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

Table IV.A-1
Ambient Air Quality Standards

Pollutant	Averaging Period	California Standard (CAAQS)[a,b]	Federal Standard (NAAQS)[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	0.070 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	Unclassified/ Attainment[f]
	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)[e]	1 hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	Attainment	Unclassified/ Attainment
	24 hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)		
	Annual	—	0.03 ppm (80 µg/m^3)		
Lead (Pb)	30-day average	1.5 µg/m^3	—	Attainment	Partial Non-Attainment[e]
	Rolling 3-month average	—	0.15 µg/m^3		
Sulfates	24 hour	25 µg/m^3	—	Attainment	—
Hydrogen Sulfide (H_2S)	1 hour	0.03 ppm (42 µg/m^3)	—	Unclassified	—
Visibility Reducing Particles	8-hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent.	—	Unclassified	—
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m^3)	—	Unclassified	—

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

Pollutant	Averaging Period	California Standard (CAAQS)[a,b]	Federal Standard (NAAQS)[a,b]	SCAQMD Attainment Status[c]	
				California Standard[d]	Federal Standard[d]

ppm = parts per million by volume

1 ppm = 1,000 ppb (parts per billion 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 expressed as a concentration that is not to be equaled or exceeded.*

[b] *Ambient Air Quality Standards based on the 2016 AQMP.*

[c] *"Attainment" means that the regulatory agency has determined based on established criteria, that the Air Basin meets the identified standard. "Non-attainment" means that the regulatory agency has determined that the Air Basin does not meet the standard. "Unclassified" means there is insufficient data to designate an area, or designations have yet to be made.*

[d] *California and Federal standard attainment status based on SCAQMD's 2016 AQMP.*

[e] *The EPA has established a secondary standard for SO_2 with a 3-hour averaging period. However, SO2 is no longer monitored within the South Coast Air Basin with a 3-hour averaging period.*

[f] *An attainment re-designation request is pending.*

Source: Eyestone Environmental, 2021.

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

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

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

(c) Carbon Monoxide (CO)

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

(d) Nitrogen Dioxide (NO_2)

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

(e) Sulfur Dioxide (SO_2)

Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of sulfur dioxide aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. 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 (SO_4^{2-})

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 (H_2S)

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

(2) Volatile Organic Compounds (VOCs)

VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids. Some VOCs are also classified by the state as toxic air contaminants. While there are no specific VOC ambient air quality standards, VOC is a prime component (along with NO_X) of the photochemical processes by which such criteria pollutants as ozone, nitrogen dioxide, and certain fine particles are formed. They are, thus, regulated as "precursors" to the 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) 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.[1]

[1] *CARB, Toxic Air Contaminant Identification List, ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants, accessed February 18, 2021.*

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 µm), including a subgroup of ultrafine 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.[2,3]

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.[4]

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.

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[2] *CARB, Overview: Diesel Exhaust and Health, ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health, accessed February 18, 2021.*

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

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

(1) Criteria Pollutants

(a) Federal

The Air Pollution Control Act of 1955 was the first federal legislation involving air pollution. This Act provided funds for federal research in air pollution. The Federal Clean Air Act of 1963 was the first federal legislation regarding air pollution control.[5] The Federal Clean Air Act (CAA) has been amended numerous times in subsequent years, with the most recent amendments in 1990. At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementation of some portions of the CAA (e.g., certain mobile source and other requirements). Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies.

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

Title I provisions are implemented for the purpose of attaining NAAQS. Table IV.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 O_3 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. Title II pertains to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline and automobile pollution control devices are examples of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_X emissions have been lowered substantially and the specification requirements for cleaner burning gasoline are more stringent.

(b) State Regulations

(i) California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by

[5] *United States Environmental Protection Agency, Evolution of the Clean Air Act, www.epa.gov/clean-air-act-overview/evolution-clean-air-act , accessed February 18, 2021.*

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 on page IV.A-3 includes the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the state. As shown in Table IV.A-1, the CAAQS include more stringent standards than the NAAQS. The Air Basin fails to meet state standards for O_3, PM_{10}, and $PM_{2.5}$ and, therefore, is considered a state "non-attainment" area for these pollutants.

(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 CCR Title 13 states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) used during construction shall be limited to five minutes at any location. In addition, Section 93115 in CCR Title 17 states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

(c) Regional

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

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

To meet the CAAQS and NAAQS, SCAQMD has adopted a series of Air Quality Management Plans (AQMPs). The 2016 AQMP incorporates the Southern California Association of Governments' (SCAG) 2016–2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016–2040 RTP/SCS) and updated emission inventory

methodologies for various source categories.[6] The 2016 AQMP also includes the new federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches.

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

SCAQMD 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.[7] 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.

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to a project's construction or operation.

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

- Rule 403 (Fugitive Dust) 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;

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[6] *The 2020–2045 RTP/SCS was approved by SCAG in September 2020. However, the 2016 AQMP relies on the 2016–2040 RTP/SCS and is therefore addressed for consistency with the 2016 AQMP.*

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

- 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 additional watering would be implemented 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.

- Rule 1113 (Architectural Coatings) limits the volatile organic compound content of architectural coatings.
- Regulation XIII (New Source Review) requires new on-site facility nitrogen oxide emissions to be minimized through the use of emission control measures (e.g., use of best available control technology for new combustion sources such as boilers, emergency generators, and water heaters).

(ii) Southern California Association of Governments (SCAG)

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including applicable federal, state, and air district laws and regulations. As the federally designated Metropolitan Planning Organization (MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. In addition, SCAG is a co-producer, with SCAQMD, of the transportation strategy and transportation control measure sections of the 2016 AQMP. The development of the 2016 AQMP relies on population and transportation growth projections contained in SCAG's 2016–2040 RTP/SCS.

SCAG's 2016–2040 RTP/SCS, adopted on April 7, 2016, presents a long-term transportation vision through the year 2040 for the six-county region. The mission of the 2016–2040 RTP/SCS is to provide "leadership, vision and progress which promote economic growth, personal well-being, and livable communities for all Southern Californians." The 2016–2040 RTP/SCS places a greater emphasis on sustainability and

integrated planning compared to previous versions of the RTP. These strategies generally include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and culture and a full range of shopping, entertainment and services all within a relatively short distance, while encouraging employment development around current and planned transit stations and neighborhood commercial centers.

On September 3, 2020, SCAG's Regional Council adopted its 2020–2045 RTP/SCS, Connect SoCal. Connect SoCal's core vision is to build upon and expand land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal includes new initiatives at the intersection of land use, transportation, and technology to reach our region's pollutant reduction goals. As was the case under the prior RTP/SCS, the Project Site is located within a High Quality Transit Area (HQTA) as designated by the 2020–2045 RTP/SCS.[8,9]

(d) Local

(i) City of Los Angeles General Plan, Air Quality Element

Local jurisdictions, such as the City of Los Angeles, have the authority and responsibility to reduce air pollution through their police power and land use 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, that 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 planning area for the Air Quality Element covers the entire City, which encompasses an area of about 465 square miles. The Air Quality Element and the accompanying Clean Air Program acknowledge the inter-relationships 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

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[8] *HQTA's "are corridor-focused Priority Growth Areas within one half mile of an existing or planned fixed guideway transit stop or a bus transit corridor where buses pick up passengers at a frequency of every 15 minutes (or less) during peak commuting hours." Source: SCAG, Connect SoCal, The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, formally adopted on September 3, 2020, page 51.*

[9] *SCAG, Connect SoCal, The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, formally adopted on September 3, 2020, Exhibit 3.8.*

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

Goal 1—Good air quality and mobility in an environment of continued population growth and health economic structure.

Objective 1.1—It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.

Objective 1.3—It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.

Policy 1.3.1—Minimize particulate emissions from construction sites.

Policy 1.3.2—Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic.

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.

Policy 2.2.2 —Encourage multi-occupant vehicle travel and discourage single occupant vehicle travel by instituting parking management practices.

Goal 4—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.

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.

Goal 5—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 methods such as site orientation and tree planting.

Objective 5.1—It is the objective of the City of Los Angeles to increase energy efficiency of City facilities and private developments.

Policy 5.1.2—Effect a reduction in energy consumption and shift to nonpolluting sources of energy in its buildings and operations.

Policy 5.1.4—Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.

Objective 5.3—It is the objective of the City of Los Angeles to reduce the use of polluting fuels in stationary sources.

Policy 5.3.1—Support the development and use of equipment powered by electric or low-emitting fuels.

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

(2) Toxic Air Contaminants (TAC)

(a) State

The California Air Toxics Program 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.[10] 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, including benzene, chloroform, formaldehyde, and particulate emissions from diesel-fueled engines, among others.[11] In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants as TACs.

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

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

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[10] *CARB, Airborne Toxics, ww2.arb.ca.gov/our-work/topics/airborne-toxics, accessed February 18, 2021.*

[11] *CARB, Toxic Air Contaminant Identification List, ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants, accessed February 18, 2021.*

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.[12]

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.[13] CARB provides recommended 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.

(c) Local

In November 2012, the Los Angeles City Planning Commission (CPC) issued ZI No. 2427, the Advisory Notice for Freeway Adjacent Projects, which is an informational notification to inform applicants for all new projects and expansions of existing development involving sensitive 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

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[12] *CARB, Construction and Earthmoving Equipment, ww2.arb.ca.gov/our-work/topics/construction-earthmoving-equipment, accessed February 18, 2021.*

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

at-risk from the negative effects of air pollution caused by freeway proximity. The advisory notice calls attention to existing adopted goals, objectives, policies, and programs in the General Plan that address land use compatibility with respect to sites near freeways for new residential development and sensitive land uses.[14] Although ZI No. 2427 is informational in nature and does not impose any additional land use or zoning regulations, it is intended to inform project applicants of the significance of this issue. ZI No. 2427 acknowledges that an impact analysis of the air environment on new sensitive receptors in proximity to transportation facilities is not required by CEQA. However, in the interest of providing information to the public and creating healthy communities, the CPC advises that applicants of projects requiring discretionary approval, located in proximity to a freeway, and including residential units, hospitals, schools, retirement homes, and other sensitive uses, perform a health risk assessment (HRA) to enable applicants to make informed decisions about site planning from the earliest stages of project design. Consistent with this policy, the City adopted Ordinance No. 184,245 in 2016, which, among other things, requires the provision of air filtration media that achieves a Minimum Efficiency Reporting Value (MERV) of 13 for regularly occupied areas of buildings located within 1,000 feet of a freeway. The Project would include residential uses approximately 800 feet from US-101 and, as such, an HRA was prepared for the Project and discussed in Section IV.E, Land Use, of this Draft EIR.

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

[14] *City of Los Angeles, Zoning Information (ZI) File No. 2427 Freeway Adjacent Advisory Notice for Sensitive Uses.*

the Air Basin vary with location, season, and time of day. O_3 concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California. However, the Air Basin still fails to meet the national standards for O_3 and $PM_{2.5}$. In addition, Los Angeles County still fails to meet the national standard for lead.

