio/video equipment rental and sales business, offices, a commercial printing shop and surface parking. Area source emissions are generated by maintenance equipment, landscape equipment, and use of products that contain solvents. Energy source emissions are typically associated with building natural gas usage. Mobile source emissions are generated by motor vehicle trips to and from the Project Site. Table IV.A-3 on page IV.A-25 presents an estimate of the existing emissions within the Project Site.



Figure IV.A-3
Air Quality Sensitive Receptor Locations

Table IV.A-3
Estimated Daily Regional Operational Criteria Pollutant Emissions—Baseline^a

Emission Source	Pollutant Emissions (pounds per day)					
	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	4	11	<1	1	<1
Total Existing Emissions^a	3	4	11	<1	1	<1
<p>Numbers may not add up exactly due to rounding.</p> <p>^a The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this Draft EIR.</p> <p>Source: Eyestone Environmental, 2019.</p>						

3. Project Impacts

a. Thresholds of Significance

(1) State CEQA Guidelines Appendix G

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

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

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

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

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

(2) 2006 L.A. CEQA Thresholds Guide

To assist in answering the Appendix G Threshold questions and thresholds provided by SCAQMD, this analysis utilizes factors and considerations identified below from the

2006 *L.A. CEQA Thresholds Guide*, as appropriate. The *L.A. CEQA Thresholds Guide* identifies the following criteria to evaluate air quality impacts:

(a) Construction

(i) Combustion Emissions from Construction Equipment

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

(ii) Fugitive Dust—Grading, Excavation and Hauling

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

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

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

(iv) Other Mobile Source Emissions

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

(b) Operation

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

Pollutant	Significance Threshold (lbs/day)
ROG	55
NO _x	55
CO	550
PM ₁₀	150
SO _x	150

- Either of the following conditions would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:
 - The proposed project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 parts per million (ppm), respectively; or
 - The incremental increase due to the project is equal to or greater than 1.0 ppm for the California 1-hour CO standard, or 0.45 ppm for the 8-hour CO standard.
- The project creates an objectionable odor at the nearest sensitive receptor.

(c) Toxic Air Contaminants

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

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

(3) SCAQMD's CEQA Air Quality Handbook

To assist in answering the Appendix G Threshold questions and thresholds provided by the SCAQMD, the City of Los Angeles utilizes SCAQMD's *CEQA Air Quality Handbook* and the thresholds of significance below as the guidance documents for the environmental review of development proposals within the Air Basin. Table IV.A-4 on page IV.A-28 shows the currently recommended supplemental thresholds by SCAQMD in the *CEQA Air Quality*

**Table IV.A-4
SCAQMD Air Quality Significance Thresholds**

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants		
NO₂ 1-hour average Annual Arithmetic Mean	SCAQMD is in attainment; project is significant if It causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM₁₀ 24-hour average Annual Average	10.4 µg/m3 (construction)e & 2.5 µg/m3 (operation) 1.0 µg/m3	
PM_{2.5} 24-hour average	10.4 µg/m3 (construction)e & 2.5 µg/m3 (operation)	
SO₂ 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal—99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m3 (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average Rolling 3-month average	1.5 µg/m3 (state) 0.15 µg/m3 (federal)	
<hr/> <i>lbs/day = pounds per day</i>		
^a SCAQMD CEQA Handbook (SCAQMD, 1993)		
^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).		
^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.		
Source: South Coast Air Quality Management District, 2015.		

Handbook, which is intended to translate the CEQA Guidelines thresholds into numerical values or performance standards.

(a) Construction

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*,²³ the Project may 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 SCAQMD prescribed threshold levels identified in Table IV.A-4 on page IV.A-28.
- Maximum on-site daily localized emissions exceed the Localized Significance Thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m³] over a 1-hour period or 9.0 ppm [10,350 µg/m³] averaged over an 8-hour period) and NO₂ (0.18 ppm [338.4 µg/m³] over a 1-hour period, 0.1 ppm [188 µg/m³] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [56.4 µg/m³] averaged over an annual period).
- Maximum on-site localized PM₁₀ or PM_{2.5} emissions during construction exceed the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed the incremental 24-hr threshold of 10.4 µg/m³ or 1.0 µg/m³ PM₁₀ averaged over an annual period.

(b) Operation

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*,²⁴ the Project may have a significant impact with regard to operational on emissions if any of the following would occur:

- Regional emissions from both direct and indirect sources would exceed any of the SCAQMD prescribed threshold levels identified in Table IV.A-4.
- Maximum on-site daily localized emissions exceed the Localized Significance Thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an

²³ SCAQMD, *CEQA Air Quality Handbook*.

²⁴ SCAQMD, *CEQA Air Quality Handbook*.

8-hour period) and NO₂ (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).²⁵

- Maximum on-site localized operational PM₁₀ and PM_{2.5} emissions exceed the incremental 24-hr threshold of 2.5 µg/m³ or 1.0 µg/m³ PM₁₀ averaged over an annual period.²⁶
- The Project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively; or
- The Project creates an odor nuisance pursuant to SCAQMD Rule 402 (i.e., objectionable odor at the nearest sensitive receptor).

