# IV. Environmental Impact Analysis B. Air Quality

# 1. Introduction

This section of the Draft EIR addresses the air emissions generated by construction and operation of the Project. The analysis also addresses the consistency of the Project with the air quality policies in the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP) and the City of Los Angeles General Plan (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 C of this Draft EIR.

# 2. Environmental Setting

### a. Air Quality Background

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

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

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

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

### **b.** Air Pollution and Potential Health Effects

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants due to their presence in elevated concentrations in the atmosphere. 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<sub>3</sub>), respirable particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), sulfates, and hydrogen sulfide (H<sub>2</sub>S). In addition, volatile organic compounds (VOCs) and toxic air contaminants (TACs) are of concern in the Air Basin. The health implications of each of these pollutants is briefly described below.

- (1) Criteria Pollutants
  - (a) Ozone (O<sub>3</sub>)

Ozone (O<sub>3</sub>) is a gas that is formed when VOCs and nitrogen oxides (NO<sub>x</sub>)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. O<sub>3</sub> concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O<sub>3</sub> 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. The people most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active

Table IV.B-1 Ambient Air Quality Standards

				SCAQMD Attai	nment Status°	
Pollutant	Averaging Period	California Standard <sup>a,b</sup>	Federal Standard <sup>a,b</sup>	California Standard <sup>d</sup>	Federal Standard <sup>d</sup>	
	1 hour	0.09 ppm (180 μg/m³)	_	Non-Attainment	_	
Ozone (O <sub>3</sub> )	8 hour	0.07 ppm (137 μg/m³)	0.070 ppm (137 µg/m³)	Non-Attainment	Non-Attainment (Extreme)	
Respirable Particulate	24 hour	50 µg/m³	150 µg/m³	Non-Attainment	Attainment	
Matter (PM <sub>10</sub> )	Annual	20 µg/m³	_	non-Attainment		
Fine	24 hour		35 µg/m³		Non-Attainment	
Particulate Matter (PM <sub>2.5</sub> )	Annual	12 µg/m³	12 µg/m³	Non-Attainment	(Serious)	
Carbon	1 hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	Attainment	Attainment	
Monoxide (CO)	8 hour	9.0 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	- Attainment		
Nitrogen	1 hour	0.18 ppm (339 μg/m³)	0.10 ppm (188 µg/m³)	Attainment	Unclassified/ Attainment	
Dioxide (NO <sub>2</sub> )	Annual	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)			
	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)			
Sulfur Dioxide	3 hour	—	0.5 ppm (1,300 μg/m³)	Attainment	Unclassified/	
(SO <sub>2</sub> )	24 hour	0.04 ppm (105 μg/m³)	0.14 ppm (365 µg/m³)	Allalinnent	Attainment	
	Annual	—	0.03 ppm (80 µg/m³)			
	30-day average	1.5 µg/m³			Partial Non- Attainment <sup>e</sup>	
Lead (Pb)	Rolling 3-month average	_	0.15 µg/m³	Attainment		
Sulfates	24 hour	25 µg/m³		Attainment		
Hydrogen Sulfide (H₂S)	1 hour	0.03 ppm (42 μg/m³)	_	Unclassified	—	

ppm = parts per million by volume

 $\mu g/m^3 = micrograms$  per cubic meter

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

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

				SCAQMD Attai	nment Status <sup>°</sup>
Pollutant	Averaging Period	California Standard <sup>a,b</sup>	Federal Standard <sup>a,b</sup>	California Standard <sup>d</sup>	Federal Standard <sup>d</sup>
expressed as a concentration that is not to be equaled or exceeded.					
<sup>b</sup> Ambient Air	Quality Standa	rds based on the SCAQ	MD's 2016 AQMP.		
<sup>c</sup> "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.					
<sup>d</sup> California and Federal standard attainment status based on SCAQMD's 2016 AQMP.					
<sup>e</sup> A small portion of Los Angeles county exceeded the Lead NAAQS during the 2007-2009 data period. However, in 2015, the SCAQMD lead monitoring network of eight regular monitoring sites and five source-specific sites did not exceed lead NAAQS. An attainment re-designation request is pending.					
Source: Eyestone Environmental, 2019.					

outdoors, especially outdoor workers.<sup>1</sup> Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure to  $O_3$  may lead to scarring of lung tissue and may lower lung efficiency.

### (b) Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)

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

<sup>&</sup>lt;sup>1</sup> United States Environmental Protection Agency, Health Effects of Ozone Pollution, www.epa.gov/groundlevel-ozone-pollution/health-effects-ozone-pollution, last updated June 30, 2019, accessed September 21, 2020.

### (c) Carbon Monoxide (CO)

Carbon Monoxide (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<sub>2</sub>)

Nitrogen Dioxide (NO<sub>2</sub>) 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<sub>2</sub>, creating the mixture of NO and NO<sub>2</sub> commonly called NO<sub>x</sub>. NO<sub>2</sub> absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO<sub>2</sub> also contributes to the formation of PM<sub>10</sub>. 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<sub>x</sub> is as a precursor to the formation of O<sub>3</sub>.

The adverse effects of ambient nitrogen dioxide air pollution exposure on health were reviewed in the 2008 USEPA Integrated Science Assessment for Oxides of Nitrogen—Health Criteria,<sup>2</sup> and more recently in the 2016 USEPA Integrated Science Assessment for Oxides of Nitrogen—Health Criteria.<sup>3</sup> The 2016 USEPA review noted the respiratory effects of NO<sub>2</sub>, and evidence suggestive of impacts on cardiovascular health, mortality and cancer.

### (e) Sulfur Dioxide (SO<sub>2</sub>)

Sulfur oxides (SO<sub>x</sub>) are compounds of sulfur and oxygen molecules. Sulfur Dioxide (SO<sub>2</sub>) is the predominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO<sub>2</sub> include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of SO<sub>2</sub> aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO<sub>2</sub> potentially causes wheezing, shortness of breath, and coughing. High levels of

<sup>&</sup>lt;sup>2</sup> U.S. EPA, Integrated Science Assessment for Oxides of Nitrogen—Health Criteria (Final Report), 2008, Washington, DC, EPA/600/R-08/071, http://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=194645, accessed May 11, 2021.

<sup>&</sup>lt;sup>3</sup> U.S. EPA, Integrated Science Assessment for Oxides of Nitrogen—Health Criteria (Final Report), 2016, Washington, DC, EPA/600/R-15/068, https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=310879, accessed May 11, 2021.

particulates appear to worsen the effect of SO<sub>2</sub>, 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 can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system, and affects the oxygen-carrying capacity of blood.<sup>4</sup> 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<sub>4</sub><sup>2</sup>)

Sulfates  $(SO_4^2)$  are the fully oxidized ionic form of sulfur.  $SO_4^2$  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  $SO_4^2$  exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease.  $SO_4^2$  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 ( $H_2S$ )

Hydrogen Sulfide ( $H_2S$ ) 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)

Volatile Organic Compounds (VOCs) are typically formed from combustion of fuels and/or released through evaporation of organic liquids. Some VOCs are also classified by the state as TACs. While there are no specific VOC ambient air quality standards, VOC is a prime component (along with NO<sub>x</sub>) of the photochemical processes by which such criteria

<sup>&</sup>lt;sup>4</sup> U.S. Environmental Protection Agency, Lead Air Pollution, www.epa.gov/lead-air-pollution/basic-informationabout-lead-air-pollution, accessed September 21, 2020.

pollutants as O<sub>3</sub>, NO<sub>2</sub>, and certain fine particles are formed. They are, thus, regulated as "precursors" to formation of those criteria pollutants.

### (3) Toxic Air Contaminants (TACs)

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

The California Air Resources Board (CARB)<sup>5</sup> 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.<sup>6</sup>

Diesel particulate matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the state as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 micrometer ( $\mu$ m)), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1  $\mu$ m). 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;

<sup>&</sup>lt;sup>5</sup> CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both state and federal air pollution control programs within California.

<sup>&</sup>lt;sup>6</sup> CARB, Toxic Air Contaminant Identification List, ww2.arb.ca.gov/resources/documents/carb-identifiedtoxic-air-contaminants, last reviewed by CARB July 18, 2011, accessed May 12, 2021.

(4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease.<sup>7,8</sup>

### c. Regulatory Framework

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

### (1) Criteria Pollutants

(a) Federal

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

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the National Ambient Air Quality Standard (NAAQS). These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones.

The sections of the CAA which are most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions). Title I provisions are implemented for the purpose of attaining NAAQS. Table IV.B-1 on page IV.B-3 shows the NAAQS currently in effect for each criteria pollutant and their relative attainment status. The Air Basin fails to meet national standards for O<sub>3</sub> and PM<sub>2.5</sub> and, therefore, is considered a federal "non-attainment" area for these pollutants. In addition, Los Angeles

<sup>&</sup>lt;sup>7</sup> CARB, Overview: Diesel Exhaust and Health, www.arb.ca.gov/research/diesel/diesel-health.htm, last reviewed by CARB April 12, 2016, accessed May 12, 2021.

<sup>&</sup>lt;sup>8</sup> CARB, Fact Sheet: Diesel Particulate Matter Health Risk Assessment Study for the West Oakland Community: Preliminary Summary of Results, March 2008.

County fails to meet the national standard for lead and, therefore, is considered a federal "non-attainment" area for lead.<sup>9</sup>

CAA 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<sub>x</sub> emissions have been lowered substantially and the specification requirements for cleaner burning gasoline are more stringent.

### (b) State

### (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 the earliest practicable date. CARB is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. Table IV.B-1 on page IV.B-3 includes the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the state. As shown in Table IV.B-1, the CAAQS include more stringent standards than the NAAQS. The Air Basin fails to meet state standards for O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> 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 (APA). The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. In addition, Section 93115 in Title 17 of the

<sup>&</sup>lt;sup>9</sup> A small portion of Los Angeles County exceeded the Lead NAAQS during the 2007–2009 data period. However, in 2015, the SCAQMD lead monitoring network of eight regular monitoring sites and five source-specific sites did not exceed lead NAAQS. An attainment re-designation request is pending.

CCR states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

(c) Regional

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

The SCAQMD shares responsibility with CARB for ensuring that all state and federal ambient air quality standards are achieved and maintained throughout the Air Basin.

To meet the CAAQS and NAAQS, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs). The 2016 AQMP incorporates the Southern California Association of Governments' (SCAG) 2016–2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS) and updated emission inventory methodologies for various source categories. <sup>10</sup> The 2016 AQMP also includes 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 and State 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.

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

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

- SCAQMD Rule 403 requires projects to incorporate fugitive dust control measures at least as effectively as the following measures:
  - Use watering to control dust generation during the demolition of structures;
  - Clean-up mud and dirt carried onto paved streets from the site;

<sup>&</sup>lt;sup>10</sup> The 2020–2045 RTP/SCS was approved in September. Consistency with the 2020–2045 RTP/SCS is therefore analyzed in Section IV.D, Land Use, of this Draft EIR. However, the 2016 AQMP relies on the 2016-2040 RTP/SCS and is therefore addressed for consistency with the 2016 AQMP.

- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;
- All haul trucks would be covered or would maintain at least 6 inches of freeboard;
- All materials transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of spillage or dust;
- Suspend earthmoving operations or implement additional watering to meet Rule 403 criteria if wind gusts exceed 25 mph; and
- The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind. All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions.
- SCAQMD Rule 1113 limits the VOC content of architectural coatings.
- SCAQMD Rule 1121 specifies NO<sub>X</sub> emission limits from residential type, naturalgas fired water heaters. This rule applies to water heaters with heat input rates less than 75,000 British Thermal Units (BTUs) per hour.
- SCAQMD Rule 1403 requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.
- SCAQMD Regulation XIII, New Source Review, requires new on-site facility nitrogen oxide emissions to be minimized through the use of emission control measures (e.g., use of best available control technology for new combustion sources such as boilers, emergency generators, and water heaters).