SCAQMD has the responsibility for ensuring that all national and State ambient air quality standards are achieved and maintained throughout the Air Basin. To meet the standards, SCAQMD has adopted a series of AQMPs. The 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines are met and that public health is protected to the maximum extent feasible. The most significant air quality challenge in the Air Basin is to reduce NO_X emissions[15] sufficiently to meet the upcoming ozone standard deadlines. The 2016 AQMP provides a baseline year 2012 inventory of 512 tons per day (tpd) of NO_X and modeling results show that NO_X emissions are projected to be 214 tpd in the 8-hour ozone attainment year of 2031, due to continued implementation of already adopted regulatory actions ("baseline emissions"). The 2016 AQMP suggests that total Air Basin emissions of NO_X must be reduced to 96 tpd by 2031 to attain the 8-hour ozone standard. Although the existing air regulations and programs will continue to lower NO_X emissions in the region, an additional 55 percent in the year 2031 are necessary to attain the 8- hour ozone standard.[16,17]

The overall control strategy is an integral approach relying on fair-share emission reductions from federal, State and local levels. The 2016 AQMP is composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile source strategies and reductions from federal sources, which include aircraft, locomotives and ocean-going vessels. These strategies are to be implemented in partnership with CARB and USEPA. The 2016 AQMP also includes the transportation program, measures, and strategies in SCAG's 2016–2040 RTP/SCS[18] that are generally designed to reduce VMT.[19]

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[15] *NOx emissions are a precursor to the formation of both ozone and secondary $PM_{2.5}$.*

[16] *Estimates are based on the inventory and modeling results and are relative to the baseline emission levels for each attainment year (see Final 2016 AQMP for detailed discussion).*

[17] *SCAQMD, Final 2016 AQMP, 2017, p. ES-2.*

[18] *SCAG, Final 2016–2040 RTP/SCS, p. 74.*

[19] *Appendix C, Regional Transportation Plan/Sustainable Communities Strategy and Transportation Control Measures of the 2016 AQMP describes the regional land use and transportation strategies and transportation control measures in the 2016–2040 RTP/SCS that are included in the 2016 AQMP.*

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the Plan with those prepared by SCAG. The RTP/SCS and Transportation Control Measures (TCMs), included as Appendix IV-C to the 2016 AQMP/SIP for the Basin, are based on SCAG's 2016–2040 RTP/SCS.

The 2016 AQMP forecasts the 2031 emissions inventories ''with growth'' based on SCAG's 2016–2040 RTP/SCS. The region is projected to see a 12-percent growth in population, 16-percent growth in housing units, 23-percent growth in employment, and 8-percent growth in VMT between 2012 and 2031.

Despite this regional growth, air quality has improved substantially over the years, primarily due to the impacts of air quality control programs at the local, State and federal levels. The graphic included in Figure IV.A-1 on page IV.A-20 shows the percent change in air quality along with demographic data for the 4-county region from the 2016 AQMP. In particular, Figure IV.A-1 illustrates the trends since 1990 of the 8-hour ozone levels, the 1-hour ozone levels, and annual average $PM_{2.5}$ concentrations (since 1999), compared to the regional gross domestic product, total employment and population. Human activity in the region has an impact on achieving reductions in emissions. However, the ozone and particulate matter levels continue to trend downward as the economy and population increase, demonstrating that it is possible to maintain a healthy economy while improving public health through air quality improvements.[20]

SCAQMD has also released an Air Basin-wide air toxics study (MATES-IV).[21] 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 897 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

[20] *SCAQMD, Final 2016 AQMP, 2017 (p. 1-6), www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp, accessed February 18, 2021.*

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

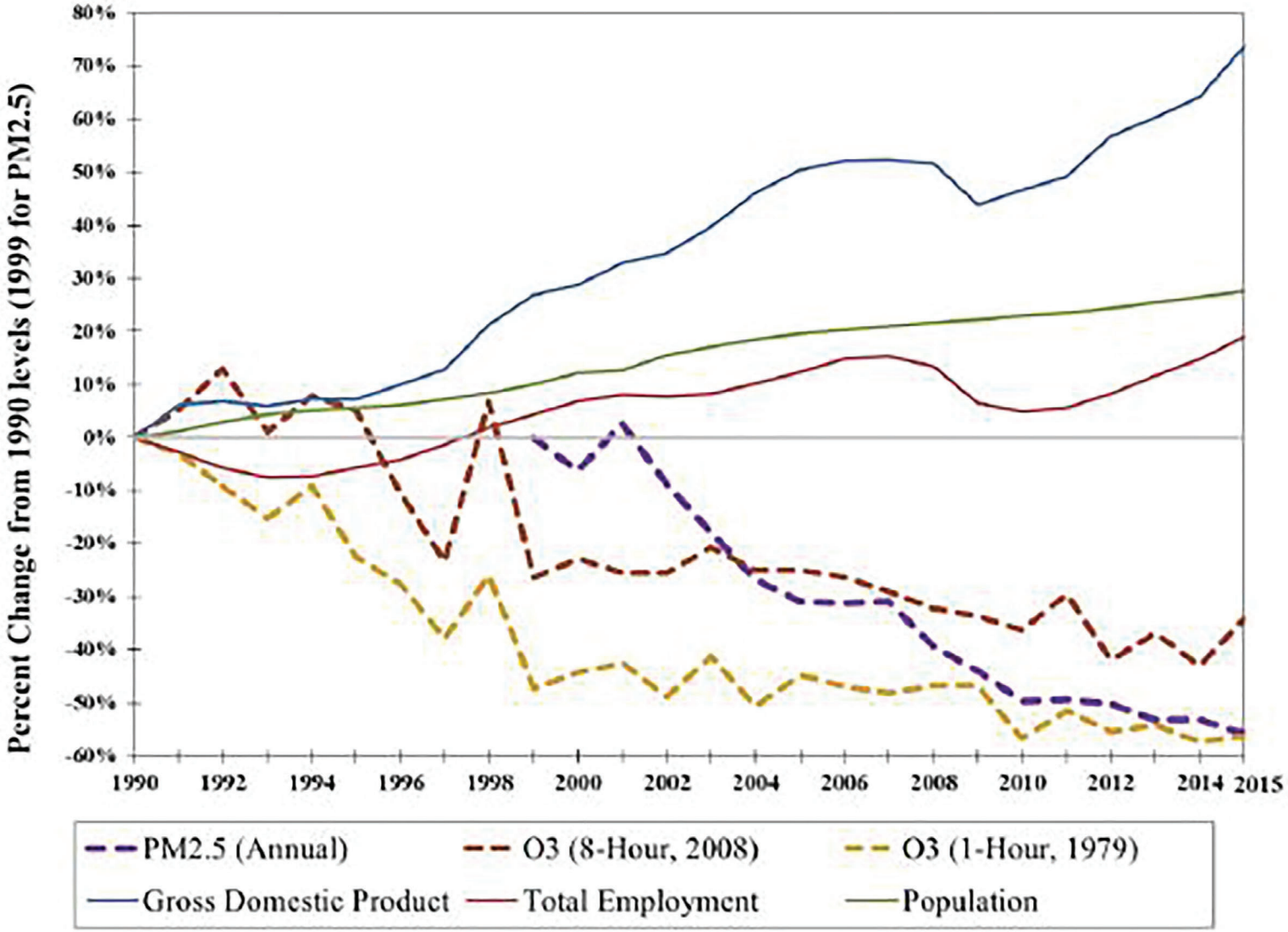

Figure IV.A-1
Ozone Trends

Source: SCAQMD, 2016.

industrial operations, such as refineries and metal processing facilities, as well as smaller businesses, such as gas stations and chrome plating).

As part of the MATES-IV Study, SCAQMD prepared a series of maps that shows regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps' estimates represent the number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years) in parts of the area. The MATES-IV map is the most recently available map to represent existing conditions near the Project area. The 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.[22] Generally, the risk from air toxics is lower near the coastline and higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

(2) Local Air Quality

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

(a) Existing Criteria Pollutant Levels at Nearby Monitoring Stations

SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient pollutant concentrations and has divided the Air Basin into 38 source receptor areas (SRAs) in which 31 monitoring stations operate. Figure IV.A-2 on page IV.A-22 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, approximately 5 miles southeast of the Project Site. Criteria pollutants monitored at this station include PM_{10}, $PM_{2.5}$, O_3, CO, NO_2, SO_2, lead, and sulfate. Table IV.A-2 on page IV.A-23 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at this station through the period of 2017–2019.