(c) Toxic Air Contaminants

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*, the Project may have a significant toxic air contaminant impact, if:²⁷

- The Project emits carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk as provided in Table IV.A-4 on page IV.A-28.

In assessing impacts related to TACs in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the *L.A. CEQA Thresholds Guide* will be used where applicable and relevant to assist in analyzing the Appendix G thresholds. In addition, the following criteria set forth in SCAQMD's *CEQA Air Quality Handbook* serve as quantitative air quality standards to be used to evaluate project impacts under Appendix G thresholds:²⁸

- 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 1.0.²⁹ For projects with a maximum

²⁵ SCAQMD, *LST Methodology*.

²⁶ SCAQMD, *Final-Methodology to Calculate Particulate Matter (PM) 2.5 and PM_{2.5} Significance Thresholds*, October 2006.

²⁷ SCAQMD, *CEQA Air Quality Handbook*, Chapter 6 (Determining the Air Quality Significance of a project) and Chapter 10 (Assessing Toxic Air Pollutants), April 1993.

²⁸ SCAQMD, *CEQA Air Quality Handbook*, April 1993, Chapter 6 (Determining the Air Quality Significance of a Project) and Chapter 10 (Assessing Toxic Air Pollutants).

²⁹ Hazard index is the ratio of a toxic air contaminant's concentration divided by its Reference Concentration, or safe exposure level. If the hazard index exceeds one, people are exposed to levels of TACs that may pose noncancer health risks.

incremental cancer risk between 1 in one million and 10 in one million, a project would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

(d) Consistency with Applicable Air Quality Plans

Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with SCAQMD's *CEQA Air Quality Handbook*,³⁰ the following criteria were used to evaluate the Project's consistency with SCAQMD and SCAG regional plans and policies, including the AQMP:

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

³⁰ SCAQMD, *CEQA Air Quality Handbook*, April 1993, p. 12-3.

- 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 AQMP control measures?

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

(e) Cumulative Impacts

Based on SCAQMD guidance, individual construction projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment.³¹ As discussed in the SCAQMD's White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution (August 2003):

As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR.... Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.³²

The cumulative analysis of air quality impacts within this Draft EIR follows SCAQMD's guidance such that construction or operational Project emissions will be considered cumulatively considerable if Project-specific emissions exceed an applicable SCAQMD recommended daily threshold.

³¹ Jillian Wong, SCAQMD CEQA Specialist, personal communication, August 8, 2016.

³² White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. Appendix D, South Coast Air Quality Management District, August 2003.

b. Methodology

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

(1) Construction

(a) Regional Emissions

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

(b) Localized Emissions

The localized effects from the on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to SCAQMD's localized significance thresholds (LST) methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling, where appropriate.³³ SCAQMD provides LSTs applicable to the following criteria pollutants: NO_x; CO; PM₁₀; and PM_{2.5}. SCAQMD does not provide an LST for SO₂ 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 O₃ 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

³³ SCAQMD, *LST Methodology Appendix C-Mass Rate LST Look-Up Table*, October 2009.

used to determine whether or not a project may generate significant adverse localized air quality impacts. SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to five acres. If the project exceeds the LST look-up values, then SCAQMD recommends that project-specific air quality modeling must be performed.

(2) Operation

(a) Regional Emissions

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

Similar to construction, SCAQMD's CalEEMod software was used for the evaluation of Project emissions during operation. CalEEMod was used to calculate on-road fugitive dust, architectural coatings, landscape equipment, energy use, mobile source, and stationary source emissions. To determine if a significant air quality impact would occur, the net increase in regional operational emissions generated by the Project was compared against SCAQMD's significance thresholds.³⁴ Refer to Appendix B of this Draft EIR for additional information regarding methodology.

The Project includes 276 residential units, 13 (5 percent of the Project Site's base density) of which would be restricted to Very Low Income households and approximately 24,000 square feet of neighborhood-serving commercial retail and restaurant uses. Alternatively, an approximately 27,000 square-foot grocery store could be constructed in lieu of the proposed retail and restaurant uses. Both options would include up to 412 vehicle parking spaces.³⁵ For purposes of this analysis, the Project's proposed retail and

³⁴ SCAQMD, *SCAQMD Air Quality Significance Thresholds*, revised March 2015. SCAQMD based these thresholds, in part, on the federal Clean Air Act and, to enable defining "significant" for CEQA purposes, defined the setting as the South Coast Air Basin. (See SCAQMD, *CEQA Air Quality Handbook*, April 1993, pp. 6-1-6-2.).

³⁵ The number of required parking spaces, before accounting for potential bicycle parking reductions, would be 358 for the retail/restaurant option and 364 spaces for the grocery store option.

restaurant option was analyzed, as it is the more conservative option due to greater number of mobile trips.