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

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including 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 the 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 of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The 2016–2040 RTP/SCS places an emphasis on sustainability and integrated planning. These strategies include supporting projects that encourage diverse job opportunities for a variety of skills and education, recreation and culture and a full-range of shopping, entertainment and services all within a relatively short distance, while encouraging employment development around current and planned transit stations and neighborhood commercial centers. The 2016–2040 RTP/SCS also includes strategies focused on compact infill development, creating public spaces that are appealing, and expanding housing and transportation choices. The 2016–2040 RTP/SCS is expected to encourage more compact development in certain areas of the region and access to public transit, which is expected to reduce individual vehicle miles traveled and related emissions from vehicles.

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. On October 30, 2020, the California Air Resources Board (CARB) accepted SCAG's determination that the SCS met the applicable state greenhouse gas emission targets. Connect SoCal builds upon the prior RTP/SCS with new initiatives involving land use, transportation, and technology to achieve the region's pollutant reduction goals from the transportation and land use sections in accordance with SB 375 and the state's climate targets. 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, which are described 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.<sup>11</sup>

### (d) Local

Local jurisdictions, such as the City of Los Angeles, have the authority and responsibility to reduce air pollution through their police power and decision-making

<sup>&</sup>lt;sup>11</sup> SCAG, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, adopted September 2020, Exhibit 3.4.

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 guality 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 interrelationships between transportation and land use planning in meeting the City's mobility and clean air goals. With the City's adoption of the Air Quality Element and the accompanying Clean Air Program, the City is seeking to achieve consistency with regional air quality growth management, mobility, and congestion management plans. The Air Quality Element sets forth the goals, objectives, and policies, which guide the City in the implementation of its air guality improvement programs and strategies.

The Air Quality Element establishes six goals:

- Good air quality in an environment of continued population growth and healthy economic structure;
- Less reliance on single-occupant vehicles with fewer commute and non-work trips;
- Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques;
- Minimal 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;
- Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting; and
- Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

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

### (2) Toxic Air Contaminants (TAC)

- (a) State
  - (i) Assembly Bill 1807

The California Air Toxics Program<sup>12</sup> was established in 1983, when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and OEHHA determine if a substance should be formally identified, or "listed," as a TAC in California. Since inception of the program, a number of such substances have been listed and include benzene, chloroform, formaldehyde, and particulate emissions from diesel-fueled engines, among others.<sup>13</sup> In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants (HAPs) as TACs.

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

In addition to limiting exhaust from idling trucks, CARB adopted regulations on July 26, 2007 for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled, off-road diesel vehicles to reduce emissions by installation of diesel particulate filters and encouraging the replacement of

<sup>&</sup>lt;sup>12</sup> CARB, California Air Toxics Program, www.arb.ca.gov/toxics/toxics.htm, last reviewed by CARB September 24, 2015, accessed May 11, 2021.

<sup>&</sup>lt;sup>13</sup> CARB, Toxic Air Contaminant Identification List, ww2.arb.ca.gov/resources/documents/carb-identifiedtoxic-air-contaminants, last reviewed by CARB July 18, 2011, accessed May 11, 2021.

older, dirtier engines with newer emission controlled models. Implementation is staggered based on fleet size, with the largest operators beginning compliance in 2014.<sup>14</sup>

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

### (ii) Air Quality and Land Use Handbook

CARB published the Air Quality and Land Use Handbook on April 28, 2005 (the "CARB Handbook"), to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions.<sup>15</sup> The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day;<sup>16</sup> (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines. If sensitive receptors are proposed to be sited within these distances, the CARB Handbook recommends performing additional site-specific assessments to evaluate the actual estimated health risks.

<sup>&</sup>lt;sup>14</sup> CARB, In-Use Off-Road Diesel-Fueled Fleets Regulation Overview, Revised October 2016.

<sup>&</sup>lt;sup>15</sup> CARB, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.

<sup>&</sup>lt;sup>16</sup> In November 2012, the Los Angeles City Planning Commission (CPC) issued an advisory notice (Zoning Information File No. 2427) regarding the siting of sensitive land uses within 1,000 feet of freeways. The CPC deemed 1,000 feet to be a conservative distance to evaluate projects that house populations considered to be more at-risk from the negative effects of air pollution caused by freeway proximity. The CPC advised that applicants of projects requiring discretionary approval, located within 1,000 feet of a freeway and contemplating residential units and other sensitive uses (e.g., hospitals, schools, retirement homes, etc.) perform a Health Risk Assessment (HRA). The Project Site is not within 1,000 feet of a freeway and does not involve the development of residential units or other sensitive uses and, therefore, would not be subject to this notice and does not warrant the preparation of an HRA relative to the Project Site's proximity to a freeway.

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

### (b) Regional

Pursuant to California AB 1807, which directs the CARB to identify substances as TACs and adopt ATCMs to control such substances, the SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. SCAQMD has adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities. Significant risk facilities are those facilities which have an increased cancer risk exceeding 10 in 1 million or a total hazard index exceeding 1.0. Examples include landfills, refineries and oil production facilities.

### d. Existing Conditions

### (1) Regional Air Quality

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

The greatest air pollution throughout the Air Basin occurs from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Air Basin vary with location, season, and time of day. O<sub>3</sub> 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<sub>3</sub> and PM<sub>2.5</sub>. 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<sub>X</sub> emissions<sup>17</sup> 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<sub>X</sub> and modeling results show that NO<sub>X</sub> 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 NOx must be reduced to 96 tpd in 2031 to attain the 8-hour ozone standard. Although the existing air regulations and programs will continue to lower NOx emissions in the region, an additional 55 percent in the year 2031 are necessary to attain the 8- hour ozone standard.<sup>18,19</sup>

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 U.S. EPA. In addition, the SCAG 2016–2040 RTP/SCS<sup>20</sup> includes transportation programs, measures, and strategies generally designed to reduce VMT, which are contained in the AQMP.

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the Plan with those prepared by SCAG. The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and Transportation Control Measures

<sup>&</sup>lt;sup>17</sup> NOx emissions are a precursor to the formation of both ozone and secondary PM<sub>2.5</sub>.

<sup>&</sup>lt;sup>18</sup> 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).

<sup>&</sup>lt;sup>19</sup> SCAQMD, Final 2016 AQMP, 2017, p. ES-2.

<sup>&</sup>lt;sup>20</sup> SCAG, Connect SoCal, What is Connect SoCal?, http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx, accessed May 12, 2021.

(TCMs), included as Appendix IV-C of the 2016 AQMP/SIP for the Basin, are based on SCAG's 2016–2040 RTP/SCS.

### (a) AQMP—Long-Term Trends

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 vehicle miles traveled between 2012 and 2031.

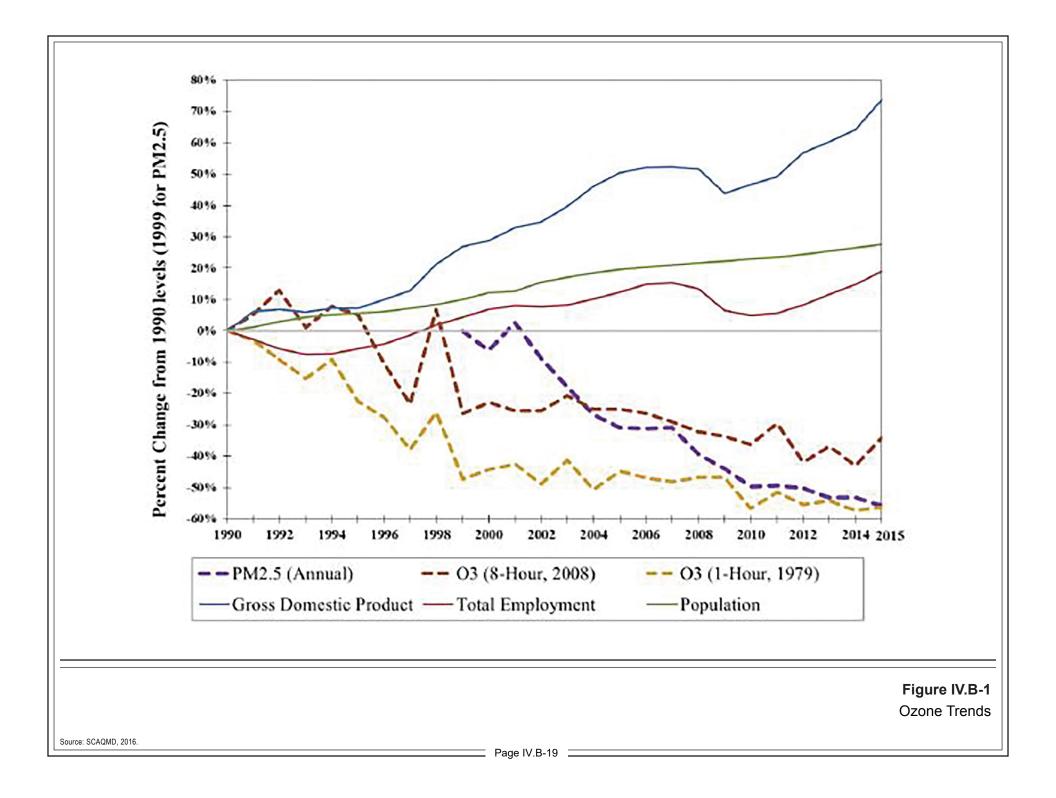
Despite this regional growth, air quality has improved substantially over the years, primarily due to the impacts of air quality control programs at the local, state and federal levels. The graphic included in Figure IV.B-1 on page IV.B-19 shows the percent change in air quality along with demographic data for the 4-county region from the 2016 AQMP. In particular, Figure IV.B-1 illustrates the trends since 1990 of the 8-hour ozone levels, the 1-hour ozone levels, and annual average PM<sub>2.5</sub> 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.<sup>21</sup>

### (b) Multiple Air Toxics Exposure Study (MATES)

The SCAQMD has released the Multiple Air Toxics Exposure Study (MATES-IV).<sup>22</sup> The MATES-IV study was aimed at estimating the cancer risk from toxic air emissions throughout the Air Basin by conducting a comprehensive monitoring program, an updated emissions inventory of TACs, and a modeling effort to fully characterize health risks for those living in the Air Basin. The MATES-IV study concluded that the average carcinogenic risk from air pollution in the Air Basin is approximately 420 in one million over a 70-year duration. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 68 percent of the risk is attributed to diesel particulate emissions, approximately 21 percent to other toxics associated with mobile sources (including benzene, butadiene, and carbonyls), and approximately 11 percent of all carcinogenic risk is attributed to stationary sources (which include large industrial

<sup>&</sup>lt;sup>21</sup> SCAQMD, Final 2016 AQMP, 2017, p. 1-6, www.aqmd.gov/home/air-quality/clean-air-plans/air-qualitymgt-plan/final-2016-aqmp, accessed May 11, 2021.

<sup>&</sup>lt;sup>22</sup> SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV) Final Report, May 2015.



operations, such as refineries and metal processing facilities, as well as smaller businesses, such as gas stations and chrome plating).<sup>23</sup>

As part of the MATES-IV study, the 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.<sup>24</sup> Generally, the risk form air toxics is lower near the coastline and higher risks are concentrated near large diesel sources (e.g., freeways, airports, and ports).