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

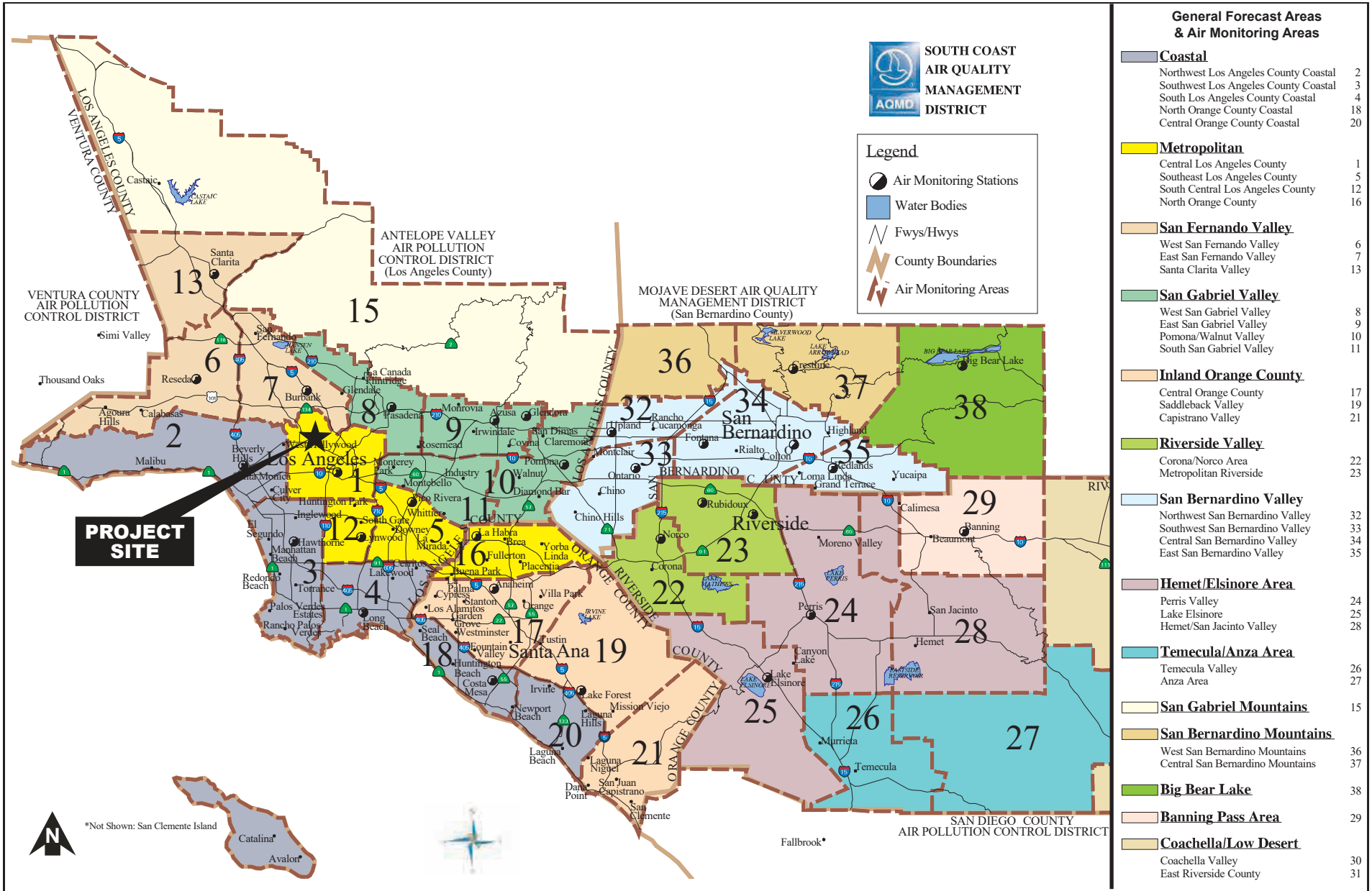

Figure IV.A-2
SCAQMD SRAs

Source: Sierra Wade Associates, 2010.

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

Pollutant	Year		
	2017	2018	2019
Ozone (O_3)			
Maximum 1-hour Concentration (ppm)	0.12	0.10	0.09
Days exceeding CAAQS (0.09 ppm)	6	2	0
Maximum 8-hour Concentration (ppm)	0.09	0.07	0.08
Days exceeding NAAQS (0.070 ppm)	14	4	2
Days exceeding CAAQS (0.07 ppm)	14	4	2
Respirable Particulate Matter (PM_{10})			
Maximum 24-hour Concentration (µg/m^3)	96	81	62
Days exceeding NAAQS (150 µg/m^3)	0	0	0
Days exceeding CAAQS (50 µg/m^3)	41	31	3
Annual Arithmetic Mean (µg/m3)	34	34	26
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)	49	44	44
Days exceeding NAAQS (35 µg/m^3)	5	3	1
Annual Arithmetic Mean (µg/m^3)	12	13	11
Does measured AAM exceed NAAQS (12 µg/m^3)?	No	**Yes**	No
Does measured AAM exceed CAAQS (12 µg/m^3)?	No	**Yes**	No
Carbon Monoxide (CO)			
Maximum 1-hour Concentration (ppm)	2	2	2
Days exceeding NAAQS (35.0 ppm)	0	0	0
Days exceeding CAAQS (20.0 ppm)	0	0	0
Maximum 8-hour Concentration (ppm)	2	2	2
Days exceeding NAAQS and CAAQS (9 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour Concentration (ppm)	0.08	0.07	0.07
Days exceeding CAAQS (0.18 ppm)	0	0	0
Annual Arithmetic Mean (ppm)	0.02	0.02	0.02
Does measured AAM exceed NAAQS (0.0534 ppm)?	No	No	No
Does measured AAM exceed CAAQS (0.03 ppm)?	No	No	No
Sulfur Dioxide (SO_2)			
Maximum 1-hour Concentration (ppm)	0.01	0.01	0.01
Days exceeding CAAQS (0.25 ppm)	0	0	0
Maximum 24-hour concentration (ppm)	N/A	N/A	N/A
Days exceeding CAAQS (0.04 ppm)	0	0	0
Days exceeding NAAQS (0.14 ppm)	0	0	0
Annual Arithmetic Mean (ppm)	N/A	N/A	N/A
Does measured AAM exceed NAAQS (0.030 ppm)?	N/A	N/A	0

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

Pollutant	Year		
	2017	2018	2019
Lead			
Maximum 30-day Average Concentration (µg/m^3)	0.02	0.01	0.012
Does measured concentration exceed NAAQS (1.5 µg/m^3)	No	No	No
Maximum Calendar Quarter Concentration (µg/m^3)	0.01	0.01	0.01
Does measured concentration exceed CAAQS (1.5 µg/m^3)	No	No	No
Sulfate			
Maximum 24-hour Concentration (µg/m^3)	5	5	5.1
Does measured concentration exceed CAAQS (25 µg/m^3)	No	No	No

ppm = parts per million by volume

µg/m^3 = micrograms per cubic meter

AAM = annual arithmetic mean

Source: South Coast Air Quality Management District Ambient Monitoring Data (2017–2019), www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed February 18, 2021.

(b) Existing Health Risk in the Project Site Vicinity

As shown in Figure IV.A-3 on page IV.A-25, based on the MATES-IV model, the calculated cancer risk in the Project area is approximately 1,155 in a million. The cancer risk in this area is predominately related to nearby sources of diesel particulate (e.g., the US-101 freeway located approximately 800 feet from the Project Site) . In general, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports and ports).

OEHHA, on behalf of CalEPA, provides a screening tool called CalEnviroScreen that can be used to help identify California communities disproportionately burdened by multiple sources of pollution. According to CalEnviroScreen, the Project Site is located in the 80th to 85th percentile, which means the Project Site is worse than average in comparison to other communities within California.[23]

Potential sources of TACs near the Project Site 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

[23] *Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0 MAP, https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30, accessed February 18, 2021.*

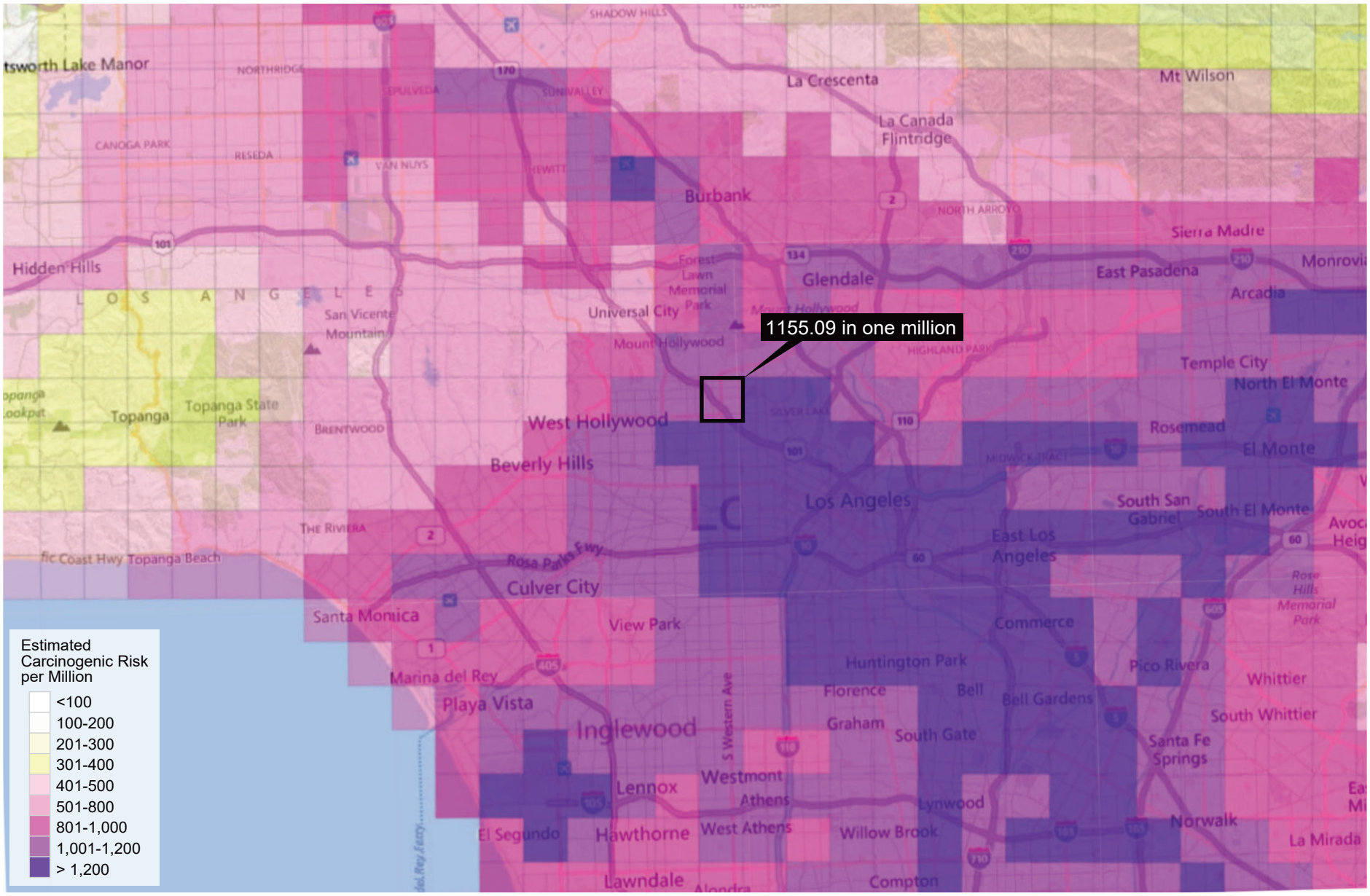

Figure IV.A-3
MATES IV Total Cancer Risk for Project Area

Source: South Coast AQMD, 2017.

distribution facilities in excess of 100 trucks per day). Based on this information, no substantial sources (e.g., gasoline stations, dry cleaners, warehouse distribution) of TAC emissions near the Project Site were identified, and the location of the proposed residential uses would be consistent with the recommended siting distances (e.g., no sensitive receptors within 500 feet of a freeway) provided in the CARB guidance documents discussed above.

(c) Surrounding Uses

As shown in Figure IV.A-4 on page IV.A-27, the Project Site is located in an urbanized area and includes a mixture of low- and mid-rise buildings occupied primarily by commercial and residential uses. Specific uses surrounding the Project Site include a small retail center, the Upright Citizens Brigade Theatre, an inn, and a five-story multi-family residential building with retail to the north on Sunset Boulevard; retail and residential uses to the east on Serrano Avenue; the former site of Deluxe Laboratories, a motion picture film processing laboratory, to the south; and a newly constructed Target store, retail, and restaurant uses to the west on Western Avenue. In the vicinity of the Project Site, the major streets such as Sunset Boulevard are generally developed with more dense residential and commercial development, while lower density mixed-use and residential areas are located along the adjacent collector streets, including Serrano Avenue.

