

IV. Environmental Impact Analysis

A. Air Quality

1. Introduction

This section of the Draft EIR quantifies the air quality emissions generated by construction and operation of the Project and addresses whether the Project conflicts with implementation of the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP) and the City of Los Angeles General Plan. The analysis of Project-generated air emissions also addresses whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard and whether the Project would expose sensitive receptors to substantial pollutant concentrations. Calculation worksheets, assumptions, and model outputs used in the analysis are included in Appendix B of this Draft EIR.

2. Environmental Setting

a. Air Quality Background

(1) Air Quality and Public Health

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of an overall endeavor to prevent further deterioration and to facilitate improvement in air quality. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) 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.¹ As the scientific methods for the study of air pollution health effects have progressed over the past decades, adverse effects have been shown to occur at lower levels of exposure. For some pollutants, no clear thresholds for effects have been

¹ United States Environmental Protection Agency, NAAQS Table, www.epa.gov/criteria-air-pollutants/naaqs-table, accessed October 3, 2023.

demonstrated. New findings over time have, in turn, led to the revision and lowering of NAAQS which, in the judgment of the U.S. Environmental Protection Agency (USEPA), are necessary to protect public health. Ongoing assessments of the scientific evidence from health studies continue to be an important part of setting and informing revisions to federal and state air quality standards.² The national and State criteria pollutants and the applicable ambient air quality standards are listed in Table IV.A-1 on page IV.A-3.

At the regional level, the South Coast Air Quality Management District (SCAQMD) is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange County, Riverside, and San Bernardino Counties, including the Coachella Valley.³ The City of Los Angeles is located within the South Coast Air Basin (Air Basin), which is a distinct geographic subarea within the SCAQMD's jurisdiction. The SCAQMD, together with the Southern California Association of Governments (SCAG), has the responsibility for ensuring that national and state ambient air quality standards are achieved and maintained for the Air Basin. Failure to comply with these standards puts state and local agencies at risk for penalties in the form of lawsuits, fines, a federal takeover of state implementation plans, and a loss of funds from federal agencies, such as the Federal Highway Administration and Federal Transit Administration.

To meet the air quality standards, regional plans are developed, including the SCAQMD Air Quality Management Plan (AQMP), which incorporates regional demographic projections and integrated regional land use and transportation strategies from the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). These plans work together to examine multiple pollutants, cumulative effects, and transport issues related to attaining healthful air quality in the region. In addition, a host of regulatory standards at the federal, state, regional, and local level function to identify and limit exposure of air pollutants and toxic air contaminants (TACs).

(2) Local Air Quality and Air Pollution Sources

As mentioned above, the City of Los Angeles is located within the South Coast Air Basin, which is 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,

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SCAQMD, Final 2022 AQMP, 2022, Appendix I, Health Effects, p I-154.

³ SCAQMD, Map of Jurisdiction, 1999.

Table IV.A-1 Ambient Air Quality Standards

				SCAQMD Attainment Statu		
Pollutant	Averaging Period	California Standard ^{a,b}	Federal Standard ^{a,b}	California Standard ^d	Federal Standard ^d	
0-000 (0)	1 hour	0.09 ppm (180 μg/m³)	_	Non-Attainment	_	
Ozone (O ₃)	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 ₁₀)	Annual	20 μg/m³	_	- Non-Attainment	Auamment	
Fine	24 hour	-	35 μg/m ³		Non-Attainment	
Particulate Matter (PM _{2.5})	Annual	12 μg/m³	12 μg/m³	Non-Attainment	(Serious)	
Carbon	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	Attainment	Attainment	
Monoxide (CO)	8 hour	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	Attairinent		
Nitrogen Dioxide (NO ₂)	1 hour	0.18 ppm (339 μg/m³)	0.10 ppm (188 µg/m³)	Attainment	Unclassified/	
	Annual	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	Attairinent	Attainment	
Sulfur Dioxide (SO ₂)	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)			
	3 hour	_	0.5 ppm (1,300 μg/m³)	Attainment	Unclassified/ Attainment	
	24 hour	0.04 ppm (105 μg/m³)	0.14 ppm (365 μg/m³)	Attairinent		
	Annual	_	0.03 ppm (80 µg/m³)			
Lead (Pb)	30-day average	1.5 μg/m³	_		Partial Non-	
	Rolling 3-month average	_	Attainment 0.15 μg/m³		Attainment ^e	
Sulfates	24 hour	25 μg/m³	_	Attainment	_	
Hydrogen Sulfide (H ₂ S)	1 hour	0.03 ppm (42 μg/m³)	_	Unclassified	_	

ppm = parts per million by volume

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

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

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

				SCAQMD Attai	nment Status ^c
Pollutant	Averaging Period	California Standard ^{a,b}	Federal Standard ^{a,b}	California Standard ^d	Federal Standard ^d

expressed as a concentration that is not to be equaled or exceeded.