### (2) Local Air Quality

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

### (a) Existing Pollutant Levels at Nearby Monitoring Stations

The SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin and has divided the Air Basin into 38 source receptor areas (SRAs) in which 31 monitoring stations operate. Figure IV.B-2 on page IV.B-21 shows the locations of the SRAs located in Los Angeles County. The Project Site is located within SRA 2, which covers the West Los Angeles area. The monitoring station most representative of the Project Site is the West Los Angeles–VA Hospital Station, located at Wilshire Boulevard and Sawtelle Boulevard in the City of Los Angeles, approximately 2 miles northwest of the Project Site. Criteria pollutants monitored at this station include PM<sub>10</sub>, PM<sub>2.5</sub>, O<sub>3</sub>, CO, NO<sub>2</sub>, lead, and sulfate. Table IV.B-2 on page IV.B-22 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at these stations through the period of 2016–2018.

<sup>&</sup>lt;sup>23</sup> SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV) Final Report, May 2015.

<sup>&</sup>lt;sup>24</sup> SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV), MATES IV Interactive Carcinogenicity Map, 2015.

### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 21865 Copley Drive, Diamond Bar, CA 91765-4182 AQMD Information: 1-800-CUT-SMOG (1-800-288-7664) Internet: http://www.aqmd.gov General Forecast Areas & Air Monitoring Areas numbered Monitoring Area and quality information using the General Air Quality Reporting Coastal Hemet/Elsinore Area General Forecast Area depicted here. Forecast Areas, shown in color below, Northwest Los Angeles County Coasta Perris Valley 24 Since 1977, the South Coast This air quality information is which are larger groupings of the more Southwest Los Angeles County Coastal Lake Elsinore 25 South Los Angeles County Coastal North Orange County Coastal Air Quality Management District has transmitted to the public through specific Air Monitoring Areas. Hemet/San Jacinto Valley 28 18 The 1-800-CUT-SMOG (1served as the local government newspapers, television, radio and Central Orange County Coastal 20 Temecula/Anza Area agency responsible for measuring, pager services, through faxes to 800-288-7664) line also provides Temecula Valley Metropolitan schools, through recorded messages reporting and taking steps to improve smog forecast and current smog level Anza Area Central Los Angeles County on the AQMD's toll-free Smog air quality. information by ZIP code Southeast Los Angeles County South Central Los Angeles County San Gabriel Mountains 15 12 To inform the AQMD's 15 Update telephone line, 1-800-CUT-The AQMD's Internet North Orange County 16 San Bernardino Mountains million residents about air quality SMOG, and on the AQMD's Internet Website provides both forecasts as West San Bernardino Mountains Central San Bernardino Mountains San Fernando Valley conditions, the AQMD issues an air Website http://www.aqmd.gov. well as smog levels for that day and West San Fernando Valley East San Fernando Valley quality forecast each day and reports Newspapers, television and the previous day. Forecasts for the Big Bear Lake radio stations typically will report air current air quality conditions for each 13 next day normally are posted by noon. Santa Clarita Valley Banning Pass Area San Gabriel Valley 29 West San Gabriel Valley Coachella/Low Desert East San Gabriel Valley Coachella Valley East Riverside County Pomona/Walnut Valley 10 South San Gabriel Valley 11 Legend Victorville Air Monitoring Station Inland Orange County ANTELOPE VALLEY APCD\* 14 Water Bodies Central Orange County 17 ANTELOPE VALLEY AIR POLLUTION Hesperia Saddleback Valley V Fwys/Hwys MOJAVE DESERT AOMD\* CONTROL DISTRICT Capistrano Valle 21 County Boundaries (Los Angeles County) Victor Valley Riverside Valley Northern Mojave Deser Central Mojave Desert VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT Air Monitoring Areas Corona/Norco Area Metropolitan Riverside 22 23 15 (San Bernardino County) \*These agencies contract with the South Coast AOMD for forecasting Simi Valle services. Also, the Antelope Valley APCD contracts with the Mojave San Bernardino Valley Desert AQMD for other services. For more air quality information 36 Northwest San Bernardino Valley 32 in these areas, please call the Mojave Desert AOMD at (760) 245-1661. Southwest San Bernardino Valley Central San Bernardino Valley 33 extension 5067. East San Bernardino Valley 35 MOJAVE DESERT AIR QUALITY ¥ucca Valley MANAGEMENT DISTRICT (San Bernardino County) Twentynine Palms RIVERSIDE COUNTY RIVERSIDE COUNT 29 Project Site 28 30 Desert 31 Indiar Indic La Ouint 2⁄6 27 RIVERSIDE COUNTY SALTON SEA RIVERSIDE COUNTY IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT Pone Fallbrook \*Not Shown: San Clemente Islan Copyright 1999 by Sierra Wade Associate www.sierrawade.com

Figure IV.B-2 SCAQMD SRA Map

Source: Sierra Wade Associates, 1999.

 Table IV.B-2

 Summary of Ambient Air Quality in the Project Vicinity

	Year			
Pollutant <sup>a</sup>	2016	2017	2018	
Ozone (O <sub>3</sub> )		•		
Maximum 1-hour Concentration (ppm)	0.085	0.099	0.094	
Days exceeding CAAQS (0.09 ppm)	0	1	0	
Maximum 8-hour Concentration (ppm)	0.073	0.077	0.073	
Days exceeding NAAQS (0.070 ppm)	2	1	2	
Days exceeding CAAQS (0.07 ppm)	2	3	2	
Respirable Particulate Matter (PM <sub>10</sub> )	·		•	
Maximum 24-hour Concentration (µg/m³)	67	96	81	
Days exceeding NAAQS (150 µg/m <sup>3</sup> )	0	0	0	
Days exceeding CAAQS (50 µg/m <sup>3</sup> )	18	41	31	
Annual Arithmetic Mean (µg/m3)	32	34	34	
Does measured AAM exceed CAAQS (20 µg/m <sup>3</sup> )?	Yes	Yes	Yes	
Fine Particulate Matter (PM <sub>2.5</sub> )				
Maximum 24-hour Concentration (µg/m³)	44	49	44	
Days exceeding NAAQS (35 µg/m <sup>3</sup> )	2	5	3	
Annual Arithmetic Mean (µg/m³)	12	12	13	
Does measured AAM exceed NAAQS (12 µg/m <sup>3</sup> )?	No	No	Yes	
Does measured AAM exceed CAAQS (12 µg/m <sup>3</sup> )?	No	No	Yes	
Carbon Monoxide (CO)		I	I	
Maximum 1-hour Concentration (ppm)	2.2	2.0	1.6	
Days exceeding NAAQS (35.0 ppm)	0	0	0	
Days exceeding CAAQS (20.0 ppm)	0	0	0	
Maximum 8-hour Concentration (ppm)	1.1	1.2	1.3	
Days exceeding NAAQS and CAAQS (9 ppm)	0	0	0	
Nitrogen Dioxide (NO <sub>2</sub> )		I	I	
Maximum 1-hour Concentration (ppm)	0.07	0.06	0.07	
Days exceeding CAAQS (0.18 ppm)	0	0	0	
Annual Arithmetic Mean (ppm)	0.02	0.01	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 <sub>2</sub> )		•	•	
Maximum 1-hour Concentration (ppm)	0.013	N/A	N/A	
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)?	No	No	No	

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

	Year		
Pollutant <sup>a</sup>	2016	2017	2018
Lead <sup>b</sup>			
Maximum 30-day Average Concentration (µg/m <sup>3</sup> )	N/A	N/A	N/A
Does measured concentration exceed NAAQS (1.5 µg/m <sup>3</sup> )?	No	No	No
Maximum Calendar Quarter Concentration (µg/m <sup>3</sup> )	N/A	N/A	N/A
Does measured concentration exceed CAAQS (1.5 µg/m <sup>3</sup> )?	No	No	No
Sulfate			
Maximum 24-hour Concentration (µg/m <sup>3</sup> )	5.8	N/A	N/A
Does measured concentration exceed CAAQS (25 µg/m <sup>3</sup> )?	No	No	No

 $\mu g/m^3 = micrograms$  per cubic meter

AAM = annual arithmetic mean

ppm = parts per million by volume

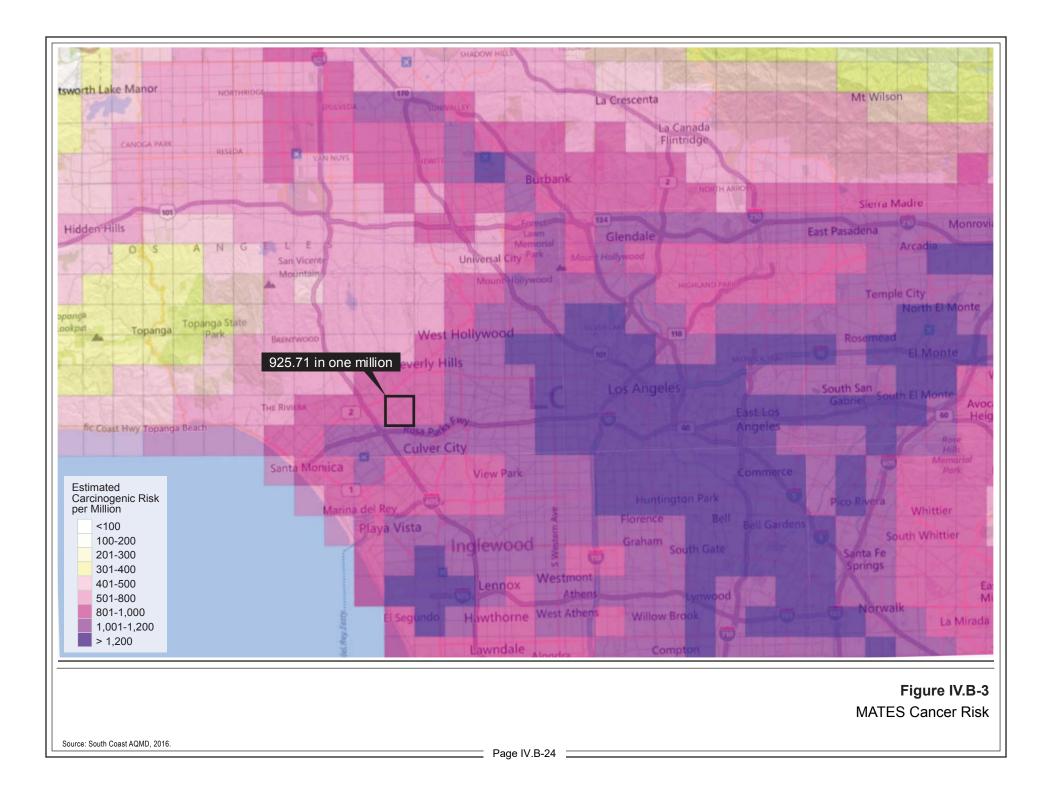
- <sup>a</sup> Not all pollutants are monitored at SRA2 (Northwest Coastal LA County). For pollutant concentrations that are not available for SRA2, values from SRA1 (Central LA) is presented.
- <sup>b</sup> USEPA regulation requires the SCAQMD operate lead monitoring stations near sources of lead. As there are no major sources of lead emissions within the Project Source Receptor Area, lead monitoring was not performed within SRA2. However, as of 2018, no monitoring stations within the South Coast Basin demonstrated an exceedance of the lead NAAQS. Attainment redesignation for lead is currently pending with the USEPA
- Source: South Coast Air Quality Management District Ambient Monitoring Data (2016–2018), www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed September 21, 2020.