(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" that may house such people near the Project Site are shown in Figure IV.A-4, and include the following:

- Residential uses east of the Project Site across Serrano Avenue
- Multi-family residential uses north of the Project Site beyond Sunset Boulevard
- Residential uses located 100 feet south of the Project Site, on Serrano Avenue.

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 only for these nearest sensitive receptors.

(e) Existing Project Site Emissions

The Project Site is currently occupied by a one-story grocery store, vacant commercial space, and a one-story fast-food restaurant that together comprise approximately 100,796 square feet and associated parking areas. Mobile source emissions

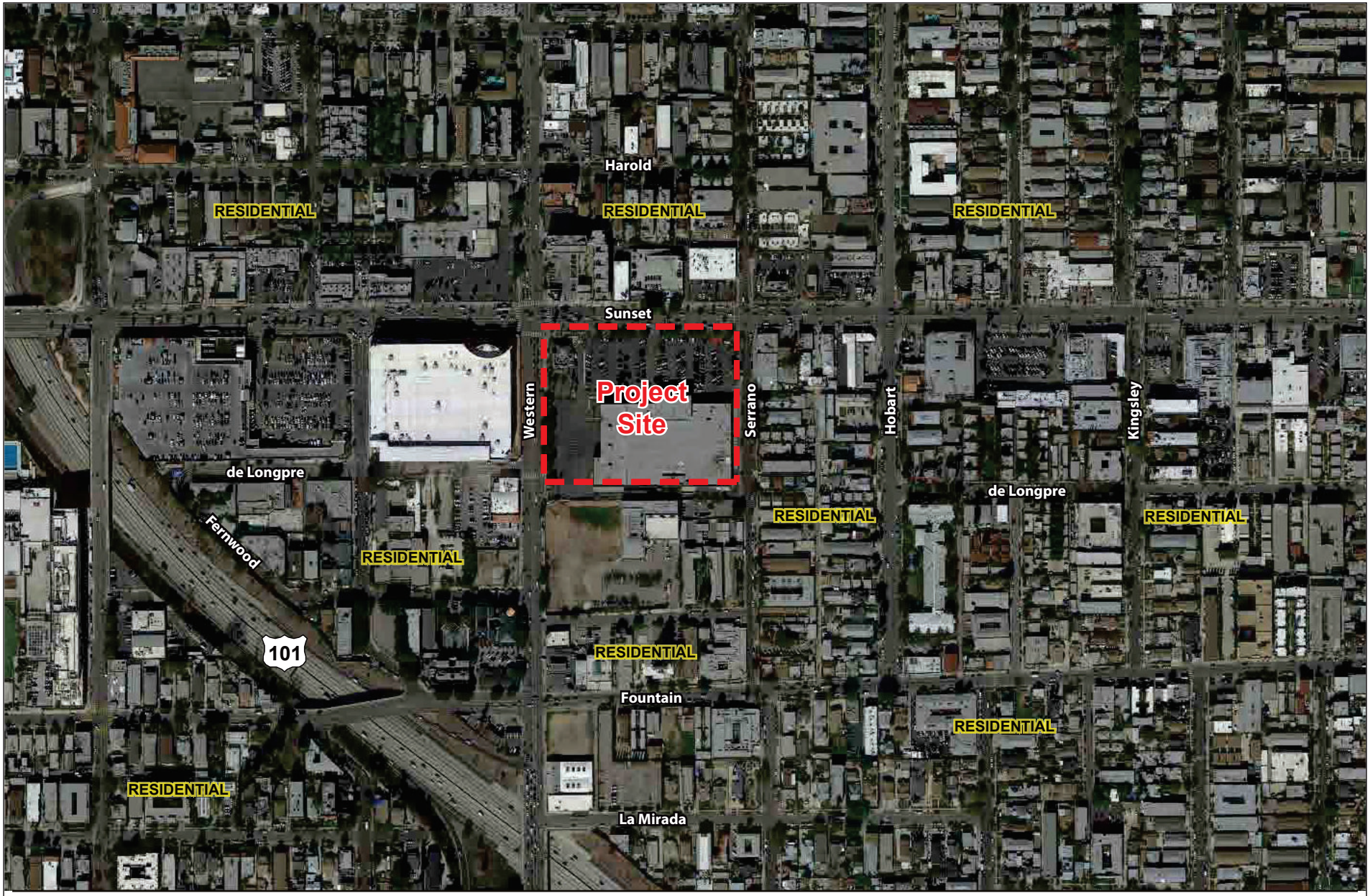

Figure IV.A-4
Air Quality Sensitive Receptor Locations

Source: Apple Maps, 2018, Eyestone Environmental, 2018.

are generated by vehicle trips to and from the site. Area source emissions are generated by charbroiler or cooking equipment, maintenance equipment, landscape equipment, and use of products that contain solvents. Energy source emissions are typically associated with building natural gas usage (e.g., building heating and hot water end uses). Table IV.A-3 below presents an estimate of the existing emissions within the Project Site.

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	2	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile[a]	27	105	258	<1	43	12
Total Existing Emissions[b]	**29**	**106**	**258**	**<1**	**43**	**12**

Numbers may not add up exactly due to rounding.

[a] *Mobile emissions include pass-by trips and assume year 2017 emissions factors.*

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

Source: Eyestone Environmental, 2021.

3. Project Impacts

a. Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines (Appendix G), 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.

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.

For this analysis the Appendix G Thresholds are relied upon. The analysis utilizes factors and considerations identified in the 2006 L.A. CEQA Thresholds Guide, as

appropriate, to assist in answering the Appendix G Threshold questions. The factors to evaluate air quality impacts are listed below.

(1) Construction

(a) 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.

(b) 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.

(c) 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.

(d) Other Mobile Source Emissions

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

(2) 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 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.

(3) 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.

(4) SCAQMD's CEQA Air Quality Handbook

To assist in answering the Appendix G Threshold questions and factors identified in the City's *L.A. CEQA Thresholds Guide* for purposes of this analysis, the City 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-31 shows the SCAQMD's currently recommended significance criteria, which provide numerical thresholds for evaluating the significance of a project's estimated air quality emissions.

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	
GHG	10,000 MT.yr CO_2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants[d]		
NO_2 1-hour average Annual Arithmetic Mean	SCAQMD is in attainment; project is significant if It causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average Annual Average	10.4 μg/m3 (construction) & 2.5 μg/m3 (operation) 1.0 μg/m3	
$PM_{2.5}$ 24-hour average	10.4 μg/m3 (construction)[e] & 2.5 μg/m3 (operation)	
SO_2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal—99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 μg/m3 (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average Rolling 3-month average	1.5 μg/m3 (state) 0.15 μg/m3 (federal)	

lbs/day = pounds per day

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

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

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

[d] *Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless*

Table IV.A-4 (Continued)
SCAQMD Air Quality Significance Thresholds

otherwise stated.

[e] *Ambient air quality threshold based on SCAQMD Rule 403.*

Source: South Coast Air Quality Management District, April 2019.

(a) Construction

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

- Emissions from the Project's direct and indirect sources would exceed any of the SCAQMD prescribed threshold levels identified in Table IV.A-4 on page IV.A-31.

- Maximum on-site daily localized emissions exceed the localized significance thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m^3] over a 1-hour period or 9.0 ppm [10,350 µg/m^3] averaged over an 8-hour period) and NO_2 (0.18 ppm [338.4 µg/m^3] over a 1-hour period, 0.1 ppm [188 µg/m^3] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [56.4 µg/m^3] averaged over an annual period).

- Maximum on-site localized PM_{10} or $PM_{2.5}$ emissions during construction exceed the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed the incremental 24-hr threshold of 10.4 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.

(b) Operation

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*,[25] the Project may have a significant impact with regard to operational emissions if the Project's estimated emissions would cause any of the following to occur:

- Emissions from the Project's direct and indirect sources would exceed any of the SCAQMD prescribed threshold levels identified in Table IV.A-4 on page IV.A-31.

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

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

- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm over a 1-hour period or 9.0 ppm averaged over an 8-hour period) and NO_2 (0.18 ppm over a 1-hour period, 0.1 ppm over a 3-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm averaged over an annual period).[26]

- Maximum on-site localized operational PM_{10} and $PM_{2.5}$ emissions exceed the incremental 24-hr threshold of 2.5 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.[27]

- 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:[28]

- 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-31.

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:[29]

- 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

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[26] *SCAQMD, LST Methodology.*

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

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

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

million or an acute or chronic hazard index of 1.0.[30] For projects with a maximum incremental cancer risk between 1 in one million and 10 in one million, a project would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

(d) Consistency with Applicable Air Quality Plans

CEQA Guidelines Section 15125 requires an analysis of project consistency with applicable governmental plans and policies. In accordance with SCAQMD's *CEQA Air Quality Handbook*,[31] the following criteria were used to evaluate the Project's consistency with SCAQMD's AQMP and SCAG's regional plans and policies:

- 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?

(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. As discussed in the SCAQMD's White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution (August 2003):

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[30] *SCAQMD, Air Quality Significance Thresholds. 2019.*

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

> *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.

b. Methodology

This analysis focuses on the potential change in air quality conditions due to Project implementation. 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 Emissions Methodology

The 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*.[33]

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;

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[32] *SCAQMD, White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. Appendix D, August 2003.*

[33] *SCAQMD, Air Quality Analysis Handbook, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed February 18, 2021.*

(4) mitigation measures and control efficiencies; (5) mobile source toxics analysis; (6) off-road mobile source emission factors; (7) $PM_{2.5}$ significance thresholds and calculation methodology; and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

(a) Regional Emissions

The Project's "regional" emissions refer to emissions that will be evaluated based on regional significance thresholds established by SCAQMD, as discussed above. Daily regional emissions during construction are estimated by assuming a conservative construction schedule (i.e., assuming all construction occurs at the earliest feasible date) 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 remove the existing structures, 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 LST methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling, where appropriate.[34] SCAQMD provides LSTs applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. SCAQMD does not provide an LST for SO_2 since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. The mass rate look-up tables were developed for each source receptor area and can be

[34] *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 5 acres. For projects that exceed 5 acres, such as the Project which involves a 6.24-acre Project Site, the 5-acre LST look-up values can be used as a screening tool to determine which pollutants require detailed analysis. This approach is conservative as it assumes that all on-site emissions would occur within a 5-acre area and would over-predict potential localized impacts (i.e., more pollutant emissions occurring within a smaller area, resulting in greater concentrations). If the project exceeds the LST look-up values, then SCAQMD recommends that project-specific air quality modeling must be performed to determine if the Project's local emissions exceed applicable significance thresholds. Please refer to Subsection (a) under Threshold (d), below, for the analysis of localized impacts from on-site construction activities.