- b Ambient Air Quality Standards based on the 2022 AQMP.
- ^c "Attainment" means that the regulatory agency has determined based on established criteria, that the Air Basin meets the identified standard. "Non-attainment" means that the regulatory agency has determined that the Air Basin does not meet the standard. "Unclassified" means there is insufficient data to designate an area, or designations have yet to be made.
- d California and Federal standard attainment status based on SCAQMD's 2022 AQMP.
- e An attainment re-designation request is pending.

Source: Eyestone Environmental, 2023.

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.

The Air Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid to late afternoons on hot summer days. Winter inversions frequently break by midmorning.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino counties. In the winter, the greatest pollution problem is the accumulation of carbon monoxide (CO) and nitrogen oxides (NO $_{\rm X}$) due to low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO $_{\rm X}$ to form photochemical smog.

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.

(3) Air Pollutant Types

(a) Criteria Pollutants

The six principal pollutants for which national and State criteria and standards have been promulgated, and which are most relevant to current air quality planning and regulation in the Air Basin are ozone (O_3) , respirable and fine particulate matter $(PM_{10}$ and $PM_{2.5}$, respectively), carbon monoxide (CO), nitrogen dioxide (NO_2) , sulfur dioxide (SO_2) , and lead (Pb). These pollutants are referred to as "criteria air pollutants" or "criteria pollutants" as a result of the specific standards, or criteria, which have been adopted for them.

(i) Ozone (O₃)

O₃ is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. O₃ concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O₃ irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

(ii) Particulate Matter (PM₁₀ and PM_{2.5})

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Respirable and fine particulate matter, PM₁₀ and PM_{2.5}, consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, such as pollen and windstorms, are naturally occurring. However, in urban areas, such as the City of Los

The Bloc
Draft Environmental Impact Report

Angeles, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. The human body naturally prevents the entry of larger particles into the body. However, small particles can enter the body and become trapped in the nose, throat, and upper respiratory tract. These small particulates can potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM₁₀ and PM_{2.5}. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

(iii) Carbon Monoxide (CO)

CO is a colorless, odorless gas primarily emitted from combustion processes and motor vehicles due to incomplete combustion of carbon-containing fuels, such as gasoline or wood. In urban areas, such as the City of Los Angeles, automobile exhaust accounts for the majority of CO emissions. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike O₃, motor vehicles operating at slow speeds are the primary source of CO in the Air Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. 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.

(iv) Nitrogen Dioxide (NO₂)

Nitrogen dioxide is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. Of the seven types of NO $_{\rm X}$ compounds, NO $_{\rm Z}$ is the most abundant in the atmosphere. As ambient concentrations of NO $_{\rm Z}$ are related to traffic density, commuters in heavy traffic areas, particularly in urban areas such as the City of Los Angeles, may be exposed to higher concentrations of NO $_{\rm Z}$ than those indicated by regional monitors. NO $_{\rm Z}$ absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO $_{\rm Z}$ also contributes to the formation of PM10. NO $_{\rm X}$ irritates the nose and throat and increases one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO $_{\rm X}$ is as a precursor to the formation of O3.

(v) Sulfur Dioxide (SO₂)

Sulfur oxides (SO_x) are compounds of sulfur and oxygen molecules. SO₂ is the predominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO₂ include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Generally, the highest levels of SO₂ are found near large industrial complexes. In recent years, SO₂ concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO₂ and limits on the sulfur content of fuels. Emissions of SO₂ aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO₂ potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of SO₂, and long-term exposures to both pollutants lead to higher rates of respiratory illness.

(vi) Lead (Pb)

Pb is a metal found naturally in the environment, as well as in manufactured products. The highest levels of Pb in the air are usually found near Pb smelters. The major sources of Pb emissions into the air are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. Pb is also emitted from the sanding or removal of old lead-based paint (LBP). Pb emissions are primarily a regional pollutant. Pb affects the brain and other parts of the body's nervous system. Exposure to Pb in very young children impairs the development of the nervous system, kidneys, and blood forming processes in the body.