### (b) Existing Health Risk in the Surrounding Area

As shown in Figure IV.B-3 on page IV.B-24, based on the MATES-IV model, the calculated cancer risk in the Project area is approximately 925.71 in one million.<sup>25</sup> The cancer risk in this area is predominately related to nearby sources of diesel particulate (e.g., the I-405 freeway). In general, the risk at the Project Site is comparable with other urbanized areas in Los Angeles.

The OEHHA, on behalf of the CalEPA, provides a screening tool (CalEnviroScreen) that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution. According to CalEnviroScreen, the Project Site

<sup>&</sup>lt;sup>25</sup> SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV), MATES IV Interactive Carcinogenicity Map, 2015.



is located in the 20th to 25th percentile, which means that the Project Site is better than average in terms of pollution in comparison to other communities within California.<sup>26</sup>

The SCAQMD developed a web tool which allows one to search for public information about SCAQMD-regulated facilities that are required to have a permit to operate equipment that release pollutants into the air.<sup>27</sup> Potential sources of TACs within the Project Site vicinity were identified using SCAQMD's Facility Information Database (FIND) search and site reconnaissance to identify potential non-permitted air toxic emitting sources (e.g., vehicles travelling on freeways, diesel trucks idling at warehouse distribution facilities in excess of 100 trucks per day). Based on this screening analysis, one dry cleaner was found to be located approximately 25 meters (85 feet) north of the Project site. As discussed previously, dry cleaning operations typically use perchloroethylene (perc) which has been identified by the CARB as a TAC and carcinogen.

### (c) Surrounding Uses

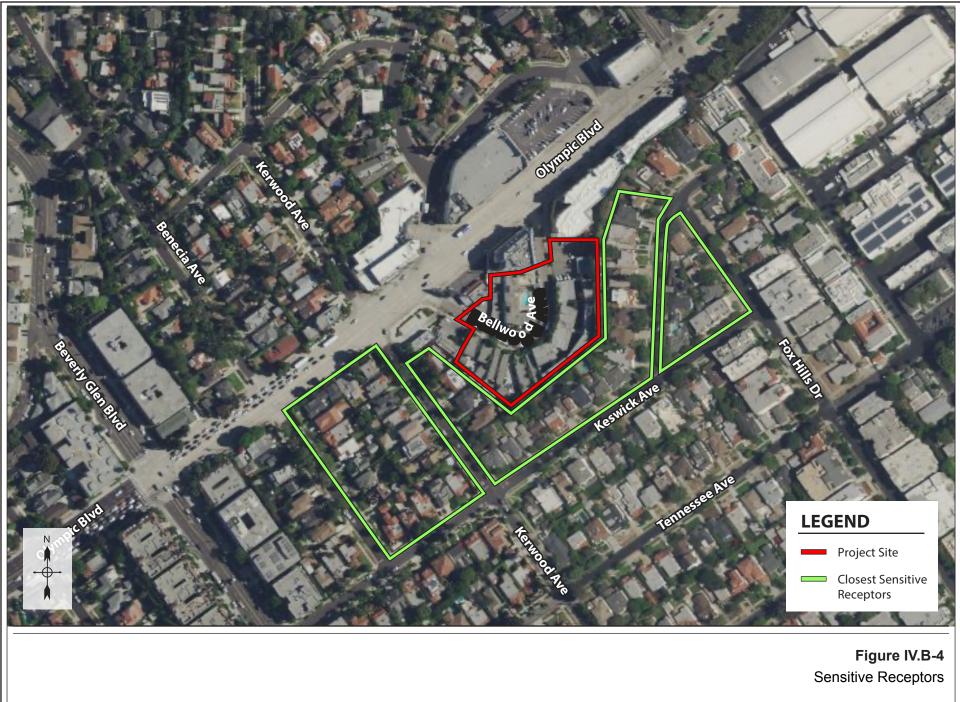
As shown in Figure IV.B-4 on page IV.B-26, the Project Site is located in an urbanized area. The Project Site is bounded by the Courtyard by Marriott hotel, the Century Park hotel, and a small commercial shopping center that includes a dry cleaner and a smog check station to the north; a beauty salon, and single-family residential uses to the west; and single-family residential uses to the east and to the south. Within the Project vicinity, major arterials such as Olympic 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.

### (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. As shown in Figure IV.B-4, the closest sensitive land uses to the Project Site are residential uses directly adjacent to the Project Site. As such, these residences would experience the highest levels of Project emissions. While there are other sensitive receptors in the Project vicinity, they are farther away than the residences immediately adjacent to the Project Site, and emission levels and impacts would be less.

<sup>&</sup>lt;sup>26</sup> OEHHA, CalEnviroScreen 3.0 MAP, https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30, accessed September 21, 2020.

<sup>&</sup>lt;sup>27</sup> SCAQMD, Facility Information Detail (F.I.N.D.), www.aqmd.gov/nav/FIND, accessed September 21, 2020.



### (e) Existing Project Site Emissions

The Project Site is currently occupied by three existing multi-family residential developments totaling 43,939 square feet, including 112 residential units. These three multi-family residential developments include a two-story, 13-unit building located at 10341–10381 Bellwood Avenue; seven, two-story buildings with a total of 82 units located at 10328–10366 Bellwood Avenue; and six one-story bungalow court buildings located at 10368–10384 Bellwood Avenue with a total of 17 units. Table IV.B-3 below presents an estimate of the existing emissions within the Project Site.

Area source emissions are generated by, among other things, landscape equipment, fireplaces, and the use of consumer products. Energy source emissions are generated as a result of activities in buildings for which natural gas is used (e.g., natural gas for heat or cooking). Mobile source emissions are generated by motor vehicle trips to and from the Project Site.

		Pollutant Emissions (pounds per day)				
<b>Emission Source</b>	VOC	NOx	СО	SOx	PM10	PM <sub>2.5</sub>
Area	2	2	10	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	1	4	11	<1	2	1
Total Existing Emissions <sup>a</sup>	3	6	21	<1	3	1

Table IV.B-3
Estimated Existing Operational Emissions—Baseline <sup>a</sup>

Numbers may not add up exactly due to rounding.

<sup>a</sup> The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix C (CalEEMod Output) of this Draft EIR.

Source: Eyestone Environmental, 2021.

# 3. Project Impacts

### a. Thresholds of Significance

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

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

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

### 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 listed above are relied upon. The City's 2006 L.A. CEQA Thresholds Guide includes factors to assist in answering the Appendix G Threshold questions.

The L.A. CEQA Thresholds Guide identifies the following factors that may be relevant to preparing the air quality impacts analysis:

### (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 <sub>X</sub>	55
CO	550
PM <sub>10</sub>	150
SOx	150

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

### (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 TACs 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 2006 L.A. CEQA Thresholds Guide for purposes of this analysis, the City of Los Angeles utilizes the thresholds of significance in the SCAQMD's *CEQA Air Quality Handbook, Chapter 6*, as identified below, to assess the significance of the Project's estimated air quality impacts. Specifically, Table IV.B-4 on page IV.B-31 shows SCAQMD's currently recommended significance thresholds, which provide numerical thresholds for evaluating the significance of a project's estimated air quality emissions.

### (a) Construction

Based on the criteria set forth in the SCAQMD's *CEQA Air Quality Handbook*,<sup>28</sup> the Project would have a significant impact with regard to construction emissions if any of the following would occur:

- Regional emissions from both direct and indirect sources would exceed any of the SCAQMD prescribed threshold levels identified in Table IV.B-4.
- Maximum on-site daily localized emissions exceed the Localized Significance Thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m<sup>3</sup>] over a 1-hour period or 9.0 ppm [10,350 µg/m<sup>3</sup>] averaged over an 8-hour period) and NO<sub>2</sub> (0.18 ppm [338.4 µg/m<sup>3</sup>] over a 1-hour period, 0.1 ppm [188 µg/m<sup>3</sup>] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [56.4 µg/m<sup>3</sup>] averaged over an annual period).
- Maximum on-site localized PM<sub>10</sub> or PM<sub>2.5</sub> 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<sup>3</sup> or 1.0 μg/m<sup>3</sup> PM<sub>10</sub> averaged over an annual period.

<sup>&</sup>lt;sup>28</sup> SCAQMD, CEQA Air Quality Handbook, 1993.

	Mass Daily Thresholds <sup>a</sup>				
Pollutant		<b>Operation</b> <sup>c</sup>			
NO <sub>X</sub>	100 lbs/day	55 lbs/day			
VOC <sup>d</sup>	75 lbs/day	55 lbs/day			
PM10	150 lbs/day	150 lbs/day			
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day			
SOx	150 lbs/day	150 lbs/day			
CO	550 lbs/day	550 lbs/day			
Lead <sup>e</sup>	3 lbs/day	3 lbs/day			
Toxic Air	Contaminants (TACs), Odor, and GH	G Thresholds			
TACs (including carcinogens and non-carcinogens) Odor	Cancer Burden > 0.5 excess canc Chronic & Acute Hazard Index ≥ 1	<ul> <li>Maximum Incremental Cancer Risk ≥ 10 in 1 million</li> <li>Cancer Burden &gt; 0.5 excess cancer cases (in areas ≥ 1 in 1 million)</li> <li>Chronic &amp; Acute Hazard Index ≥ 1.0 (project increment)</li> <li>Project creates an odor nuisance pursuant to SCAQMD Rule 402</li> </ul>			
Ambie	nt Air Quality Standards for Criteria				
NO₂ 1-hour average Annual Arithmetic Mean PM₁₀ 24-hour average	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) 10.4 µg/m <sup>3</sup> (construction) <sup>g</sup> & 2.5 µg/m <sup>3</sup> (operation)				
Annual Average		μg/m <sup>3</sup>			
<b>PM₂</b> .₅ 24-hour average	10.4 µg/m <sup>3</sup> (construction	10.4 μg/m <sup>3</sup> (construction) <sup>g</sup> & 2.5 μg/m <sup>3</sup> (operation)			
<b>SO₂</b> 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal—99th percentile) 0.04 ppm (state)				
<b>Sulfate</b> 24-hour average	25 μg/m³ (state)				
<b>CO</b> 1-hour average 8-hour average	contributes to an exceedance of	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)			
<b>Lead</b> 30-day average Rolling 3-month average		m <sup>3</sup> (state) n <sup>3</sup> (federal)			

### Table IV.B-4 SCAQMD Air Quality Significance Thresholds

*lbs/day* = *pounds per day* 

<sup>a</sup> SCAQMD CEQA Handbook (SCAQMD, 1993), Pages 6-2 and 6-3.

<sup>b</sup> Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

<sup>c</sup> For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

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

- <sup>d</sup> 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.
- <sup>e</sup> While the South Coast Air Quality Management District CEQA Air Quality Handbook contains significance thresholds for lead, Project construction and operation would not include sources of lead emissions and would not exceed the significance thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from commercial land use projects such as the Project. As a result, lead emissions are not further evaluated in this Draft EIR.
- <sup>f</sup> Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.
- <sup>g</sup> Ambient air quality threshold based on South Coast AQMD Rule 403.

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

### (b) Operation

Based on the criteria set forth in the SCAQMD's *CEQA Air Quality Handbook*,<sup>29</sup> the Project would have a significant impact with regard to operational emissions if any of the following would occur:

- Regional emissions from both direct and indirect sources exceed any of the SCAQMD prescribed threshold levels identified in Table IV.B-4 on page IV.B-31.
- Maximum on-site daily localized emissions exceed the LSTs, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an 8-hour period) and NO<sub>2</sub> (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).<sup>30</sup>
- Maximum on-site localized operational PM<sub>10</sub> and PM<sub>2.5</sub> emissions exceed the incremental 24-hr threshold of 2.5 μg/m<sup>3</sup> or 1.0 μg/m<sup>3</sup> PM<sub>10</sub> averaged over an annual period.<sup>31</sup>
- 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

<sup>&</sup>lt;sup>29</sup> SCAQMD, CEQA Air Quality Handbook, 1993.