(2) Operational Emissions Methodology

(a) Regional Emissions

Analysis of the Project's likely impact on regional air quality during Project operation (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). Criteria pollutants are also generated during generation of electricity at fossil fuel plants. Electricity generation at power plants are permitted by air districts which are subject to local, state and federal control measures and can be considered to be the maximum feasible level of mitigation for stack emissions. For these reasons, the CalEEMod model does not include criteria pollutant emissions from electricity generation.[35] 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 a proposed emergency generator 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

[35] *CalEEMod User's Guide. Appendix A, p. 36.*

against SCAQMD's significance thresholds.[36] Please refer to Appendix B for additional information regarding methodology.

(b) Localized Emissions

(i) On-Site Emissions

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

(ii) Off-Site Emissions

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

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections.[37,38,39] 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.[40] 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).[41] With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the SCAQMD 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

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[36] *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).*

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

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

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

[40] *USEPA, Timeline of Major Accomplishments in Transportation, Air Pollution, and Climate Change, www.epa.gov/air-pollution-transportation/timeline-major-accomplishments-transportation-air-pollution-and-climate, accessed February 18, 2021.*

[41] *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.*

was thoroughly analyzed as part of the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).[42] As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of the 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for the four worst-case scenario intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: (1) Long Beach Boulevard and Imperial Highway (Lynwood); (2) Wilshire Boulevard and Veteran Avenue (Westwood); (3) Sunset Boulevard and Highland Avenue (Hollywood); and (4) 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 the 1-hour concentration for this intersection at 4.6 parts per million (ppm), which indicates the most stringent 1-hour CO standard (20.0 ppm) would not likely be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.[43] 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 during peak morning traffic and Level F during peak afternoon traffic.[44,45] As an initial screening step, 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. If a project would potentially result in a CO hotspot based on the initial screening, detailed modeling may be performed using California LINE Source Dispersion Model, version 4 (CALINE4), which is a model used to assess air quality impacts near transportation facilities (i.e., roadways, intersections, street canyons, and parking facilities).

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

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

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

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

[44] *The Los Angeles County Metropolitan Transportation Authority (Metro) 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.*

[45] *Metro, Congestion Management Program for Los Angeles County, Exhibit 2-6 and Appendix A, 2004.*

impacts to sensitive receptors from facilities that emit TAC emissions.[46] 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.

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.

c. Project Design Features

The Project would incorporate the following project design features to reduce pollutant emissions during construction activities:

Project Design Feature AQ-PDF-1: Where power poles are available, electricity from power poles and/or solar-powered generators rather than temporary diesel or gasoline generators will be used during construction.

The Project would also incorporate a project design feature to support and promote environmental sustainability as discussed under Section IV.D, Greenhouse Gas Emissions, to this Draft EIR. While the included features are designed primarily to reduce greenhouse gas emissions, they would also serve to reduce criteria air pollutants discussed herein.

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

c. Analysis of Project Impacts

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

(1) Impact Analysis(a) SCAQMD CEQA Air Quality Handbook Policy Analysis

The following analysis addresses the Project's consistency with applicable SCAQMD and SCAG policies, including SCAQMD's 2016 AQMP and growth projections within the 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 NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ have been analyzed for the Project. SO_2 emissions would be negligible during construction and long-term operations, and, therefore, would not have the potential to cause or affect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

As demonstrated in the analysis below (see Table IV.A-9 on page IV.A-62 in the analysis below) and detailed in Appendix B (CalEEMod construction Output file) of this Draft EIR, **the increases in localized NO_2 as NO_X, CO, PM_{10} and $PM_{2.5}$ emissions during construction would not exceed the SCAQMD-recommended LSTs and would not cause or affect a violation of an applicable ambient air quality standard at sensitive receptors in proximity to the Project Site. 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.[47] As indicated below, under the analysis for Threshold (d), 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.**

As discussed below, an analysis of potential localized operational impacts from on-site activities was conducted. As demonstrated in the analysis below (see Table IV.A-10 on page IV.A-63), localized NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ operational impacts would be less than significant. **Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.**

(ii) Criterion 2

With respect to the determination of consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016–2040 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria, also listed above: (1) consistency with applicable population, housing, and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

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

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

A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2016 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's 2016–2040 RTP/SCS. As discussed at length in Section IV.E, Land Use, of this Draft EIR, the General Plan serves as a comprehensive, long-term plan for future development of the City. Refer to Subsection 3.d.4, 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.

SCAG's 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 local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. As discussed in Section IV.G, Population and Housing, of this Draft EIR, according to the 2016–2040 RTP/SCS, the forecasted population for the City of Los Angeles Subregion in 2017 was approximately 3,981,911 persons.[48] In 2026, the Project's anticipated occupancy year, the City of Los Angeles Subregion is anticipated to have a population of approximately 4,227,450.[49] Based on a household size factor of 2.41 persons per household for multi-family housing units, the Project is estimated to generate a residential population of 1,771 persons at full buildout.[50] The estimated 1,771 new residents generated by the Project would represent approximately 0.72 percent of the population growth forecasted by SCAG in the City of Los Angeles Subregion between 2017 and 2026. Using data from the 2020–2045 RTP/SCS, the population of 1,771 persons generated by the Project would represent approximately 0.68 percent of the projected growth in the City of Los Angeles during the same period.

Based on employment generation rates published by LADOT and DCP, development of the Project would result in a net increase of approximately 35 employment positions on the Project Site (340 existing employees and 375 with the Project).[51] As discussed in Section IV.G, Population and Housing, of this Draft EIR, according to the

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

[49] *Based on a linear interpolation of 2012–2040 data.*

[50] *Based on a rate of 2.41 persons per multi-family unit based on 2018 American Community Survey 5-Year Average Estimates per correspondence with Jack Tsao, Data Analyst II, Los Angeles Department of City Planning, June 12, 2020.*

[51] *Using employee generation factors from the Los Angeles Department of Transportation (LADOT) and Los Angeles Department of City Planning (DCP), City of Los Angeles VMT Calculator Documentation, Version 1.3, May 2020, Table 1. Based on the employee generation rates for Supermarket (4.0 employees/ 1,000 square feet), General Retail (2.0 employees/1,000 square feet), and Fast-Food Restaurant (6.7 employees/1,000 square feet).*

2016–2040 RTP/SCS, the employment forecast for the City of Los Angeles Subregion in 2017 was approximately 1,696,400 employees.[52] In 2026, the City of Los Angeles Subregion is anticipated to have approximately 1,932,750 employees.[53] The estimated 35 net new employees generated by the Project would represent 0.02 percent of the employment growth forecasted by SCAG for the City of Los Angeles between 2017 and 2026 under the 2016–2040 RTP/SCS and 0.04 percent of the growth for the same period forecasted by the 2020–2045 RTP/SCS.

Because the Project's resulting residential growth and employment would fall well within the growth forecasts for the City and similar projections form the basis of the 2016 AQMP, it can be concluded that the Project would be consistent with the projections in the AQMP. Please refer to Section IV.E, Land Use, of this Draft EIR, for additional discussion regarding the Project's consistency with the 2016–2040 RTP/SCS.

- 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. In addition, the Project would also comply with CARB regulations regarding limiting truck idling and fleet rules which require specific emissions standards according to fleet size. Mitigation Measures Air MM-1 through MM-6 would further reduce significant air quality impacts as the result of regional construction pollutant emissions. **As such, the proposed 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. SCAQMD combines its portion of the Plan with those prepared by SCAG. The RTP/SCS and TCMs, included as Appendix IV-C of the 2016 AQMP/SIP for the Basin, are based on SCAG's 2016–2040 RTP/SCS.

The Project represents an infill development within an existing urbanized area that would concentrate new residential and commercial uses within a High Quality Transit Area

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

[53] *Based on a linear interpolation of 2012–2040 data.*

(HQTA).[54] Specifically, the Project Site is located 0.25 mile from the Metro B (Red) Line Hollywood/Western station. Therefore, the Project would be consistent with SCAG's 2016–2040 RTP/SCS, as it is located within an HQTA. As further discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project design includes characteristics that would reduce trips and VMT as compared to a standard project within the air basin as measured by the air quality model (CalEEMod).[55] While these Project characteristics primarily reduce GHG 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.

Previously, trip generation for land uses was calculated based on survey data collected by the Institute of Transportation Engineers (ITE). However, these ITE trip generation rates were based on data collected at suburban, single-use, free standing sites, which may not be representative of urban mixed-use environments. Beginning in 2019, the USEPA has sponsored a study to collect travel survey data from mixed-use developments in order provide a more representative trip generation rate for multi-use sites. Results of the USEPA survey indicate that trip generation and VMT are affected by factors such as resident and job density, availability of transit, and accessibility of biking and walking paths. Based on these factors, the USEPA has developed equations known as the EPA Mixed-Use Development (MXD) model to calculate trip reductions for multi-use developments.[56] The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project features such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. As shown in Appendix B, page C-92, incorporation of USEPA MXD VMT reduction features applicable to the Project results in a 27-percent reduction in overall VMT and resultant pollutant emissions. Furthermore, with implementation of Project Design Feature TR-PDF-1, implementation of a TDM program, the Project would result in a 29-percent reduction in overall VMT and associated emissions in comparison to a site without increased density, proximity to transit, mixed use and other project features discussed above. Implementation of these sustainability features would contribute to a reduction in air quality emissions via a

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[54] *Defined by the 2016–2040 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.*

[55] *"Standard Project" refers to a Project that would be developed under statewide average conditions (assumed analogous to an ITE baseline). Consistent with statewide average conditions, this assumes that a development would not be located in an urban setting in close proximity to job centers or major transit stations.*

[56] *Environmental Protection Agency, Mixed-Use Trip Generation Model, www.epa.gov/smartgrowth/mixed-use-trip-generation-model, accessed February 18, 2021.*

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 2016–2040 RTP/SCS (i.e., control measures of the AQMP) and 2020–2045 RTP/SCS.**

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

Goal 1—Good air quality and mobility in an environment of continued population growth and health economic structure.

Objective 1.1—It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.

Objective 1.3—It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.

Policy 1.3.1—Minimize particulate emissions from construction sites.

Policy 1.3.2—Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic.

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.

Policy 2.2.2 —Encourage multi-occupant vehicle travel and discourage single occupant vehicle travel by instituting parking management practices.

Goal 4—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.

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.

Goal 5—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 methods such as site orientation and tree planting.

Objective 5.1—It is the objective of the City of Los Angeles to increase energy efficiency of City facilities and private developments.

Policy 5.1.2—Effect a reduction in energy consumption and shift to nonpolluting sources of energy in its buildings and operations.

Policy 5.1.4—Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.

Objective 5.3—It is the objective of the City of Los Angeles to reduce the use of polluting fuels in stationary sources.

Policy 5.3.1—Support the development and use of equipment powered by electric or low-emitting fuels.