(b) Localized Emissions

(i) On-Site Emissions

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

(ii) Off-Site Emissions

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

It has long been recognized that CO exceedances are caused by vehicular emissions,³⁶ primarily when idling at intersections.^{37,38} 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.³⁹ Currently, the CO standard in California is a maximum of 3.4 grams/mile for passenger cars (with provisions for certain cars to emit even less).⁴⁰ With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the Air Basin have steadily declined.

The analysis prepared for CO attainment in the Air Basin by SCAQMD can be used to assist in evaluating the potential for CO exceedances in the Air Basin. CO attainment was thoroughly analyzed as part of SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).⁴¹

³⁶ USEPA. 2000. *Air Quality Criteria for Carbon Monoxide*. EPA 600/P-099/001F.

³⁷ SCAQMD. 1993. *CEQA Air Quality Handbook*. Section 4.5.

³⁸ SCAQMD. 2003. *Air Quality Management Plan*.

³⁹ USEPA, *Milestone in Auto Emissions Control, Fact Sheet*, August 1994.

⁴⁰ 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.

⁴¹ SCAQMD, 1992. *Federal Attainment Plan for Carbon Monoxide*.

In the 1992 CO Plan, a CO hot spot analysis was conducted for the four worst-case scenario 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 peak modeled CO concentrations due to vehicle emissions occurred at the intersection of Wilshire Boulevard and Veteran Avenue, which had a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1 hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.⁴² The Los Angeles County Metropolitan Transportation Authority (Metro) evaluated the level of service (LOS) in the vicinity of the Wilshire Boulevard and Veteran Avenue intersection and found it to be Level E at peak morning traffic and Level F at peak afternoon traffic.^{43,44} If a project intersection does not exceed 400,000 vehicles per day, then the project does not need to prepare a detailed CO hot spot analysis using California LINE Source Dispersion Model, version 4 (CALINE4).⁴⁵ If the screening method does not rule out significant impacts for an intersection, then detailed analysis using CALINE4 is conducted.

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

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

⁴² Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

⁴³ The Metropolitan Transportation Authority measured traffic volumes and calculated the LOS for the intersection Wilshire Blvd/ Sepulveda Ave. which is a block west along Wilshire Blvd., still east of Highway 405.

⁴⁴ Metropolitan Transportation Authority. 2004. Congestion Management Program for Los Angeles County. Exhibit 2-6 and Appendix A.

⁴⁵ CALINE4 is a Caltrans software that is used to conduct intersection specific CO hot spot analyses.

c. Analysis of Project Impacts

(1) Project Design Features

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

(2) Project Impacts

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

(a) SCAQMD CEQA Air Quality Handbook Policy Analysis

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

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

(i) Criterion 1

With respect to the first criterion, as discussed under the analysis for Threshold (c) below, localized concentrations of NO₂ as NO_x, CO, PM₁₀, and PM_{2.5} have been analyzed for the Project. SO₂ 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 SO₂ 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 O₃ formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

Particulate matter is the primary pollutant of concern during construction activities, and therefore, the Project's PM₁₀ 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 PM₁₀ and PM_{2.5}. As shown in Table IV.A-7 on page IV.A-52 in the analysis below, **the increases in PM₁₀ and PM_{2.5} emissions during construction would not exceed the SCAQMD-recommended significance thresholds at sensitive receptors in proximity to the Project Site.**

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

Because the Project would not introduce any substantial stationary sources of emissions, CO is the preferred benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.⁴⁶ As indicated below, no intersections would require a CO hotspot analysis, and impacts would be less than significant. **Therefore, the Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.**

An analysis of potential localized operational impacts from on-site activities was also conducted. As shown in Table IV.A-8 on page IV.A-53 in the analysis below, localized NO₂ as NO_x, CO, PM₁₀, and PM_{2.5} operational impacts would be less than significant.

⁴⁶ SCAQMD, *CEQA Air Quality Handbook*, Chapter 12, *Assessing Consistency with Applicable Regional Plans*, 1993.

Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.

(ii) Criterion 2

With respect to the second criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016 RTP/SCS regarding population, housing, and growth trends. 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 control measures. The following discussion provides an analysis with respect to each of these three criteria.

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

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

As described in Section IV.D, Land Use, of this Draft EIR, the General Plan of the City of Los Angeles serves as a comprehensive, long-term plan for future development of the City. Refer to Subsection 3.c.2.b, City of Los Angeles Policies, below, for a discussion of the Project's consistency with applicable goals, objectives, and policies of the City's General Plan Air Quality Element.