<sup>&</sup>lt;sup>30</sup> SCAQMD, LST Methodology.

<sup>&</sup>lt;sup>31</sup> SCAQMD, Final-Methodology to Calculate Particulate Matter (PM) 2.5 and PM<sub>2.5</sub> Significance Thresholds, October 2006.

- 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 the SCAQMD's *CEQA Air Quality Handbook*, the Project would have a significant TAC impact, if:<sup>32</sup>

• The Project emits carcinogenic or TACs that exceed the maximum incremental cancer risk as provided in Table IV.B-4 on page IV.B-31.

### (d) Consistency with Applicable Air Quality Plans

Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with the SCAQMD's *CEQA Air Quality Handbook*,<sup>33</sup> the following criteria were used to evaluate the Project's consistency with the SCAQMD and SCAG regional plans and policies, including the AQMP:

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

<sup>&</sup>lt;sup>32</sup> SCAQMD, <u>CEQA Air Quality Handbook</u>, 1993, Chapter 6 (Determining the Air Quality Significance of a project) and Chapter 10 (Assessing Toxic Air Pollutants).

<sup>&</sup>lt;sup>33</sup> SCAQMD, <u>CEQA Air Quality Handbook</u>, 1993, Chapter 12, Assessing Consistency with Applicable Regional Plans.

In addition, the Project's consistency with the City of Los Angeles General Plan Air Quality Element is discussed.

### (e) Cumulative Impacts

The SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Instead, 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. <sup>34</sup> As discussed in the SCAQMD's White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution (August 2003):

As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR.... Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.<sup>35</sup>

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 significance threshold.

### b. 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

<sup>&</sup>lt;sup>34</sup> Jillian Wong, SCAQMD CEQA Specialist, personal communication, August 8, 2016.

<sup>&</sup>lt;sup>35</sup> White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. Appendix D, South Coast Air Quality Management District, August 2003.

analysis. The SCAQMD is currently in the process of replacing the CEQA Air Quality Handbook with the Air Quality Analysis Guidance Handbook.<sup>36</sup>

Supplemental guidance/information to assist lead agencies is provided on the SCAQMD website (www.aqmd.gov/ceqa/hdbk.html) and includes: (1) EMFAC on-road vehicle emission factors; (2) background CO concentrations; (3) localized significance thresholds; (4) mitigation measures and control efficiencies; (5) mobile source toxics analysis; (6) off-road mobile source emission factors; (7) PM<sub>2.5</sub> significance thresholds and calculation methodology; and (8) updated SCAQMD Air Quality Significance Thresholds. The SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

The 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.<sup>37</sup> 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). The 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.

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

### (1) Construction Emissions Methodology

Construction of the Project has the potential to generate temporary pollutant emissions through the use of heavy-duty construction equipment, such as excavators and cranes, and through vehicle trips generated from workers and haul and delivery trucks traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and various soil-handling activities such as excavation, grading and shoring.

<sup>&</sup>lt;sup>36</sup> SCAQMD, Air Quality Analysis Handbook, www.aqmd.gov/home/regulations/ceqa/air-quality-analysishandbook, accessed September 21, 2020.

<sup>&</sup>lt;sup>37</sup> SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

Mobile source emissions, primarily NO<sub>x</sub>, would result from the use of construction equipment. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

### (a) Regional Emissions

The Project's "regional" emissions refer to emissions that will be evaluated based on regional significance thresholds established by the SCAQMD, as discussed above. Daily regional emissions during construction are estimated by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying mobile source and fugitive dust emissions factors. The emissions are estimated using CalEEMod (Version 2016.3.2) software, an emissions inventory software program recommended by SCAQMD. The CalEEMod model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with SCAQMD and received input from other California air districts, and is currently used by numerous lead agencies in the Los Angeles area and within the state for quantifying the emissions associated with development projects undergoing environmental review, including by the City of Los Angeles.

CalEEMod is based on outputs from Off-road Emissions Inventory Program model<sup>38</sup> (OFFROAD) and EMission FACtor model<sup>39</sup> (EMFAC), which are emissions estimation models developed by CARB, and used to calculate emissions from construction activities, including off- and on-road vehicles, respectively. CalEEMod also relies upon known emissions data associated with certain activities or equipment (often referred to as "default" data, values or factors) that can be used if site-specific information is not available. CalEEMod contains default values to use in each specific local air district region. Default values within CalEEMod were obtained from a survey of construction sites conducted by the SCAQMD. The construction survey data was used to determine appropriate construction equipment based on lot size and project type.<sup>40</sup> Appropriate statewide default values can be used, if regional default values are not defined.

<sup>&</sup>lt;sup>38</sup> California Air Resources Board, 2017 Off-Road Diesel Emission Factors, ww2.arb.ca.gov/our-work/ programs/mobile-source-emissions-inventory/road-documentation/msei-documentation-road, accessed September 21, 2020.

<sup>&</sup>lt;sup>39</sup> California Air Resources Board, EMFAC 2014, ww2.arb.ca.gov/our-work/programs/mobile-sourceemissions-inventory/road-documentation/msei-modeling-tools-emfac, accessed September 21, 2020

<sup>&</sup>lt;sup>40</sup> CAPCOA, California Emissions Estimator Model, Appendix E1: Construction Survey and SCAQMD, October 2017.

The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Construction tasks were aggregated to reflect overlapping tasks and identify the reasonably expected maximum construction emissions occurring over the course of Project construction. To be conservative, this analysis evaluates the Project's air quality impacts during construction based on reasonably expected maximum construction emissions even though such emissions would not occur throughout the entire construction phase. Detailed equipment lists, construction scheduling, and emissions calculations are provided in Appendix C of this Draft EIR.

### (b) Localized Emissions

The localized effects from the on-site portion of daily construction emissions were evaluated at sensitive receptor locations closest to the Project Site potentially impacted by the Project according to the SCAQMD's LST methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling, where appropriate, to assess whether the Project's local emissions would exceed the SCAQMD's significance thresholds, as described above.<sup>41</sup> SCAQMD provides LSTs applicable to the following criteria pollutants: NO<sub>X</sub>; CO; PM<sub>10</sub>; and PM<sub>2.5</sub>.<sup>42</sup> SCAQMD does not provide an LST for SO<sub>2</sub> since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant as on-site activities during construction and operation do not include activities that emit high levels of SO<sub>2</sub>. 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<sub>3</sub> 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 SCAQMD developed mass rate look-up tables for each source receptor area and 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. If the project exceeds the LST look-up values, then the SCAQMD recommends that project-specific air quality modeling

<sup>&</sup>lt;sup>41</sup> SCAQMD, LST Methodology Appendix C-Mass Rate LST Look-Up Table, October 2009.

<sup>&</sup>lt;sup>42</sup> SCAQMD, LST Methodology, p. 1-4.

must be performed to determine if the Project's local emissions exceed applicable significance thresholds.

# (2) Operation Emissions Methodology

#### (a) Regional Emissions

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

Similar to construction, SCAQMD's CalEEMod model was used to estimate Project emissions during operation.

Mobile-source emissions were calculated within CalEEMod. However, the Projectrelated VMT was calculated using the Los Angeles Department of Transportation (LADOT) VMT Calculator rather than applying the CalEEMod default VMT. The VMT Calculator was developed by the City and LADOT to comply with SB 743, which requires lead agencies to adopt VMT criteria to determine transportation related impacts.<sup>43</sup> CalEEMod calculates mobile source emissions using the Project's VMT, trip generation, and emission factors based on EMFAC.<sup>44</sup>

Energy source emissions are based on natural gas (building heating and water heaters). Area source emissions include landscaping equipment and consumer product usage (including paints) rates provided in CalEEMod. Natural gas usage factors in CalEEMod are based on the California Energy Commission California Commercial End Use Survey data set, which provides energy demand by building type and climate zone. Emissions associated with use of emergency generators were calculated using CalEEMod, in which emission factors are based on Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel Engines) from EPA's AP-42: Compilation of Air Pollutant Emission

<sup>&</sup>lt;sup>43</sup> Gibson Transportation Consulting, Transportation Assessment for Senior Residential Community at the Bellwood Project, February 2021, revised April 2021.

<sup>&</sup>lt;sup>44</sup> CAPCOA, California Emissions Estimator Model, Appendix A: Calculation Details for CalEEMod, October 2017.

Factors. The emissions are based on the horsepower rating of the diesel generator and the number of hours operated per year for testing purposes.

To determine if a significant air quality impact would occur, the net increase in regional operational emissions generated by the Project was compared against the SCAQMD's significance thresholds.<sup>45</sup> To be conservative, this analysis evaluates the Project's air quality impacts during operations based on reasonably expected maximum operational emissions even though such emissions would not occur throughout the entire operational phase. Refer to Appendix C of this Draft EIR 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 the 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.

It has long been recognized that CO exceedances are caused by vehicular emissions,<sup>46</sup> primarily when idling at intersections.<sup>47,48</sup> 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.<sup>49</sup> Currently, the CO standard in California is a maximum of 3.4 grams/mile for passenger

<sup>&</sup>lt;sup>45</sup> 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, <u>CEQA Air Quality Handbook</u>, April 1993, pp. 6-1–6-2.

<sup>&</sup>lt;sup>46</sup> USEPA. 2000. Air Quality Criteria for Carbon Monoxide. EPA 600/P-099/001F.

<sup>&</sup>lt;sup>47</sup> SCAQMD. 1993. CEQA Air Quality Handbook. Section 4.5.

<sup>&</sup>lt;sup>48</sup> SCAQMD. 2003. Air Quality Management Plan.

<sup>&</sup>lt;sup>49</sup> USEPA, Timeline of Major Accomplishments in Transportation, Air Pollution, and Climate Change, www.epa.gov/air-pollution-transportation/timeline-major-accomplishments-transportation-air-pollution-andclimate, accessed September 21, 2020.

cars (with provisions for certain cars to emit even less).<sup>50</sup> With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the Air Basin have steadily declined.

The analysis prepared for CO attainment in the Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the Air Basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).<sup>51</sup> 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: Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The peak modeled CO concentrations due to vehicle emissions occurred at the intersection of Wilshire Boulevard and Veteran Avenue, which had a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.<sup>52</sup> The AQMP CO hotspots modeling also took into account worst-case meteorological conditions and background CO concentrations. The Los Angeles County Metropolitan Transportation Authority (Metro) evaluated the level of service (LOS) in the vicinity of the Wilshire Boulevard and Veteran Avenue intersection and found it to be Level E at peak morning traffic and Level F at peak afternoon traffic.<sup>53,54</sup> As an initial screening step, if a project intersection does not exceed 400,000 vehicles per day, then the project

<sup>&</sup>lt;sup>50</sup> 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.

<sup>&</sup>lt;sup>51</sup> SCAQMD, 1992. Federal Attainment Plan for Carbon Monoxide.

<sup>&</sup>lt;sup>52</sup> Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

<sup>&</sup>lt;sup>53</sup> The Metropolitan Transportation Authority measured traffic volumes and calculated the LOS for the intersection of Wilshire Blvd./ Sepulveda Ave. which is a block west along Wilshire Blvd., still east of Interstate 405.