As shown Table IV.A-5 on page IV.A-49, the Project would promote the City of Los Angeles' General Plan Air Quality Element goals, objectives and policies noted above. In particular, the Project includes 548 bicycle parking spaces (including 472 long-term spaces and 76 short-term spaces for the proposed residential, commercial and retail uses). In addition to bicycle parking, the Project would offer convenient access to public transit and opportunities for walking and biking to nearby destinations (e.g., work, retail, or entertainment destinations), thereby facilitating a reduction in the Project's VMT. Furthermore, the Project would include neighborhood-serving commercial and retail uses that would serve Project residents and the Project vicinity, thereby reducing VMT that would otherwise be required to travel to similar retail uses elsewhere in the community. The Project also includes primary entrances for pedestrians and bicyclists that would be safe, easily accessible, and a short distance from transit stops. Additionally, as discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project will comply with City EV charging requirements which includes the provision of at least 30 percent of total parking spaces provided on the Project Site to be capable of supporting future electric vehicle supply equipment (EVSE) and a minimum of 10 percent of the total parking spaces on the Project Site to be equipped with EV charging stations. Provisions of the EVSE and EV parking spaces would help to facilitate and encourage use of alternative fueled vehicles.

Refer to Section IV.E, Land Use and Planning, of this Draft EIR, for an analysis of the Project's consistency with the City's General Plan. **Based on the discussion above, the Project is consistent with applicable policies of the City of Los Angeles Air Quality Element. Impacts to Threshold (a) would be less than significant.**

Based on the above, the Project is consistent with applicable policies of the City of Los Angeles Air Quality Element.

(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 plans and policies. The determination of AQMP consistency is primarily concerned with the long-term influence of the Project on air

Table IV.A-5
Project Consistency with City of Los Angeles General Plan (Air Quality Element)

Recommendation	Analysis of Project Consistency
Air Quality Element	
Goal 1: Good air quality and mobility in an environment of continued population growth and health economic structure.	**Consistent.** The Project Site is located in an infill location with convenient access to public transit and opportunities for walking and biking which would promote good air quality and mobility by facilitating a reduction of vehicle trips, VMT, and air pollution. The Project would also provide required short- and long-term bicycle parking spaces in compliance with the requirements of the LAMC. The increase in transit accessibility and the bicycle parking spaces provided on-site would further reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation.
Objective 1.1: It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.	**Consistent.** The Project Site is located in an infill location with convenient access to public transit and opportunities for walking and biking which would promote increased mobility and a reduction in air pollution by facilitating a reduction of vehicle trips, VMT, and air pollution. Future residents and employees on the Project Site would be approximately 0.25 mile from the Hollywood/Western Metro B (Red) Line station. The Project Site would also be served by ten Metro bus lines and one DASH line and one LADOT Commuter Express line. The Project would also provide 548 bicycle parking spaces, including 76 short-term spaces to further encourage biking. The Project's close proximity to mass transit would reduce reliance on single-occupant vehicles, consistent with this goal. As discussed under Threshold (a), the Project would be consistent with the relevant SCAG growth projections in the SCAG 2016–2040 RTP/SCS that were used in preparing the 2016 AQMP. Furthermore, the Project would be consistent with the relevant SCAG growth projections in the SCAG 2020–2045 RTP/SCS. The Project would reduce air pollutants through a reduction in VMT and increase traffic mobility while also sustaining economic growth.
Objective 1.3: It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.	**Consistent.** The Project would comply with SCAQMD Rule 403 which requires dust control measures during construction activities. The Project would also require the construction contractor(s) to comply with the applicable provisions of the CARB In-Use Off-Road Diesel Vehicle Regulation, which aims to reduce emissions through the installation of diesel particulate matter filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. In addition, the Project would not have large areas of unpaved surfaces. Parking areas would be provided within an enclosed parking structure and would be maintained with good housekeeping practices.

Table IV.A-5 (Continued)
Project Consistency with City of Los Angeles General Plan (Air Quality Element)

Recommendation	Analysis of Project Consistency
Policy 1.3.1: Minimize particulate emissions from construction sites	**Consistent.** The Project would comply with SCAQMD Rule 403 which requires dust control measures during construction activities and would therefore minimize particulate emissions from Project construction.
Policy 1.3.2: Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic	**Consistent.** The Project would comply with SCAQMD Rule 403 which requires dust control measures during construction activities. In addition, the Project would not have large areas of unpaved surfaces. Parking would be provided within an enclosed parking structure and would be maintained with good housekeeping practices.
Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.	**Consistent.** The Project Site is located in an infill location in close proximity to mass transit, thereby encouraging transit use and reducing the distance traveled for future residents and employees. Future residents and employees on the Project Site would be approximately 0.25 mile from the Hollywood/Western Metro B (Red) Line station. The Project Site would also be served by ten Metro local lines and one DASH line and one LADOT Commuter Express line. The Project would also provide 548 bicycle parking spaces, including 76 short-term spaces to further encourage biking. The Project's close proximity to mass transit would reduce reliance on single-occupant vehicles, consistent with this goal.
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.	**Consistent.** As discussed above, the Project Site is located approximately 0.25 mile from the Hollywood/Western Metro B (Red) Line station and also served by Metro/DASH/LADOT lines. The accessibility to mass transit would encourage employees and residents to utilize alternative modes of transportation. which would reduce trips. Additionally, the Project's mix of uses and infill location would help to reduce work trips and 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.	**Consistent**. The Project would be located within 0.25 mile from the Metro B (Red) Line Hollywood/Western Station and is served by local bus lines. The Project would incorporate pedestrian pathways that would connect to the existing sidewalk network. In addition, the Project would provide 548 bicycle parking spaces, including 76 short-term spaces. Together, these features would reduce work trips and traffic congestion.
Policy 2.2.2: Encourage multi-occupant vehicle travel and discourage single occupant vehicle travel by instituting parking management practices.	**Consistent**. As required by Project Design Feature TR-PDF-1, the Project would develop and implement a TDM program to promote non-auto travel and reduce the use of single-occupant vehicle trips for employees and Project residents.

Table IV.A-5 (Continued)
Project Consistency with City of Los Angeles General Plan (Air Quality Element)

Recommendation	Analysis of Project Consistency
Goal 4: Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.	**Consistent.** The Project would reduce VMT due to its infill location, development of residential and retail uses near major population areas, and access to public transportation within a quarter mile of the Project Site, therefore contributing to 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 the regional attainment of ambient air quality standards as a primary consideration in land use planning.	**Consistent.** The Project analysis of potential air quality impacts relied upon the numeric indicators established by SCAQMD, which considers attainment of the ambient air quality standards. The Project also incorporates land use characteristics that would reduce land use planning-related air pollutant emissions.
Policy 4.1.2: Ensure that project level review and approval of land use development remain at the local level.	**Consistent.** The Project environmental review and approval would occur at the local level and the City is preparing this project-level EIR for the Project.
Objective 4.2: It is the objective of the City of Los Angeles to reduce vehicle trips and VMT associated with land use patterns.	**Consistent.** The Project would reduce VMT due to its infill location, development of residential and commercial uses near major population areas, access to public transportation within a quarter mile of the Project Site, and development of neighborhood serving retail.
Policy 4.2.2: Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.	**Consistent.** The Project would improve accessibility due to its infill location, development of residential uses near major population areas, access to public transportation within a quarter mile of the Project Site, and development of neighborhood serving retail.
Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	**Consistent.** The Project would incorporate pedestrian pathways that would connect to the existing sidewalk network. In addition, the Project would provide 548 bicycle parking spaces, including 76 short-term spaces. The Project would also comply with City requirements for providing electric vehicle charging capabilities and electric vehicle charging stations within the proposed parking areas.
Policy 4.2.4: Require that air quality impacts be a consideration in the review and approval of all discretionary projects.	**Consistent.** The environmental review conducted for the Project would include an analysis of air quality impacts; and the decision-maker(s) for the discretionary actions would be responsible for determining that the environmental review was conducted in compliance with CEQA.
Policy 4.2.5: Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	**Consistent.** The Project would occupy an infill location within a quarter mile of existing public transportation, which would help to promote transit usage and in turn reduce the number of vehicle trips to and from the Project Site. In addition, the Project would provide 548 bicycle parking spaces, including 76 short-term spaces. Furthermore, as required by Project Design Feature TR-PDF-1, the Project would develop and implement a

Table IV.A-5 (Continued)
Project Consistency with City of Los Angeles General Plan (Air Quality Element)

Recommendation	Analysis of Project Consistency
	TDM program to promote non-auto travel and reduce the use of single-occupant vehicle trips for office employees.
Goal 5: 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 methods such as site orientation and tree planting. .	**Consistent.** The Project would reduce VMT due to its infill location, development of residential and retail uses near major population areas, and access to public transportation within a quarter mile of the Project Site, therefore contributing to addressing the relationship between land use, transportation, and air quality. Furthermore, as required by Project Design Feature TR-PDF-1, the Project would develop and implement a TDM program to promote non-auto travel and reduce the use of single-occupant vehicle trips for employees and Project residents. The Project would also comply with City requirements for providing electric vehicle charging capabilities and electric vehicle charging stations within the proposed parking areas. The Project also includes 17 new street trees along Western Avenue, nine new street trees along Sunset Boulevard plus retention of 11 existing Palm trees, and 10 new street trees along Serrano Avenue, in addition to planting new trees and landscaping within the Project Site.
Objective 5.1: It is the objective of the City of Los Angeles to increase energy efficiency of City facilities and private developments.	**Consistent.** The Project would comply with requirements of the latest Title 24 energy efficiency requirements, CalGreen Building Code and LA Green Building Code.
Policy 5.1.2: Effect a reduction in energy consumption and shift to nonpolluting sources of energy in its buildings and operations	**Consistent.** The Project would comply with requirements of the latest Title 24 energy efficiency requirements, CalGreen Building Code and LA Green Building Code. Electricity supplied to the Project site would meet renewable portfolio standard (RPS) requirements.
Policy 5.1.4: Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.	**Consistent.** The Project would comply with requirements of the latest Title 24 energy efficiency requirements, CalGreen Building Code and LA Green Building Code. The Project would comply with the City's waste diversion regulatory requirements.
Objective 5.3: It is the objective of the City of Los Angeles to reduce the use of polluting fuels in stationary sources	**Consistent.** The Project would comply with SCAQMD requirements for stationary sources including emergency generators, boilers or other external combustion equipment.
Policy 5.3.1: Support the development and use of equipment powered by electric or low-emitting fuels.	**Consistent.** The Project would also comply with City requirements for providing electric vehicle charging capabilities and electric vehicle charging stations within the proposed parking areas.

Table IV.A-5 (Continued)
Project Consistency with City of Los Angeles General Plan (Air Quality Element)

Recommendation	Analysis of Project Consistency

Source: Eyestone Environmental, 2021.

quality in the Air Basin. As discussed above, the Project would not increase the frequency or severity of an existing air quality violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the State and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. In addition, because the Project is consistent with growth projections that form the basis of the 2016 AQMP, the Project would be consistent with the emissions forecasts in the AQMP. Furthermore, as the Project implements feasible air quality mitigation measures, which would reduce air quality impacts, the Project meets this AQMP consistency criterion. Additionally, as the Project would support the City's 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's policies, as discussed above, the Project would serve to implement applicable policies of the City pertaining to air quality. Based on the above, impacts related to Threshold (a) would be less than significant.