The 2016 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. According to the 2016 RTP/SCS, the forecasted population for the City of Los Angeles Subregion in 2017 was approximately 3,981,911 persons.⁴⁷ In 2023, the projected

⁴⁷ Based on a linear interpolation of 2012–2040 data.

occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have a population of approximately 4,145,604 persons.⁴⁸ Based on a household size factor of 2.43 persons per household for multi-family housing units, the Project is estimated to generate a residential population of 671 persons at full buildout.⁴⁹ The estimated 671 net new residents generated by the Project would represent approximately 0.41 percent of the population growth forecasted by SCAG in the City of Los Angeles Subregion between 2016 and 2023. Development of the Project would result in approximately 73 employment positions on the Project Site, based on employee generation rates developed by the Los Angeles Unified School District (LAUSD). This employee generation is based on the grocery store option, which has a higher employee generation as compared to the neighborhood-serving commercial retail and restaurant option, which generates 65 employment positions due to less square footage.⁵⁰ According to the 2016 RTP/SCS, the employment forecast for the City of Los Angeles Subregion in 2017 was approximately 1,780,811 employees.⁵¹ In 2023, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have approximately 1,882,104 employees.⁵² Thus, the Project's estimated 73 employees would constitute approximately 0.06 percent of the employment growth forecasted between 2017 and 2023. Accordingly, the Project's generation of residents and employees would be consistent with, within the parameters of, and not exceed the population and employment projections contained in the 2016 RTP/SCS. **As similar population and employment projections in the 2016 RTP/SCS form the basis for the projections of air pollutant emissions in the 2016 AQMP, it can be concluded that the Project would be consistent with the projections in the AQMP.**

- Does the project implement feasible air quality mitigation measures?

The Project would comply with all applicable regulatory standards (e.g., SCAQMD Rule 403, etc.) as required by SCAQMD, as summarized above. The Project also would incorporate project design features to support and promote environmental sustainability as discussed in Section IV.C, 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

⁴⁸ Based on a linear interpolation of 2012–2040 data.

⁴⁹ Based on a 2.43 persons per household rate for multi-family units based on the 2016 American Community Survey 5-Year Average Estimate (2012–2016) per correspondence with Jack Tsao, Los Angeles Department of City Planning Demographics Unit, March 8, 2018.

⁵⁰ Los Angeles Unified School District, 2018 Developer Fee Justification Study, March 2018, Table 14. Based on the employee generation rate for "Neighborhood Shopping Center" land uses, which is 0.00271 employee per average square foot.

⁵¹ Based on a linear interpolation of 2012–2040 data.

⁵² Based on a linear interpolation of 2012–2040 data.

with the regulatory requirements identified above and in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, no significant air quality impacts would occur. **As such, the Project meets this AQMP consistency criterion.**

- To what extent is project development consistent with AQMP control measures?

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

With regard to land use developments, such as the Project, the 2016–2040 RTP/SCS land use control measures (i.e., goals and policies) focus on the reduction of vehicle trips and vehicle miles traveled (VMT). As discussed in detail in Section IV.C, Greenhouse Gas Emissions, of the Draft EIR, the 2016–2040 RTP/SCS includes, for the SCAG region as a whole, a daily 22.8 Total VMT per capita for the 2012 Base Year, and a daily 20.5 Total VMT per capita for the 2040 Plan Year. For Los Angeles County, the 2012 Base Year projected daily Total VMT per capita is 21.5 and 18.4 daily Total VMT per capita for the 2040 Plan Year. To analyze the Project's consistency with this aspect of the 2016–2040 RTP/SCS, the Project's Total Daily VMT was divided by the Project's service population to arrive at the Daily VMT per capita. As shown in Table IV.C-7 on page IV.C-66 of Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, the Total Project VMT per capita of 10.4 VMT per day would be well below the Los Angeles County goals provided in the 2016–2040 RTP/SCS. It should be noted that the above VMT per capita calculation is provided for informational purposes only, to demonstrate the Project's consistency with the 2016 RTP/SCS, and is not considered a threshold of significance (as no such numeric thresholds have been adopted by the City).⁵³

The Project represents an infill development within an existing urbanized area that would concentrate new residential and commercial retail and restaurant uses within an HQT. Therefore, the Project would be consistent with SCAG's 2016–2040 RTP/SCS, as it is located within an HQT. The Project would be designed and constructed with sustainability and transit orientation as guiding principles. The Project Site is located approximately 0.28 mile southeast of the Metro Red Line Hollywood/Vine Station. In

⁵³ *As this calculation is provided for informational purposes only and is not being utilized as a significance threshold, the analysis is consistent with the holding of Golden Door Properties, LLC v. County of San Diego/Sierra Club, LLC v. County of San Diego (2018) 27 Cal.App.5th 892.*

addition, the Project Site is served by one Metro Rapid line, seven Metro Local lines, and three Los Angeles Department of Transportation (LADOT) Downtown Area Shuttle (DASH) lines. The Project would also provide required short- and long-term bicycle parking spaces in compliance with the requirements of the Los Angeles Municipal Code (LAMC). As shown in Appendix B, of this Draft EIR, the Project design includes characteristics that would reduce trips and VMT as calculated internal to the air quality model (CalEEMod). While these Project characteristics primarily reduce greenhouse gas emissions, they would also reduce criteria air pollutants discussed herein. These relative reductions in vehicle trips and VMT from a standard project within the air basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project in any infill, HQTa area that promotes alternative modes of transportation. Specifically, the Project characteristics listed below were input into CalEEMod and are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*,⁵⁴ which identifies the VMT and vehicle trips reductions for the Project Site relative to the standard trip and VMT rates in CalEEMod, which corresponds to reduction relative GHG emissions. Measures applicable to the Project include the following:

- **CAPCOA Measure LUT-1—Increase Density:** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduced emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services. The Project would increase the site density from zero dwelling units per acre and 152 jobs per acre to approximately 251 dwelling units per acre and 66 jobs per acre.
- **CAPCOA Measure LUT-3—Increase Diversity of Urban and Suburban Developments (Mixed-Uses):** The Project would introduce new uses on the Project Site, including *new* residential and commercial uses in proximity to other existing off-site residential and commercial uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation (i.e., walking and biking), which would result in corresponding reductions in transportation-related emissions.
- **CAPCOA Measure LUT-5—Increase Transit Accessibility:** The Project would be located approximately 0.28 miles from the Metro Red Line Hollywood/Vine Station. In addition, the Project Site is served by one Metro Rapid line, seven Metro Local lines, and three LADOT DASH lines. The Project would also provide bicycle parking spaces for the proposed uses to encourage utilization of alternative modes of transportation.

⁵⁴ CAPCOA, *Quantifying Greenhouse Gas Mitigation Measures*, 2010.

- **CAPCOA Measure LUT-6—Integrate Affordable and Below Market Rate Housing:** Below market rate housing provides greater opportunity for people to live closer to job centers and to accommodate more people in urban infill areas. The Project would include 13 affordable units (5 percent of the Project Site's base density) that would be restricted to Very Low Income households. CAPCOA guidelines reference a correlation between income and probability that a commuter will transit or walk to work. Affordable housing would provide greater opportunity for lower income families to live closer to job centers and utilize mass transit. This would result in an increase in alternative transit usage and a corresponding reduction in transportation-related emissions as lower income families tend to have lower levels of auto ownership.
- **CAPCOA Measure LUT-9—Improve Design of Development:** The Project would remove the existing warehouse, office, and commercial uses and enhance the pedestrian environment by developing a mix of uses to improve pedestrian activation of the street.
- **CAPCOA Measure SDT-1—Provide Pedestrian Network Improvements:** Project design would provide pedestrian access that minimizes barriers and links the Project Site with existing or planned external streets to encourage people to walk instead of drive. Specifically, the Project would be integrated into the Argyle Avenue and Selma Avenue street frontages by siting neighborhood-serving commercial uses on the ground level and providing a more pedestrian-friendly building design and streetscape.

The Project results in a VMT reduction of approximately 61 percent (see Appendix B of this Draft EIR) compared to a Project without Reduction Features. This reduction in VMT is substantially better than the goals of the 2016–2040 RTP/SCS with an estimated 18-percent decrease in per capita GHG emissions from passenger vehicles by 2035 and 21-percent decrease in per capita GHG emissions from passenger vehicles by 2040.⁵⁵ Implementation of these sustainability features would contribute to a reduction in air quality emissions via a reduction in VMT. **Accordingly, as the Project would support SCAG's and SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project is consistent with the 2016 RTP/SCS (i.e., control measures of the AQMP).**

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of the Project on air quality in the Air Basin. The Project represents

⁵⁵ CARB updated the SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035. Implementation of the 2016 RTP/SCS or the next plan is expected to fulfill and exceed the region's obligations under SB 375 with respect to meeting the State's VMT and related GHG emission reduction goals.

an infill development near transit within an existing urbanized area that would concentrate new residential and commercial retail and restaurant uses within an HQTAs, thus reducing VMT. The Project would not have a significant long-term impact on the region's ability to meet state and federal air quality standards. The Project would comply with SCAQMD Rule 403 and would implement measures for control of NO_x, PM₁₀, and PM_{2.5}. The Project would also be consistent with the goals and policies of the AQMP for the control of fugitive dust. As discussed above, the Project's would be consistent with the goals and policies of the AQMP and, therefore, is considered consistent with SCAQMD's AQMP.

(b) City of Los Angeles Policies

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

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

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

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

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

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

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

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

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

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

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

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

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

The Project would promote the General Plan Air Quality Element goals, objectives and policies, as discussed in Section IV.D, Land Use, of this Draft EIR. In particular, the Project includes short- and long-term bicycle parking spaces for the proposed residential and commercial uses as required by the LAMC. As such, the Project would provide opportunities for the use of alternative modes of transportation, including convenient access to public transit and opportunities for walking and biking, thereby facilitating a reduction in VMT. In addition, the Project would be consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near transit options, including the Metro Red Line Hollywood/Vine Station, located approximately 0.28 mile from the Project Site as well as one Metro Rapid line, seven Metro Local lines, and three LADOT DASH lines. The Project also includes primary entrances for pedestrians and bicyclists that would be safe, easily accessible, and a short distance from transit stops.