<sup>&</sup>lt;sup>54</sup> Metropolitan Transportation Authority. 2004. Congestion Management Program for Los Angeles County. Exhibit 2-6 and Appendix A.

does not need to prepare a detailed CO hot spot. 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)

Potential TAC impacts are evaluated by conducting a qualitative analysis consistent with SCAQMD guidance and the CARB Handbook. The qualitative analysis consists of reviewing the Project to identify any new or modified TAC emissions sources and evaluating the potential for such sources to cause significant TAC impacts. If the qualitative evaluation determines the potential for significant impacts from a new TAC source, or modification of an existing TAC emissions source, a more detailed dispersion analysis is conducted to evaluate estimated Project TAC emissions against the applicable SCAQMD significance thresholds based on downwind sensitive receptor locations.

# c. Project Design Features

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

# d. Analysis of Project Impacts

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

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

To assess whether the Project would conflict with or obstruct implementation of an applicable air quality plan, this analysis evaluates the Project's consistency with

SCAQMD's AQMP and SCAG's RTP/SCS. In accordance with the SCAQMD's *CEQA Air Quality Handbook*, Chapter 12, the following criteria are considered as part of this evaluation:

- Criterion 1: 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.
- Criterion 2: 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

The Project is an infill development near transit within an existing urbanized area that would concentrate new residential uses within a SCAG-designated HQTA.<sup>55</sup> Public transit service within the study area is currently provided by Metro, Culver City Bus, Santa Monica Big Blue Bus, Antelope Valley Transit Authority, Santa Clarita Transit, and LADOT Commuter Express. Bus stops that serve the Project Site (within a 0.25-mile walking distance) are currently provided along Olympic Boulevard at Beverly Glen Boulevard, Kerwood Avenue, and Century Park West. In addition, the Project Site is located approximately 0.5 mile from the future Metro Purple Line rail station. This means the Project advances regional goals to reduce VMT through infill development near transit that has the co-benefit of reducing air emissions and GHG emissions compared to the average

<sup>&</sup>lt;sup>55</sup> SCAG, High Quality Transit Areas (HQTA) 2016—SCAG Region, http://gisdata-scag.opendata.arcgis. com/datasets/1f6204210fa9420b87bb2e6c147e85c3\_0?geometry=-118.958%2C33.943%2C-117.817% 2C34.142, accessed May 12, 2021.

regional project. As shown below, the Project would not exceed any SCAQMD significance thresholds for air quality emissions.<sup>56</sup>

With respect to the first criterion, as discussed below, localized concentrations of NO<sub>2</sub> as NO<sub>X</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> have been analyzed for the Project. Due to California Low Sulfur Diesel Fuel requirements, calculations shown below demonstrate that SO<sub>2</sub> 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<sub>2</sub> ambient air quality standard.<sup>57</sup> 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<sub>3</sub> formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

Particulate matter is the primary pollutant of concern during construction activities, and therefore, the Project's PM<sub>10</sub> and PM<sub>2.5</sub> emissions during construction were analyzed in order to: (1) ascertain potential effects on localized concentrations; and (2) determine if there is a potential for such emissions to cause or affect a violation of the ambient air quality standards for PM<sub>10</sub> and PM<sub>2.5</sub>. As shown in Table IV.B-7 on page IV.B-58 in the analysis below, the increases in PM<sub>10</sub> and PM<sub>2.5</sub> emissions during construction would not exceed the SCAQMD-recommended significance thresholds at sensitive receptors in proximity to the Project Site.

Additionally, the Project's maximum potential NO<sub>X</sub> and CO daily emissions during construction were analyzed to ascertain potential effects on localized concentrations and to determine if there is a potential for such emissions to cause or affect a violation of an applicable ambient air quality standard. As shown in Table IV.B-7 in the analysis below, NO<sub>X</sub> and CO would not exceed the SCAQMD-recommended localized significance thresholds. Therefore, Project construction would not result in a significant impact with regard to localized air quality.

Because the Project would not introduce any substantial stationary sources of emissions, CO is the preferred benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.<sup>58</sup> As discussed below on page IV.B-59, no intersections would require a CO hotspot analysis, and impacts would be

<sup>&</sup>lt;sup>56</sup> Air quality violations under Criterion 1 are evaluated based on ambient air quality standards (NAAQS and CAAQS). Determining whether the Project would exceed ambient air quality standards is based on localized emissions.

<sup>&</sup>lt;sup>57</sup> California Air Resources Board, California Low Sulfur Diesel Fuel Fact Sheet, ww2.arb.ca.gov/resources/ fact-sheets/california-low-sulfur-diesel-fuel-fact-sheet, accessed September 21, 2020.

<sup>&</sup>lt;sup>58</sup> SCAQMD, <u>CEQA Air Quality Handbook</u>, 1993, Chapter 12, Assessing Consistency with Applicable Regional Plans.

# less than significant. Therefore, the Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.

An analysis of potential localized operational impacts from on-site activities was also conducted. As shown in Table IV.B-8 on page IV.B-59 in the analysis below, localized NO<sub>2</sub> as NO<sub>X</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> operational impacts would be less than significant. **Therefore, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.** 

# (ii) Criterion 2

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

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

A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2016 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's RTP/SCS.<sup>59</sup> As noted above, the 2020–2045 RTP/SCS is now available. Therefore, a comparison of population growth projections from SCAG's 2020–2045 RTP/SCS is also provided below.

As described in Section IV.E, Land Use and Planning, of this Draft EIR, the City's General Plan serves as a comprehensive, long-term plan for future development of the City. Refer to Subsection (D)(1)(b), City of Los Angeles Policies, below, for a discussion of the Project's consistency with applicable goals, objectives and policies of the City's General Plan Air Quality Element. The 2016–2040 and 2020–2045 RTP/SCS provide socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are

<sup>&</sup>lt;sup>59</sup> As noted above, SCAG recently adopted the 2020–2045 RTP/SCS. However, the 2016 AQMP is based on the 2016-2040 RTP/SCS. Therefore, a comparison of population growth projections from SCAG's 2016-2040 and 2020–2045 RTP/SCS are provided below.

based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review.

According to SCAG's 2016 RTP/SCS, the forecasted population for the City of Los Angeles Subregion in 2019 was approximately 4,036,475 persons.<sup>60</sup> In 2023, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have a population of approximately 4,145,604 persons.<sup>61</sup> The 2016–2040 RTP/SCS's employment forecast for the City of Los Angeles Subregion in 2019 was approximately 1,814,575 employees.<sup>62</sup> In 2023, the City of Los Angeles Subregion is anticipated to have approximately 1,882,104 employees.<sup>63</sup> The 2016–2040 RTP/SCS's household forecast within the City of Los Angeles Subregion in 2019 was 1,416,700.<sup>64</sup> In 2023, the number of households within the City of Los Angeles Subregion is anticipated to be 1,468,814.<sup>65</sup>

According to SCAG's 2020–2045 RTP/SCS, the forecasted population for the City of Los Angeles Subregion in 2019 was approximately 4,020,438 persons.<sup>66</sup> In 2023, the City of Los Angeles Subregion is anticipated to have a population of approximately 4,135,955 persons.<sup>67</sup> The 2020–2045 RTP/SCS's employment forecast for the City of Los Angeles Subregion in 2019 was approximately 1,878,052 employees. <sup>68</sup> In 2023, the City of Los Angeles Subregion is anticipated to have approximately 1,917,721 employees.<sup>69</sup> The 2020-2045 RTP/SCS's household forecast within the City of Los Angeles Subregion in 2019 was 1,411,069.<sup>70</sup> In 2023, the number of households within the City of Los Angeles Subregion is anticipated to be 1,469,828.<sup>71</sup>

The Project proposes 192 senior housing residential units, consisting of 46 studio memory care guest rooms, 51 one-bedroom assisted living guest rooms, 24 two-bedroom assisted living guest rooms, 43 one-bedroom independent living dwelling units, and 28 two-

- <sup>62</sup> Based on a linear interpolation of 2012–2040 data.
- <sup>63</sup> Based on a linear interpolation of 2012–2040 data.
- <sup>64</sup> Based on a linear interpolation of 2012–2040 data.
- <sup>65</sup> Based on a linear interpolation of 2012–2040 data.
- <sup>66</sup> Based on a linear interpolation of 2016–2045 data.
- <sup>67</sup> Based on a linear interpolation of 2016–2045 data.
- <sup>68</sup> Based on a linear interpolation of 2016–2045 data.
- <sup>69</sup> Based on a linear interpolation of 2016–2045 data.
- <sup>70</sup> Based on a linear interpolation of 2016–2045 data.
- <sup>71</sup> Based on a linear interpolation of 2016–2045 data.

<sup>&</sup>lt;sup>60</sup> Based on a linear interpolation of 2012–2040 data.

<sup>&</sup>lt;sup>61</sup> Based on a linear interpolation of 2012–2040 data.

bedroom independent living dwelling units in an eldercare facility for persons age 62 and older. Based on the generation rates used in the City of Los Angeles VMT Calculator, the Project would generate approximately 231 residents and 88 employees.<sup>72</sup> Per the 2016–2040 RTP/SCS, the estimated 231 new residents generated by the Project would represent approximately 0.21 percent of the population growth forecasted by SCAG in the City of Los Angeles Subregion between 2019 and 2023, and the Project's estimated 88 employees would constitute approximately 0.13 percent of the employment growth forecasted between 2019 and 2023. The Project's 192 units would represent approximately 0.37 percent of the household growth forecasted by SCAG between 2019 and 2023.

Per the 2020–2045 RTP/SCS, the estimated 231 new residents generated by the Project would represent approximately 0.20 percent of the population growth forecasted by SCAG in the City of Los Angeles Subregion between 2019 and 2023,<sup>73</sup> and the estimated 88 employees would constitute approximately 0.22 percent of the employment growth forecasted between 2019 and 2023. The Project's 192 units would constitute 0.33 percent of the household growth within the City of Los Angeles Subregion between 2019 and 2023.

Accordingly, the Project's generation of residents and employees would be consistent with the population, housing and employment projections contained in the 2016–2040 and 2020–2045 RTP/SCS. Because similar projections form the basis of the **2016 AQMP, the Project would be consistent with the projections in the AQMP.** Refer to Section IV.E, Land Use and Planning, of this Draft EIR, for additional discussion regarding the Project's consistency with the 2016–2040 and 2020–2045 RTP/SCS.

• Does the project implement feasible air quality mitigation measures?

As discussed below under Thresholds (b), (c) and (d), the Project would not result in any significant air quality impacts and therefore would not require mitigation. In addition, the Project would comply with all applicable regulatory standards (e.g., SCAQMD Rule 403

<sup>&</sup>lt;sup>72</sup> Refer to the VMT calculation worksheets included in the Transportation Study provided in Appendix H, of this Draft EIR. The VMT Calculator assumption of 231 Project residents is more conservative in evaluating VMT per capita; however, if full occupancy of the Project is assumed with one person per bedroom, the Project could generate up to 244 residents, which would represent approximately 0.22 percent of SCAG's projected population growth for the City of Los Angeles Subregion between 2019 and 2023 as compared to approximately 0.21 percent. As such, it would be well within SCAG's projections for the City of Los Angeles Subregion, and the conclusions of the analysis would remain the same.