(2) Mitigation Measures

Project impacts related to Threshold (a) would be less than significant during construction and operation of the Project. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts were determined to be less than significant without mitigation. Therefore, no mitigation measures were required, and the impact level remains less than significant**.**

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

(1) Impact Analysis

(a) Regional Emissions

(i) Construction

As described in Section II, Project Description, of this Draft EIR, Project construction would occur continuously over approximately 48 months with a sequence of non-overlapping construction phases. The Project is scheduled to be built out by 2026. Construction activities would require approximately 380,000 cubic yards of grading, which would be exported off-site to nearby landfills. This analysis also conservatively assumes a round trip haul distance of 48 miles to the Vulcan Landfill in Sun Valley, which is currently accepting clean soil. For additional construction assumptions, see Appendix B, Air Quality Appendix, of this Draft EIR.

Project construction has the potential to generate air emissions through the use of heavy-duty construction equipment and vehicle trips by 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 building finishing phase, 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-6 on page IV.A-55 represent the highest daily emissions projected to occur during each year of construction. As presented therein, construction-related daily maximum regional construction emissions (i.e., combined on-site and off-site emissions) without mitigation would not exceed the SCAQMD daily significance thresholds for VOC, CO, SO_X, PM_{10}, or $PM_{2.5}$. Maximum unmitigated construction emissions would exceed the SCAQMD daily significance threshold for NO_X as a result of the grading phase (i.e., excavation and export of soil) over an approximate seven-month duration. **Therefore, prior to mitigation, regional construction emissions resulting from the Project would result in a significant short-term impact. However, as discussed below in subsection (2) Mitigation Measures and (3) Level of Significance After Mitigation**, **mitigation measures would reduce impacts to a less-than-significant level. Therefore, regional construction emissions resulting from the Project would result in a less-than-significant impact with incorporation of mitigation measures.**

Table IV.A-6
Estimate of Maximum Regional Project Daily Construction Emissions—Unmitigated
(pounds per day)

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Regional Construction Emissions						
Year 2022	7	134	58	<1	14	6
Year 2023	5	97	55	<1	46	13
Year 2024	8	43	78	<1	15	5
Year 2025	31	41	76	<1	14	5
Year 2026	28	21	49	<1	12	4
Maximum Unmitigated Construction Emissions[c]	**31**	**134**	**78**	**<1**	**46**	**13**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(44)**	**34**	**(472)**	**(150)**	**(104)**	**(42)**
Maximum Unmitigated Construction Emissions Exceed Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

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

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

[c] *Unmitigated scenario assumes compliance with SCAQMD Rule 403 requirements for fugitive dust.*

Source: Eyestone Environmental, 2021.

(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.D, Greenhouse Gas Emissions, of this Draft EIR. The Project's design includes characteristics that would reduce vehicular trips and VMT when compared to the Project without implementation of VMT reducing measures within the Air Basin. In addition, the Project would implement a TDM program as required under Project Design Feature TR-PDF-1. These VMT reductions are quantified in LADOT's VMT Calculator and account for project features such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. As shown on page C-92 in Appendix B of this Draft EIR, incorporation of USEPA mixed-use MXD VMT reduction features applicable to the Project and Project Design Feature TR-PDF-1 results in a 29-percent reduction in overall VMT and resultant pollutant emissions. These project design features and project characteristics are explained further in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR.

Table IV.A-7 on page IV.A-57 provides the Project's operational emissions with incorporation of relevant project design features. As shown in Table IV.A-7, regional emissions resulting from operation of the Project at its projected buildout year of 2026 would not exceed the SCAQMD's daily regional operational thresholds. **Therefore, 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.

(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 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 sources (e.g., water heaters, cooking appliances, HVAC), off-site sources such as

Project-related vehicle trips were also evaluated for potential exceedances of ambient air quality standards. As analyzed in Threshold (c) below, Project-related operational emissions from on-site and off-site sources would not exceed localized thresholds. Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.

(c) Conclusion

According to SCAQMD guidance, individual projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would have a cumulatively considerable contribution to emissions for those pollutants for which the Air Basin is in non-attainment. As shown in Table IV.A-6 on page IV.A-55, Project daily emissions at the Project Site would exceed SCAQMD's regional significance threshold for NO_X during

Table IV.A-7
Estimate of Maximum Regional Project Daily Operational Emissions—At Project Buildout (2026)[a]

Emission Source	Pollutant Emissions (pounds per day)[b]					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project						
Area	21	12	65	<1	1	1
Energy (Natural Gas)	<1	1	<1	<1	<1	<1
Mobile	2	15	42	<1	19	5
Emergency Generators	<1	<1	<1	<1	<1	<1
Total Proposed Uses Emissions	**24**	**28**	**110**	**<1**	**20**	**6**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(31)**	**(27)**	**(440)**	**(150)**	**(130)**	**(49)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

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

[b] *Please note that values presented represent the net increase in emissions which take into account Project future operational emissions and existing operational emissions. Calculations are presented in Appendix B of this document.*

Source: Eyestone Environmental, 2021.

construction of the Project. Although the Air Basin is not in federal or state attainment for NOx, it is a federal and state nonattainment for O_3. NOx is a precursor to the formation of O_3. Consequently, prior to mitigation, the Project would have a cumulative impact due to construction-related regional NO_X emissions without incorporation of mitigation measures.

Based on the above, prior to mitigation, impacts to Threshold (b) would be significant as the Project would exceed the SCAQMD daily significant threshold for regional NO_X emissions during construction.

(2) Mitigation Measures

The following mitigation measures set forth a program of air pollution control strategies designed to reduce the Project's air quality impacts during construction, particularly those impacts related to NO_X emissions:

Mitigation Measure AIR-MM-1: All off-road diesel-powered equipment greater than 50 hp used during Project grading/excavation activities shall meet USEPA Tier 4 Final emissions standards. A copy of each such unit's certified tier specification, BACT documentation, and CARB or

SCAQMD operating permit shall be provided on-site at the time of mobilization of each applicable unit of equipment to allow the Construction Monitor to compare the on-site equipment with the inventory and certified Tier specification and operating permit.

Mitigation Measure AIR-MM-2: During the grading phase, all trucks hauling the export of soil material and demolished site improvements shall be model year 2007 or newer. Prior to issuance of a grading permit, the applicant shall provide evidence (such as copies of contracts with concrete subcontractors with specifications or engine certifications) satisfactory to the Department of City Planning demonstrating compliance with this measure.

Mitigation Measure AIR-MM-3: All construction equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications. The contractor shall keep documentation on-site demonstrating that the equipment has been maintained in accordance with the manufacturer's specifications.

Mitigation Measure AIR-MM-4: Contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues shall have their engines turned off after five minutes when not in use, to reduce vehicle emissions.

Mitigation Measure AIR-MM-5: If stationary petroleum-powered construction equipment, such as generators, must be operated continuously, such equipment shall be located at least 100 feet from sensitive land uses. Distance to the nearest receptor is measured from the exhaust stack of the engine to the nearest receptor location.

Mitigation Measure AIR-MM-6: The Project shall include the use of solar-powered generators, to the extent commercially available, should generators be required during construction.

(3) Level of Significance After Mitigation

(a) Construction

As shown in Table IV.A-8 on page IV.A-59, implementation of the mitigation measures described above would serve to reduce construction emissions for all pollutants and maximum regional NO_X emissions would be reduced below SCAQMD's regional construction significance threshold. Specifically, Mitigation Measure AIR-MM-1, the use of EPA Tier 4 emissions compliant equipment would reduce peak daily construction NO_X emissions from 134 pounds per day to 107 pounds per day in Year 2022. Mitigation measures AIR-MM-2, the use of 2007 or newer haul trucks, would further reduce peak daily construction NO_X emissions from 107 to 71 pounds per day of NO_X in Year 2022 and would be reduced below the SCAQMD significance threshold of 100 pounds per day of NO_X.

Table IV.A-8
Estimate of Maximum Regional Project Daily Construction Emissions—Mitigated
(pounds per day)

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Regional Construction Emissions						
Year 2022	3	71	49	<1	4	2
Year 2023	5	97	55	<1	46	13
Year 2024	8	43	78	<1	15	5
Year 2025	31	41	76	<1	14	5
Year 2026	28	21	49	<1	12	4
Maximum Unmitigated Construction Emissions[c]	**31**	**97**	**78**	**<1**	**46**	**13**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(44)**	**(3)**	**(472)**	**(150)**	**(104)**	**(42)**
Maximum Unmitigated Construction Emissions Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

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

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

[c] *Mitigated scenario assumes compliance with SCAQMD Rule 403 requirements for fugitive dust and AIR-MM-1 and AIR-MM-2.*

Source: Eyestone Environmental, 2021.

Peak daily NOx emissions over the duration of construction would be 97 pounds per day of NOx during Year 2022, which is also below the significance threshold. AIR-MM-3 through AIR-MM-6, presented above, would further reduce criteria pollutant emissions (including NOx) during Project construction activities. However, quantification of these mitigation measures are not feasible (e.g., due to the number of construction equipment manufacturers each with their own specifications regarding engine tuning and extent of use of solar generators) Although Mitigation Measures AIR-MM-3 through AIR-MM-6 are included as part of the Project, emissions presented above do not account for these measures. Therefore, Project construction emissions presented above along with impact conclusions are conservative. Project construction would result in a less than significant Project-level and cumulative regional impacts with incorporation of mitigation measures.

(b) Operation

Project-level impacts related to Threshold (b) during operation of the Project were determined to be less than significant without mitigation. Therefore, no mitigation measures

were required or included, and the impact level remains less than significant with regards to Project operational emissions.

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

(1) Impacts Analysis

(a) Construction

(i) Localized Impacts from On-Site Construction Activities

As discussed above in the methodology subsection, the localized construction air quality analysis was conducted using the methodology promulgated by SCAQMD. Look-up tables provided by SCAQMD were used to determine localized construction emissions thresholds for the Project.[57] 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 (2017–2019) for the Project area presented in Table IV.A-2 on page IV.A-23. Although the trend shown in Table IV.A-2 demonstrates that ambient air quality is improving in the area, the localized construction emissions analysis conservatively did not apply a reduction in background pollutant concentrations for subsequent years of construction (i.e., 2022–2026). By doing so, the allowable pollutant increment to not exceed an ambient air quality standard is more stringent. This analysis is based on existing background ambient air quality monitoring data (2016–2018).