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

(c) Conclusion

In conclusion, analysis of Threshold (a) was based on the Project’s consistency with the AQMP as well as the City of Los Angeles policies. With regard to AQMP consistency, which is primarily concerned with the long-term influence of the Project on air quality in the Air Basin, the Project would not increase the

frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. In addition, because the Project includes similar growth projections that form the basis of the 2016 AQMP, it can be concluded that the Project would be consistent with the projections in the AQMP. Furthermore, while the Project does not implement any air quality mitigation measures, the Project would comply with all applicable regulatory standards and would incorporate the project design features in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, that would serve to reduce the criteria air pollutants discussed herein. Additionally, as the Project would support the City of Los Angeles and SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project would be consistent with AQMP control measures. Thus, the Project would not conflict with or obstruct implementation of the AQMP. With regard to the City of Los Angeles policies, as discussed above, the Project would serve to implement applicable policies of the City of Los Angeles pertaining to air quality. Based on the above, impacts to Threshold (a) would be less than significant.

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

(a) Regional Emissions

(i) Construction

As described in Section II, Project Description, of this Draft EIR, construction of the Project is estimated to require 30 months, with construction completed in 2023. Subphases of construction would include demolition of all existing structures and features on-site, site clearing, grading, excavation and building construction. Construction activities would require that approximately 89,000 cubic yards of export materials be hauled from the Project Site during the demolition and excavation phase.

Construction of the Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO_x, would result from the use of construction equipment, such as dozers, loaders, and cranes. During the finishing phase of the Project, paving and the application of architectural coatings (e.g., paints) would potentially release VOCs. The assessment of construction air quality impacts considers each of these potential sources.

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

The emissions levels in Table IV.A-5 on page IV.A-48 represent the highest daily emissions projected to occur during each year of construction. As presented in Table IV.A-5, construction-related daily maximum regional construction emissions would not exceed any of the SCAQMD daily significance thresholds. **Therefore, regional construction emissions resulting from the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Regional construction emissions resulting from the Project would result in a less-than-significant air quality impact.**

(ii) Operation

As discussed above, SCAQMD's CalEEMod was used to calculate regional area, energy, mobile source, and stationary emissions. The Project would incorporate project design features to support and promote environmental sustainability, as discussed in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR. While these features are designed primarily to reduce greenhouse gas emissions, they would also likely serve to reduce criteria air pollutants discussed herein. For purposes of the air quality analysis, project design features incorporated in this analysis include the Project Site's increase in accessibility to transit and increase in diversity of uses and density. These project design features are explained further in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR.

Table IV.A-6 on page IV.A-49 provides Project operational emissions with incorporation of project design features. As shown in Table IV.A-6, regional emissions resulting from operation of the Project would not exceed any of SCAQMD's daily regional operational thresholds. **Therefore, regional operational emissions resulting from the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Air quality impacts from Project operational emissions would be less than significant.**

(b) Localized Emissions

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

Table IV.A-5
Estimate of Maximum Regional Project Daily Construction Emissions (pounds per day)

Construction Year	VOC ^b	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Regional Construction Emissions						
Year 1	2	23	16	<1	2	1
Year 2	3	78	28	<1	7	2
Year 3	3	21	22	<1	3	1
Year 4	23	30	35	<1	4	2
Maximum Unmitigated Construction Emissions^c	23	78	35	<1	7	2
SCAQMD Daily Significance Thresholds	75	100	550	150	150	55
Over/(Under)	(52)	(22)	(515)	(150)	(143)	(53)
Maximum Unmitigated Construction Emissions Exceed Threshold?	No	No	No	No	No	No
<p>Numbers may not add up exactly due to rounding.</p> <p>^a The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this Draft EIR. The construction analysis was performed for the Supermarket Option. The non-residential building amount (square footage) under this option is greater than the Retail/Restaurant Option which requires higher VOC architectural coatings compared to residential uses. This results in a more conservative analysis.</p> <p>^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.</p> <p>^c Unmitigated scenario assumes compliance with SCAQMD Rule 403 requirements for fugitive dust.</p> <p>Source: Eyestone Environmental, 2019.</p>						

(i) Construction

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

(ii) Operations

Project-related operational emissions were also evaluated based on SCAQMD LST methodology. While SCAQMD LST methodology evaluates emissions from on-site

Table IV.A-6
Estimate of Maximum Regional Project Daily Operational Emissions—At Project Buildout (2023)^a

Emission Source	Pollutant Emissions (pounds per day) ^b					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Project						
Area	5	<1	23	<1	<1	<1
Energy (Natural Gas)	<1	1	1	<1	<1	<1
Mobile	3	13	24	<1	5	1
Stationary	1	<1	1	<1	<1	<1
Total Proposed Uses Emissions	9	15	49	<1	5	2
SCAQMD Significance Threshold	55	55	550	150	150	55
Over/(Under)	(46)	(40)	(501)	(150)	(145)	(53)
Exceed Threshold?	No	No	No	No	No	No
<p><i>Numbers may not add up exactly due to rounding.</i></p> <p>^a The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this Draft EIR.</p> <p>^b The numbers in this table reflect net emissions (i.e., Project emissions less Existing at Buildout emissions).</p> <p>Source: Eyestone Environmental, 2019.</p>						

sources (e.g. water heaters, cooking appliances, HVAC), off-site sources such as Project-related vehicle trips were also evaluated for potential exceedances of ambient air quality standards. As analyzed in Threshold (c) below, Project-related operational emissions from on-site and off-site sources would not exceed localized thresholds. **Therefore, localized operational emissions resulting from the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.**