<sup>&</sup>lt;sup>73</sup> As noted above the VMT Calculator assumption of 231 Project residents is more conservative in evaluating VMT per capita; however, if full occupancy of the Project is assumed with one person per bedroom, the Project could generate up to 244 residents, which would represent approximately 0.21 percent of SCAG's projected population growth for the City of Los Angeles Subregion between 2019 and 2023 as compared to approximately 0.20 percent. As such, it would be well within SCAG's projections for the City of Los Angeles Subregion, and the conclusions of the analysis would remain the same.

and Rule 1133, etc.) as required by SCAQMD, as summarized above. The Project also would incorporate project design features to support and promote environmental sustainability as discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR. Such project design features include GHG-PDF-1 which would incorporate increased energy efficiency features such as use of LED lighting, Energy Star appliances and fenestration designed for solar orientation. While these features are designed primarily to reduce GHG emissions, they would also serve to reduce the criteria air pollutants discussed herein. Furthermore, with compliance with the regulatory requirements identified above and in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, no significant air quality impacts would occur. As such, the Project is consistent with this AQMP consistency criterion.

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

As an infill development located in a HQTA, the Project advances goals of the AQMP and RTP/SCS to reduce VMT and related vehicle emissions. Pursuant to California Health and Safety Code Section 40460, SCAG also 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.

With regard to land use developments, such as the Project, SCAG's 2016–2040 and 2020–2045 RTP/SCSs land use control measures (i.e., goals and policies) focus on the reduction of vehicle trips and vehicle miles traveled (VMT). As discussed in detail in Section IV.D, Greenhouse Gas Emissions, of the Draft EIR, the 2016–2040 RTP/SCS includes, for the SCAG region as a whole, a daily 22.8 Total VMT per capita for the 2012 Base Year, and a daily 20.5 Total VMT per capita for the 2040 Plan Year. For Los Angeles County, the 2012 Base Year projected daily Total VMT per capita is 21.5 and 18.4 daily Total VMT per capita for the 2040 Plan Year (with implementation of the RTP/SCS). To analyze the Project's consistency with this aspect of the 2016–2040 RTP/SCS, the Project's Total Daily VMT was obtained from the LADOT VMT Calculator.<sup>74</sup> As shown in Table IV.D-7 of Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project

<sup>&</sup>lt;sup>74</sup> The VMT percentages in Table IV.D-7 and this section are not numeric thresholds but are used as a basis to compare a project's overall consistency with state plans and policies.

VMT per capita of 9.9 VMT per day would be well below the Los Angeles County goals provided in the 2016–2040 RTP/SCS.<sup>75</sup>

The Project represents an infill development within an existing urbanized area that would concentrate new residential uses within an HQTA.<sup>76</sup> Therefore, the Project would be consistent with SCAG's 2016-2040 RTP/SCS, as it is located within an HQTA. Public transit service within the study area is currently provided by Metro, Culver City Bus, Santa Monica Big Blue Bus, Antelope Valley Transit Authority, Santa Clarita Transit, and LADOT Commuter Express. Bus stops that serve the Project Site (within a 0.25-mile walking distance) are currently provided along Olympic Boulevard at Beverly Glen Boulevard, Kerwood Avenue, and Century Park West. In addition, the second section of Metro's Purple Line Extension Transit Project is currently under construction in the vicinity of the Project Site. The second section of Metro's Purple Line Extension would include a subway station at Constellation Boulevard and Avenue of the Stars, approximately 0.5 mile northeast of the Project Site.<sup>77</sup> The Project would also provide required short- and longterm bicycle parking spaces in compliance with the requirements of the Los Angeles Municipal Code (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. The Project design would also provide pedestrian access that minimizes barriers and links the Project Site with external streets to encourage people to walk instead of drive. Pedestrian access would be maintained on both sides of Bellwood Avenue. Lighting and new street trees would be provided to enhance the pedestrian experience.

As discussed under Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project design includes characteristics that would further reduce trips and VMT as compared to a standard project within the Air Basin as calculated within the LADOT VMT Calculator. Implementation of these sustainability features discussed above would contribute to a reduction in air quality emissions via a reduction in VMT. While these Project characteristics primarily reduce greenhouse gas emissions, they would also reduce criteria air pollutants discussed herein. In addition, the Project would result in a net

<sup>&</sup>lt;sup>75</sup> The VMT percentages in Table IV.D-7 and this section are not numeric thresholds but are used as a basis to compare a project's overall consistency with state plans and policies. As noted above, the VMT Calculator assumption of 231 Project residents is more conservative in evaluating VMT per capita. If full occupancy of the Project is assumed with one person per bedroom, the Project could generate up to 244 residents, which combined with the Project's employees would represent a total VMT per capita of 9.6 VMT per day as compared to 9.9 VMT per day, and would be further below the Los Angeles County goals provided in the RTP/SCS.

<sup>&</sup>lt;sup>76</sup> Defined by the 2016 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.

<sup>&</sup>lt;sup>77</sup> Metro Purple Line Extension, www.metro.net/projects/westside, accessed May 12, 2021.

decrease in vehicle trips and associated emissions when accounting for existing uses. These relative reductions in VMT from a standard project within the Air Basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project within an infill, HQTA that promotes alternative modes of transportation. The Project results in a VMT reduction of approximately 24 percent (see Appendix H of this Draft EIR) compared to a Project without Reduction Features. As discussed above, the total Project daily per capita VMT is 9.9 miles, which represents a reduction of 46 percent in daily per capita VMT when compared to the SCAG 2016–2040 RTP/SCS 2040 Plan Year. This reduction in VMT is substantially better than the goals of the 2016–2040 RTP/SCS (i.e., 18-percent decrease in per capita GHG emissions from passenger vehicles by 2035 and 21-percent daily per capita VMT represent a reduction of 48 percent in daily per capita VMT when compared to the SCAG region target of 20.7 and Los Angeles County target of 19.2 daily per capita VMT in the 2020–2045 RTP/SCS.<sup>79</sup>

# Accordingly, as the Project would support AQMP and RTP/SCS objectives of reducing VMT and the related vehicular air emissions.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of the Project on air quality in the Air Basin. The Project is an infill development near transit within an existing urbanized area that would concentrate new residential uses within an HQTA, thus reducing VMT. The Project would not have a significant long-term adverse impact on the region's ability to meet state and federal air quality standards. As discussed above, the Project's would be consistent with the goals and policies of the AQMP and, therefore, would not conflict with or obstruct implementation of the SCAQMD's AQMP.

# (b) City of Los Angeles Policies

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

<sup>&</sup>lt;sup>78</sup> The 2020–2045 RTP/SCS reflects CARB's updated SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035.

<sup>&</sup>lt;sup>79</sup> The 2020–2045 RTP/SCS provides a 2045 Plan Year daily Total VMT per capita of 20.7 and 19.2 for the SCAG region and Los Angeles County, respectively

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

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

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

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

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

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

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

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

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

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

As an infill development located in a HQTA, the Project advances regional and City goals to reduce VMT and related vehicle emissions, which has the co-benefit of decreasing GHG emissions and air pollutants from mobile sources. In addition, the Project includes short- and long-term bicycle parking spaces for the proposed residential uses as required by the LAMC and is serviced by local bus lines. The Project would provide opportunities for the use of alternative modes of transportation, including access to public transit, and

opportunities for walking and biking, thereby facilitating a reduction in VMT. The Project is consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near transit options. The Project also includes primary entrances for pedestrians and bicyclists that would be safe, easily accessible, and a short distance from transit stops. 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.** 

In conclusion, analysis of Threshold (a) was based on the Project's consistency with the AQMP as well as the City of Los Angeles policies. With regard to AQMP consistency, which is primarily concerned with the long-term influence of the Project on air quality in the Air Basin, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. In addition, because the Project includes similar growth projections that form the basis of the 2016 AQMP, it can be concluded that the Project would be consistent with the projections in the AQMP. Furthermore, while the Project does not require any air quality mitigation measures, the Project would comply with all applicable regulatory standards and would incorporate AQ-PDF -1 discussed above and the Project Design Features in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, that would serve to reduce the criteria air pollutants discussed herein. The Project would support the City's and SCAQMD's objectives of reducing VMT and the related vehicular air emissions as an infill development near transit within an existing urbanized area and HQTA, consistent with AQMP control measures. Thus, the Project would not conflict with or obstruct implementation of the AQMP. With regard to the City policies, as discussed above, the Project would serve to implement applicable policies pertaining to air quality. Based on the above, impacts to Threshold (a) would be less than significant.

(2) Mitigation Measures

Project-level impacts related to Threshold (a), implementation of the applicable air quality plan, would be less than significant during construction and operation of the Project. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to Threshold (a) during both construction and 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.

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

- (1) Impact Analysis
  - (a) Regional Emissions
    - (i) Construction

Project construction is assumed to begin in 2021, occur over approximately 34 months, and complete in 2023, subject to market conditions or demand. For purposes of conservatively analyzing construction impacts, it was assumed that the Project would be begin as early as 2021. The construction equipment and truck fleet mix is anticipated to emit less pollution in future years due to more stringent emissions control regulations. As construction activities for the Project are evaluated based on an earlier start date, the emissions presented are more conservative.

As described in Section II, Project Description, of this Draft EIR, construction of the Project would commence with demolition of the existing buildings. This phase would be followed by grading and excavation for the subterranean parking levels. Building foundations would then be laid, followed by building construction, paving/concrete installation, including for the realigned portion of Bellwood Avenue, and landscape installation. The estimated quantity of excavation expected for the subterranean parking is approximately 74,800 cubic yards of export material (e.g., concrete and asphalt surfaces) and soil would be hauled from the Project Site during the demolition and excavation phase.

Construction of the Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO<sub>X</sub>, would result from the use of construction equipment, such as dozers, loaders, and cranes. During the finishing phase of the Project, paving and the application of architectural coatings (e.g., paints) would potentially release VOCs. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

The emissions levels in Table IV.B-5 on page IV.B-54 represent the highest daily emissions projected to occur during each year of construction. As presented in Table IV.B-5, construction-related daily maximum regional construction emissions would not exceed any of the SCAQMD daily significance thresholds. Therefore, regional construction emissions resulting from the Project would result in a less-than-significant air quality impact.

# (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. While these features are designed primarily to reduce greenhouse gas emissions, they would also serve to reduce criteria air pollutants discussed herein. This air quality analysis incorporates project design features associated with the Project Site's accessibility to transit and increase in diversity of uses and density. These project design features are explained further in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR.

Operational air quality impacts are assessed based on the incremental increase in emissions compared to baseline (existing) conditions. Therefore, the calculation of the Project's operational emissions would subtract the existing emissions of the current use to determine the incremental increase. Table IV.B-6 on page IV.B-55 provides Project operational emissions with incorporation of project design features. As shown in Table IV.B-6, regional emissions resulting from operation of the Project would not exceed any of the SCAQMD's daily regional operational thresholds. Therefore, air quality impacts from Project operational emissions would be less than significant.

# (b) Localized Emissions

As previously discussed, the 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 that are designed to be protective of public health, including for sensitive receptors.

# (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,

 Table IV.B-5

 Estimate of Maximum Regional Project Daily Construction Emissions (pounds per day)

Construction Year	VOC <sup>b</sup>	NOx	со	SOx	<b>PM</b> 10 <sup>℃</sup>	PM <sub>2.5</sub> <sup>c</sup>
Regional Construction Emissions						
2021	5	96	39	<1	9	4
2022	3	23	27	<1	3	2
2023	11	20	26	<1	3	1
Maximum Unmitigated Construction Emissions <sup>a</sup>	11	96	39	<1	9	4
SCAQMD Daily Significance Thresholds	75	100	550	150	150	55
Over/(Under)	(64)	(4)	(511)	(150)	(141)	(51)
Maximum Unmitigated Construction Emissions Exceed Threshold?	No	No	No	No	No	No

Numbers may not add up exactly due to rounding.

<sup>a</sup> The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix C(CalEEMod Output) of this Draft EIR.

<sup>b</sup> 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.