Maximum on-site daily construction emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for SRA 1 based on construction site acreage of 5 acres. Although the Project Site is larger than 5 acres, it was conservatively assumed that all on-site emissions would occur within a 5-acre area. As discussed above, this approach is recommended by SCAQMD for a screening-level analysis and would also over-predict potential localized impacts as more pollutant emissions would occur within a smaller area and within closer proximity to potential sensitive receptors. Consistent with SCAQMD's LST methodology, pollutants with short-term averaging periods (NO_X and CO) were evaluated for locations where the public could be present for as short of a duration as one hour.

Potential impacts were evaluated at the closest off-site sensitive receptor, which are residences located on the east side of Serrano Avenue across from the Project Site, approximately 18 meters (60 feet) away from the Project Site. The closest receptor

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

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 should use the LSTs for receptors located at 25 meters.[58]

The maximum daily localized emissions from Project construction and LSTs are presented in Table IV.A-9 on page IV.A-62. As presented therein, maximum construction emissions would not exceed the SCAQMD-recommended localized screening thresholds. **As a result, Project-related construction activities would result in a less-than-significant impact with regard to localized emissions.**

(ii) Toxic Air Contaminants—Construction

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 four years, the Project would not result in a long-term (i.e., 70-year) source of TAC 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. **As such, Project-related TAC emissions during construction would result in a less-than-significant impact.**

(b) Operation

(i) Localized Impacts from On-Site Operational Activities

Operation of the Project would not introduce any major new sources of air pollution within the Project Site such as large warehousing operations, stationary power plants or other large industrial sources. Emissions estimates for criteria air pollutants from on-site sources are presented in Table IV.A-10 on page IV.A-63. The SCAQMD LST mass rate look-up tables, which apply to projects that have active areas that are less than or equal to 5 acres in size, were used to evaluate potential localized impacts. As shown in Table IV.A-10, on-site operational emissions would not exceed any of the LSTs. **As such, Project operations would result in a less-than-significant impact with regard to localized emissions.**

[58] *SCAQMD, Final Localized Significance Threshold Methodology, revised July 2008.*

Table IV.A-9
Estimate of Maximum Localized Daily Project Construction Emissions–Unmitigated (pounds per day)[a, b]

Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$
Year 2022	33	30	4	3
Year 2023	77	42	4	3
Year 2024	38	51	2	1
Year 2025	36	50	1	1
Year 2026	18	27	<1	<1
Maximum Unmitigated Daily Localized Emissions	**77**	**51**	**4**	**3**
SCAQMD Localized Significance Thresholds[c]	**107**	**1,861**	**16**	**8**
Over/(Under)	**(30)**	**(1,810)**	**(12)**	**(5)**
Exceed Threshold?	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

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

[b] *Unmitigated emissions assumes compliance with SCAQMD Rule 403, which is a requirement for construction projects within the South Coast Air Basin. While the measure is not considered mitigation, CalEEMod includes the measure under mitigation measures and, therefore, is reflected in the "mitigated" results within the CalEEMod output file.*

[c] *Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1. The closest existing sensitive receptor are comprised of residential uses adjacent to the south of the Project Site and residential uses located to the east, directly across Serrano Avenue. 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.*

Although the Project Site is larger than 5 acres, it was conservatively assumed that all on-site emissions would occur within a 5-acre area. This approach is recommended by SCAQMD for a screening-level analysis and would also over-predict potential localized impacts as more pollutant emissions would occur within a smaller area and within closer proximity to potential sensitive receptors.

Source: Eyestone Environmental, 2021.

(ii) 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 Project buildout, the highest average daily trips at an intersection would be approximately 62,500 at the Western Avenue and Santa Monica Boulevard intersection, which is substantially below the daily traffic volumes that would be expected to generate

Table IV.A-10
Estimate of Maximum Localized Project Daily Operational Emissions—Project Buildout (2026)[a]
(pounds per day)[b]

Emission Source	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	11	65	1	1.2
Energy (Natural Gas[c])	1	<1	<1	0.1
Stationary	<1	1	<1	<0.1
On-Site Total	**13**	**67**	**1**	**1.3**
SCAQMD Significance Threshold[d]	**107**	**1,861**	**4**	**2**
Over/(Under)	**(94)**	**(1,794)**	**(3)**	**(0.7)**
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 document.*

[b] *Please note that values presented represent the net increase in emissions which take into account Project future operational emissions and existing operational emissions. Calculations are presented in Appendix B of this document.*

[c] *Natural gas usage includes Project HVAC, water heating and cooking uses. Criteria pollutant emissions resulting from electricity generation are not included in CalEEMod as these off-site sources would be required to comply with best available control technology (BACT) consistent with federal or local air agency permits.*

[d] *Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1. The closest sensitive receptors are comprised of residential uses adjacent to south of the Project Site and residential uses located to the east, directly across Serrano Avenue. 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.*

Although the Project Site is larger than 5 acres, it was conservatively assumed that all on-site emissions would occur within a 5-acre area. This approach is recommended by SCAQMD for a screening-level analysis and would also over-predict potential localized impacts as more pollutant emissions would occur within a smaller area and within closer proximity to potential sensitive receptors.

Source: Eyestone Environmental, 2021.

CO exceedances, as evaluated in the 2003 AQMP.[59,60] 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 Western Avenue and Santa Monica Boulevard intersection would exceed the 1-hour CO standard if modeled in detail,

[59] *Daily intersection volume calculations provided on page C-102 in Appendix B of this Draft EIR.*

[60] *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.*

based on the studies undertaken for the 2003 AQMP.[61] Therefore, the Project does not trigger the need for a detailed CO hotspots model and would not cause any new or exacerbate any existing CO hotspots. **As a result, impacts related to localized mobile-source CO emissions are considered less than significant.** The supporting data for this analysis is included in Appendix B of this Draft EIR.

(iii) Toxic Air Contaminants—Operations

On-Site Sources

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. CARB has published and adopted the *Air Quality and Land Use Handbook: A Community Health Perspective*, 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).[62] SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*.[63] 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. It should be noted that in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* (2005), SCAQMD recommends that HRAs be conducted for substantial individual sources of DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.[64] Based on this guidance, the Project would not include these types of land uses and is not considered to be a substantial source of

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[61] *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.*

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

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

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

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

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.

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 California Accidental Release Program. As such, the Project would not release substantial amounts of TACs, and impacts on human health would be less than significant.

Off-Site Sources

As discussed above, ZI No. 2427 states that recent studies have established strong links to negative health outcomes affecting sensitive populations as far out as 1,000 feet from freeways. The City Planning Commission advises that applicants of projects requiring discretionary approval, located in proximity of a freeway, and including residential units and other sensitive uses, to adhere to the Citywide design guidelines, including those that address freeway proximity and encourage design approaches that site sensitive uses away from the freeway and to provide enhanced filtration. In order to evaluate health risk impacts to future on-site receptors, an HRA was performed for the Project. Non-carcinogenic hazards analyzed in the HRA include NO_X, CO, PM_{10}, and $PM_{2.5}$. The results of the HRA are included in Appendix G of this Draft EIR and in the discussion with regard to land use compatibility included in Section IV.E, Land Use, of this Draft EIR.[65] The HRA concluded that carcinogenic and non-carcinogenic hazards within the Project Site were predicted to be within acceptable limits. It is also noted that the HRA determined that the Project would not materially affect the level of toxic air contaminants generated by traffic along the nearby US-101 Freeway. **Based on the above, the Project would not expose sensitive**

[65] *Air Quality Dynamics, Sunset/Western Mixed-Use Project Health Risk Assessment, February 2018. Refer to Appendix G of this Draft EIR.*

receptors to substantial pollutant concentrations and impacts would be less than significant.

(2) Mitigation Measures

Project impacts related to Threshold (c) would be less than significant during construction and operation of the Project. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts were determined to be less than significant without mitigation. Therefore, no mitigation measures were required, and the impact level remains less than significant.

Threshold (d): Would the Project 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. **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.**

d. Cumulative Impacts

(1) Impact Analysis

(a) Construction

As discussed above, the Project's construction-related air quality emissions and cumulative impacts would be less than significant with incorporation of mitigation measures. The Project would comply with regulatory requirements, including the SCAQMD Rule 403 requirements listed above. Based on SCAQMD guidance, individual construction projects that exceed the recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants and precursors for which the Air Basin is in non-attainment. As shown above, construction-related daily emissions at the Project Site (i.e., combined on- and off-site emissions) without mitigation would exceed the SCAQMD daily significance thresholds for NO_X, which is an ozone precursor, during the first year of construction, as a result of grading/ excavation activities. With incorporation of Mitigation Measure AIR-MM-1 and AIR-MM-2, provided above in Subsection 3.c, maximum regional NO_X emissions would be reduced from 134 pounds per day to 97 pounds per day and NO_X emissions would therefore be

reduced below the SCAQMD regional construction threshold of 100 pounds per day. As discussed above, while Mitigation Measures AIR-MM-3 through AIR MM-6 would serve to further reduce construction emissions, the measures are not readily quantifiable and were conservatively not included in the construction emissions inventory. Consequently, the Project would result in a less than significant cumulative impact with implementation of mitigation measures due to construction-related emissions. Furthermore, the Project would not exceed any of the SCAQMD's localized significance thresholds including NO_X, CO, PM_{10} and $PM_{2.5}$. **Therefore, the Project's contribution to cumulative air quality impacts due to localized emissions would not be cumulatively considerable and, therefore, would be less than significant.**

Similar to the Project, the greatest potential for TAC emissions at each related project would generally involve diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Construction activities are temporary and short-term events, thus construction activities at each related project would not result in a long-term substantial source of TAC emissions. Additionally, the SCAQMD's *CEQA Air Quality Handbook* and SCAQMD's supplemental online guidance/information do not require a health risk assessment for short-term construction emissions. It is therefore not required or meaningful to evaluate long-term cancer impacts from construction activities which occur over relatively short durations. **As such, given the short-term nature of these activities, cumulative toxic emission impacts during construction would be less than significant.**

(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 the recommended daily regional thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. As operational emissions would not exceed any of SCAQMD's regional or localized significance thresholds, the emissions of non-attainment pollutants and precursors generated by Project operations would not be cumulatively considerable.

With respect to TAC emissions, neither the Project nor any of the 100 related projects (which are largely residential, retail/commercial, and office in nature), would represent a substantial source of TAC emissions, which are typically associated with large-scale industrial, manufacturing, and transportation hub facilities. As the Project and

related projects would not include any major sources of TAC emissions, it 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 related projects could 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 airborne toxic control measures 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 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 the CARB's Land Use Guidelines, and thus, would not contribute to a cumulative impact.

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

(2) Mitigation Measures

Cumulative impacts with regard to air quality would be less than significant with incorporation of mitigation measures identified under Threshold (b), during construction of the project. Therefore, no additional mitigation measures are required.

(3) Level of Significance After Mitigation

With incorporation of AIR-MM-1 through AIR-MM-6 under Threshold (b), cumulative impacts with regard to air quality during both construction and operation would be less than significant and no additional mitigation measures are required.