(c) Conclusion

According to SCAQMD, individual projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As shown above in Table IV.A-5 on page IV.A-48 and in Table IV.A-6, Project construction and operational daily emissions at the Project Site would not exceed any of SCAQMD's regional thresholds, respectively. Therefore, the Project's contribution to cumulative construction-related and operation-related regional emissions would not be cumulatively considerable and therefore would be less than significant. Analyzed below, construction and operation of the Project also would have a less-than-significant impact with regard to

localized emissions. Therefore, the Project's contribution to cumulative air quality impacts due to localized emissions would also not be cumulatively considerable.

The Project would not result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Based on the above, impacts to Threshold (b) would be less than significant.

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

(a) Construction

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

As discussed above in the methodology subsection, the localized construction air quality analysis was conducted using the methodology set forth by SCAQMD. Look-up tables provided by SCAQMD were used to determine localized construction emissions thresholds for the Project.⁵⁶ LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are based on the most recent background ambient air quality monitoring data (2015–2017) for the Project area presented in Table IV.A-2 on page IV.A-20. Although ambient air quality typically improves over time, the localized construction emissions analysis conservatively did not apply a reduction in background pollutant concentrations for subsequent years of construction (i.e., 2020–2023). 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, PM₁₀, and PM_{2.5} were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for SRA 1 based on a one-acre site. Potential impacts were evaluated at the closest off-site sensitive receptor, which are future residences located adjacent to the southern and eastern boundaries of the Project Site. The closest receptor distance on the SCAQMD mass rate LST look-up tables is 25 meters. Based on SCAQMD LST methodology, projects with boundaries located closer than 25 meters to the nearest receptor (such as the Project) should use the LSTs for receptors located at 25 meters.⁵⁷

⁵⁶ SCAQMD, *LST Methodology Appendix C-Mass Rate LST Look-up Table*, revised October 2009.

⁵⁷ SCAQMD, *Final Localized Significance Threshold Methodology*, revised July 2008.

The maximum daily localized emissions from Project construction and LSTs are presented in Table IV.A-7 on page IV.A-52. As presented in Table IV.A-7, maximum construction emissions would not exceed the SCAQMD-recommended localized screening thresholds.

The Project's on-site construction activities, including the generation of criteria pollutants, would not expose sensitive receptors to substantial pollutant concentrations. Project-related construction activities would result in a less than significant impact with regard to localized emissions, and no mitigation measures are required.

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

The greatest potential for TAC emissions during construction would be from diesel particulate emissions associated with heavy equipment operations. 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 continuously exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. Given the short-term construction schedule of approximately 30 months, the Project would not result in a long-term (i.e., 70-year) source of TAC emissions. Additionally, the SCAQMD CEQA guidance does not require a 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 individual cancer risk after construction. **The Project's off-site construction activities, including generation of TACs, would not expose sensitive receptors to substantial pollutant concentrations. Project-related TAC impacts during construction would be less than significant.**

(b) Operation

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

Operation of the Project would not introduce any major new sources of air pollution within the Project Site. Emissions estimates for criteria air pollutants from on-site sources are presented in Table IV.A-8 on page IV.A-53. The SCAQMD LST mass rate look-up tables, which apply to projects that have active areas that are less than or equal to five acres in size, were used to evaluate potential localized impacts. As shown in Table IV.A-8, on-site operational emissions would not exceed any of the LSTs. **The Project's on-site operational activities, including generation of criteria pollutants, would not expose sensitive receptors to substantial pollutant concentrations. Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.**

Table IV.A-7
Estimate of Maximum Localized Daily Project Construction Emissions
(pounds per day)

Construction Year	NO _x	CO	PM ₁₀	PM _{2.5}
Year 1	21	15	1	1
Year 2	26	21	1	1
Year 3	20	18	1	1
Year 4	29	29	1	1
Maximum Unmitigated Daily Localized Emissions	29	29	1	1
SCAQMD Localized Significance Thresholds^{a,b}	49	743	5	3
Over/(Under)	(20)	(715)	(4)	(2)
Exceed Threshold?	No	No	No	No

Numbers may not add up exactly due to rounding.

^a Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1. The closest sensitive receptors are the future residential uses adjacent to the south and east of the Project Site. The localized threshold is based on a 25 meter receptor distance which is the closest receptor distance on the SCAQMD mass rate LST look-up table.

^b Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. In addition, SCAQMD does not provide an LST for SO₂ since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant.

Source: Eyestone Environmental, 2019.