<sup>c</sup> Unmitigated scenario assumes compliance with SCAQMD Rule 403 requirements for fugitive dust. Dust control measures include watering three times daily and properly securing soil exporting loads prior to transport.

Source: Eyestone Environmental, 2019.

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. The SCAQMD LST methodology evaluates emissions from on-site sources (e.g. water heaters, cooking appliances, HVAC). 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.

According to the SCAQMD, individual projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As shown in Table IV.B-5 and in Table IV.B-6 on page IV.B-55, Project

#### Table IV.B-6

#### Estimate of Maximum Regional Project Daily Operational Emissions—At Project Buildout (2023)<sup>a</sup>

	Pollutant Emissions (pounds per day)							
Emission Source	VOC	NOx	со	SOx	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>		
Project								
Area	4	(1)	6	(0)	(0)	(0)		
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1		
Mobile <sup>b</sup>	(0)	(0)	(0)	<1	<1	<1		
Stationary	<1	1	1	<1	<1	<1		
Total Proposed Uses Emissions	5	<1	7	(0)	<1	<1		
SCAQMD Significance Threshold	55	55	550	150	150	55		
Over/(Under)	(50)	(55)	(543)	(150)	(150)	(55)		
Exceed Threshold?	No	No	No	No	No	No		

Numbers may not add up exactly due to rounding.

- <sup>a</sup> The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix C (CalEEMod Output) of this Draft EIR. The table reflects net emissions (i.e., Project emissions less existing emissions).
- <sup>b</sup> Project generated vehicle trips would be lower than existing trips, resulting in a net decrease in mobile source emissions
- <sup>b</sup> Area source emissions accounts for a reduction in emissions (e.g., 82 percent reduction in NO<sub>X</sub> emissions) with implementation of GHG-PDF-2 (prohibit installation of fireplaces within residential units).
- <sup>c</sup> Subsequent to release of the most current version of CalEEMod (Version 2016.3.2), the 2019 Title 24 standards went into effect January 1, 2020. CalEEMod is currently based on 2016 Title 24 standards. The analysis conservatively includes a 10-percent reduction in the CalEEMod calculated energy use to account for compliance with 2019 Title 24 standards.

Source: Eyestone Environmental, 2020.

construction and operational daily emissions at the Project Site would not exceed any of the SCAQMD's regional thresholds, respectively. As analyzed below in Threshold (c), construction and operation of the Project also would have a less-than-significant impact with regard to localized emissions. As such, the Project would not 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, and impacts would be less than significant.

# (2) Mitigation Measures

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

# (3) Level of Significance After Mitigation

Project-level impacts related to Threshold (b) during both construction and 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.

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

- (1) Impact Analysis
  - (a) Construction
    - (i) On-Site Construction Activities (Criteria Pollutants)

As discussed above in the Methodology subsection, the localized construction air quality analysis was conducted using the methodology promulgated by the SCAQMD. Look-up tables provided by the SCAQMD were used to determine localized construction emissions thresholds for the Project.<sup>80</sup> 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 (2016–2018) for the Project area as presented in Table IV.B-2 on page IV.B-22. Although the trend shown in Table IV.B-2 demonstrates that ambient air quality is improving in the area (decreasing for PM and CO, and remaining stable for NO<sub>2</sub>), the localized construction emissions analysis conservatively did not apply a reduction in background pollutant concentrations for subsequent years of construction (i.e., 2021-2023). By doing so, the allowable pollutant increment to not exceed an ambient air quality standard is more stringent. The analysis is conservatively based on existing background ambient air quality monitoring data (2016–2018).

Maximum on-site daily construction emissions for NOx, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for SRA 2 based on a 2.2-acre site. Potential impacts were evaluated at the closest off-site sensitive receptor, which are residential uses directly adjacent and east of the Project Site. The closest receptor distance on the SCAQMD mass rate LST look-up tables is 25 meters. Based on SCAQMD LST methodology, projects with boundaries located closer than 25 meters to the nearest receptor (such as the Project) should use the LSTs for receptors located at 25 meters.<sup>81</sup>

<sup>&</sup>lt;sup>80</sup> SCAQMD, LST Methodology Appendix C-Mass Rate LST Look-up Table, revised October 2009.

<sup>&</sup>lt;sup>81</sup> SCAQMD, Final Localized Significance Threshold Methodology, revised July 2008.

The maximum daily localized emissions from Project construction and LSTs are presented in Table IV.B-7 on page IV.B-58 and maximum construction emissions would not exceed the SCAQMD-recommended localized screening thresholds for NO<sub>X</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub>. As a result, Project-related on-site construction activities would result in a less than significant impact with regard to localized emissions, and no mitigation measures are required.

# (ii) On-Site Construction Activities (Toxic Air Contaminants)

The greatest potential for TAC emissions during construction would be from diesel particulate emissions associated with heavy equipment operations. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person continuously exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. Given the short-term construction schedule of approximately 34 months, the Project would not result in a longterm (i.e., 70-year) source of TAC emissions. Additionally, the SCAQMD CEQA guidance does not require a heath risk assessment (HRA) for short-term construction emissions. It is, therefore, not necessary to evaluate long-term cancer impacts from construction activities which occur over a relatively short duration. In addition, there would be no residual emissions or corresponding individual cancer risk after construction as all construction equipment and trucks would no longer be operating on-site. As such, Project-related TAC impacts during construction would be less than significant.

### (b) Operation

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

Operation of the Project would not introduce any major new sources of air pollution within the Project Site. Emissions estimates for criteria air pollutants from on-site sources are presented in Table IV.B-8 on page IV.B-59. The SCAQMD LST mass rate look-up tables, which apply to projects that have active areas that are less than or equal to 5 acres in size, were used to evaluate potential localized impacts. As shown in Table IV.B-8, on-site operational emissions would not exceed any of the LSTs. Therefore, localized on-site operational emissions resulting from the Project would result in a less-than-significant air quality impact.

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

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

Construction Year	NOx	со	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>
2021	43	27	4	2
2022	18	19	<1	<1
2023	16	19	<1	<1
Maximum Unmitigated Daily Localized Emissions	43	27	4	2
SCAQMD Localized Significance Thresholds <sup>b</sup>	127	861	7	4
Over/(Under)	(84)	(835)	(3)	(2)
Exceed Threshold?	No	No	No	No

 
 Table IV.B-7

 Estimate of Maximum Localized Daily Project Construction Emissions (pounds per day)

Numbers may not add up exactly due to rounding.

<sup>a</sup> Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 2. The SCAQMD Daily Significance Thresholds are based on the 2.22 acre Project Site and were interpolated between the 2 acre and 5 acre thresholds. The closest sensitive receptors are residential uses directly adjacent to the Project Site. The localized threshold is based on a 25 meter receptor distance which is the closest receptor distance on the SCAQMD mass rate LST look-up table. Source: Eyestone Environmental, 2019.

At buildout of the Project, the highest average daily trips at an intersection under the Future With Project Conditions<sup>82</sup> would be approximately 74,000 trips at the Beverly Glen Boulevard and Santa Monica Boulevard intersection,<sup>83</sup> which is significantly below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP.<sup>84</sup> 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 Beverly Glen Boulevard and Santa Monica Boulevard intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP.<sup>85</sup> In addition, the Project would result in a net decrease in

<sup>&</sup>lt;sup>82</sup> As defined in Section IV.I, Transportation, of this Draft EIR, the Future With Project Conditions is a traffic scenario that provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of Project-generated traffic.

<sup>&</sup>lt;sup>83</sup> Gibson Transportation Consulting, Transportation Assessment for Senior Residential Community at the Bellwood Project, February 2021, revised April 2021. Please refer to Appendix C, Page C-68 for trip calculations.

<sup>&</sup>lt;sup>84</sup> 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.

<sup>&</sup>lt;sup>85</sup> 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.

Table IV.B-8
Estimate of Maximum Localized Project Daily Operational Emissions—At Project Buildout (2023) <sup>a</sup>
(pounds per day)

Emission Source	NOx	СО	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>
Area	(1)	6	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary	1	1	<1	<1
On-Site Total	<1	7	<1	<1
SCAQMD Significance Threshold <sup>b</sup>	127	861	2	1
Over/(Under)	(127)	(854)	(2)	(1.0)
Exceed Threshold?	No	No	No	No

Numbers may not add up exactly due to rounding.

- <sup>a</sup> The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix C (CalEEMod Output) of this Draft EIR. The table reflects net emissions (i.e., Project emissions less existing emissions).
- <sup>b</sup> Potential localized operational impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 2. The SCAQMD Daily Significance Thresholds are based on the 2.2-acre Project Site and were interpolated between the 2-acre and 5-acre thresholds. The closest sensitive receptors are residential uses directly adjacent and east of the Project Site. The localized threshold is based on a 25-meter receptor distance which is the closest receptor distance on the SCAQMD mass rate LST look-up table.

Source: Eyestone Environmental, 2019.

vehicle trips when accounting for existing uses. 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 C of this Draft EIR.

(iii) Toxic Air Contaminants

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. CARB has published and adopted the *Air Quality and Land Use Handbook: A Community 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).<sup>86</sup> The SCAQMD adopted similar recommendations in its *Guidance Document for* 

<sup>&</sup>lt;sup>86</sup> CARB, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.

Addressing Air Quality Issues in General Plans and Local Planning.<sup>87</sup> 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.

### (i) On-Site Sources

The primary sources of potential air toxics associated with Project operations include diesel particulate matter from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets) 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 the SCAQMD recommends that HRAs be conducted for substantial individual sources of diesel particulate matter (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.<sup>88</sup> The Project would not include these types of land uses and is not considered to be a substantial source of diesel particulate matter 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.<sup>89</sup> In addition, the CARB-mandated ATCM limits diesel-fueled commercial vehicles (delivery trucks) to idle for no more than five minutes at any given time, which would further limit diesel particulate emissions.

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

# 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

<sup>&</sup>lt;sup>87</sup> SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

<sup>&</sup>lt;sup>88</sup> SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, 2002.

<sup>&</sup>lt;sup>89</sup> Although the Project will include a loading dock, the Project consists of residential uses. It is anticipated that truck activity would be minimal with 1-2 trucks per day if any.

of off-site sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0, and potential TAC impacts would be less than significant.

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

# (2) Mitigation Measures

Project-level 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

Project-level impacts related to Threshold (c) during construction and 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.

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

As discussed in Section VI, Other CEQA Considerations, of this Draft EIR, and in the Initial Study prepared for the Project, which is included as Appendix A of this Draft EIR, the Project would not create objectionable odors impacting a substantial number of people. Thus, impacts with respect to Threshold (d) would be less than significant. No further analysis is required.

# e. Cumulative Impacts

# (1) Impact Analysis

As discussed above, the SCAQMD recommends evaluating cumulative impacts for individual projects based on whether the project exceeds the SCAQMD's recommended daily thresholds for project-specific impacts for those pollutants for which the Air Basin is in non-attainment. Thus, the cumulative analysis of air quality impacts 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 significance threshold.

As shown in Table IV.B-5 and Table IV.B-6 on pages IV.B-54 and IV.B-55, respectively, Project construction and operational daily emissions at the Project Site would

not exceed any of the SCAQMD's regional thresholds, respectively. Further, construction and operation of the Project would have a less-than-significant impact on localized emissions and TACs.

# Accordingly, regional, localized, and TAC emissions during construction and operation of the Project would not be cumulatively considerable.

# (2) Mitigation Measures

Cumulative impacts related to air quality would be less than significant during construction and operation of the Project. Therefore, no mitigation measures are required.

# (3) Level of Significance After Mitigation

Cumulative impacts related to air quality during both construction and 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.