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

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

At buildout of the Project, the highest average daily trips at an intersection would be approximately 70,000 trips at the Sunset Boulevard and Vine Street intersection,⁵⁸ which is significantly below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP.⁵⁹ This daily trip estimate is based on the peak hour conditions of the intersection. There is no reason unique to the Air Basin meteorology to conclude that the CO concentrations at the Sunset Boulevard and

⁵⁸ Gibson Transportation Consulting Inc., *Transportation Impact Study for the Modera Argyle Project*, City of Los Angeles, November 2017.

⁵⁹ 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.

Table IV.A-8
Estimate of Maximum Localized Project Daily Operational Emissions—At Project Buildout (2023)^a
(pounds per day)

Emission Source	NO _x	CO	PM ₁₀	PM _{2.5}
Area	<1	23	<1	<1
Energy (Natural Gas)	1	1	<1	<1
Stationary	<1	1	<1	<1
On-Site Total	1	25	<1	<1
SCAQMD Significance Threshold^{b,c}	49	743	2	1
Over/(Under)	(48)	(718)	(2)	(1)
Exceed Threshold?	No	No	No	No

Numbers may not add up exactly due to rounding.

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

^b *Potential localized operational impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1. The closest sensitive receptor is comprised of future residential uses adjacent to the south of the Project Site. The localized threshold is based on a 25 meter receptor distance which is the closest receptor distance on the SCAQMD mass rate LST look-up table.*

^c *Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. In addition, SCAQMD does not provide an LST for SO₂ since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant.*

Source: Eyestone Environmental, 2019.

Vine Street intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP.⁶⁰ Therefore, the Project does not trigger the need for a detailed CO hotspots model and would not cause any new or exacerbate any existing CO hotspots. The supporting data for this analysis is included in Appendix B of this Draft EIR. **The Project's off-site operational activities, including the highest average daily trips, would not expose sensitive receptors to substantial pollutant concentrations. As a result, impacts related to localized mobile-source CO emissions are considered less than significant.**

(iii) Toxic Air Contaminants

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. CARB has published and adopted the *Air Quality and Land Use Handbook: A Community*

⁶⁰ *It should be noted that CO background concentrations within the vicinity of the modeled intersection have substantially decreased since preparation of the 2003 AQMP. In 2003, the 1-hour background CO concentration was 5 ppm and has decreased to 2 ppm in 2014.*

Health Perspective, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).⁶¹ SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*.⁶² Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to TAC sources and the addition of new TAC sources in proximity to existing sensitive land uses.

The primary sources of potential air toxics associated with Project operations include DPM from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets) and to a lesser extent facility operations (e.g., natural gas fired boilers). However, these activities, and the land uses associated with the Project, are not considered land uses that generate substantial TAC emissions based on review of the air toxic sources listed in SCAQMD's and CARB's guidelines. Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes (e.g., chrome plating, electrical manufacturing, petroleum refinery). The Project would not include these types of potential industrial manufacturing process sources. It is expected that quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the types of proposed land uses would be below thresholds warranting further study under the California Accidental Release Program.

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

Based on the above, impacts to Threshold (c) would be less than significant.

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

As discussed in Section VI, Other CEQA Considerations, of this Draft EIR, and in the Initial Study prepared for the Project, which is included as Appendix A of this Draft EIR, the Project would not create objectionable odors impacting a substantial number of people.

⁶¹ CARB, *Air Quality and Land Use Handbook, a Community Health Perspective*, April 2005.

⁶² SCAQMD, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005.

Thus, the Project would have a less than significant impact with respect to Threshold (d). No impacts from objectionable odors would occur and no further analysis is required.

4. Cumulative Impacts

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

As identified in Section III, Environmental Setting, of this Draft EIR, a total of 109 related projects are located in the vicinity of the Project Site. Much of this growth is anticipated by the City and will be incorporated into the Hollywood Community Plan area. A map of the related project locations is provided in Figure III-1 in Section III, Environmental Setting, of this Draft EIR.

a. Construction

As discussed above, the Project's construction-related air quality emissions and cumulative impacts would be less than significant. The Project would comply with regulatory requirements, including the SCAQMD Rule 403 requirements listed above. Based on SCAQMD guidance, 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. As shown above, construction-related daily emissions at the Project Site would not exceed any of SCAQMD's regional or localized significance thresholds. Therefore, the Project's contribution to cumulative air quality impacts due to localized emissions would also not be cumulatively considerable and therefore would be less than significant.

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

emissions. It is therefore not required or meaningful to evaluate long-term cancer impacts from construction activities which occur over relatively short durations. As such, cumulative toxic emission impacts during construction would be less than significant.

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

b. Operation

As discussed above, the Project's operational air quality emissions and cumulative impacts would be less than significant. According to SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. As operational emissions did not exceed any of SCAQMD's regional or localized significance thresholds, the emissions of non-attainment pollutants and precursors generated by project operation would not be cumulatively considerable.

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

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

5. Mitigation Measures

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

6. Level of Significance After Mitigation

a. Construction

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

b. Operations

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