(b) Additional Criteria Pollutants (California Only)

In addition to the national standards, the State of California regulates State-identified criteria pollutants, including sulfates (SO₄²-), hydrogen sulfide (H₂S), visibility-reducing particles, and vinyl chloride. With respect to the State-identified criteria pollutants, most land use development projects either do not emit them (i.e., H₂S [nuisance odor] and vinyl chloride), or otherwise account for these pollutants (i.e., SO₄²- and visibility reducing particles) through other criteria pollutants. For example, SO₄²-are associated with SO_x emissions, and visibility-reducing particles are associated with particulate matter emissions. A description of the health effects of the State-identified criteria air pollutants is provided below.

(i) Sulfates (SO_4^{2-})

SO₄²⁻ are the fully oxidized ionic form of sulfur. SO₄²⁻ 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

The Bloc
Draft Environmental Impact Report

March 2024

sulfur. This sulfur is oxidized during the combustion process and subsequently converted to SO_4^{2-} in the atmosphere. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. SO_4^{2-} are particularly effective in degrading visibility, and, due to the fact that they are usually acidic, can harm ecosystems and damage materials and property.

(ii) Hydrogen Sulfide (H₂S)

H₂S is a colorless gas with the odor of rotten eggs. The most common sources of H₂S emissions are oil and natural gas extraction and processing and natural emissions from geothermal fields. Industrial sources of H₂S include petrochemical plants and kraft paper mills. H₂S is also formed during bacterial decomposition of human and animal wastes and is present in emissions from sewage treatment facilities and landfills.⁴ Exposure to H₂S can induce tearing of the eyes and symptoms related to overstimulation of the sense of smell, including headache, nausea, or vomiting; additional health effects of eye irritation have only been reported with exposures greater than 50 parts per million (ppm), which is considerably higher than the odor threshold.⁵ H₂S is regulated as a nuisance based on its odor detection level; if the standard were based on adverse health effects, it would be set at a much higher level.⁶

(iii) Visibility-Reducing Particles

Visibility-reducing particles come from a variety of natural and manmade sources and can vary greatly in shape, size, and chemical composition. Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles are directly emitted to the air, such as windblown dust and soot, while others are formed in the atmosphere through chemical transformations of gaseous pollutants (e.g., SO_4^{2-} , nitrates, organic carbon particles), which are the major constituents of particulate matter. As the number of visibility-reducing particles increases, more light is absorbed and scattered, resulting in less

⁴ California Air Resources Board, Hydrogen Sulfide & Health, ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health, accessed October 3, 2023.

⁵ California Air Resources Board, Hydrogen Sulfide & Health, ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health, accessed October 3, 2023.

⁶ California Air Resources Board, Hydrogen Sulfide & Health, ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health, accessed October 3, 2023.

clarity, color, and visual range.⁷ Exposure to some haze-causing pollutants have been linked to adverse health impacts similar to PM₁₀ and PM_{2.5}, as discussed above.⁸

(iv) Vinyl Chloride

Vinyl chloride is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products and is generally emitted from industrial processes. Other major sources of vinyl chloride have been detected near landfills, sewage plants, and hazardous waste sites due to microbial breakdown of chlorinated solvents.⁹ Short-term health of effects of exposure to high levels of vinyl chloride in the air include central nervous system effects, such as dizziness, drowsiness, and headaches while long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage and has been shown to increase the risk of angiosarcoma, a rare form of liver cancer in humans.¹⁰ Most health data on vinyl chloride relate to carcinogenicity; thus, the people most at risk are those who have long-term exposure to elevated levels, which is more likely to occur in occupational or industrial settings. However, control methodologies applied to industrial facilities generally prevent emissions to the ambient air.¹¹

(c) Volatile Organic Compounds (VOCs) and Toxic Air Contaminants (TACs)

Although the SCAQMD's primary mandate is attaining the NAAQS and the CAAQS for criteria pollutants within the district, SCAQMD also has a general responsibility to control emissions of air contaminants and prevent endangerment to public health. As a result, the SCAQMD has regulated pollutants other than criteria pollutants, such as VOCs, TACs, greenhouse gases (GHGs), and stratospheric O₃-depleting compounds.

⁷ California Air Resources Board, Visibility-Reducing Particles and Health, www.arb.ca.gov/research/aaqs/common-pollutants/vrp/vrp.htm, accessed October 3, 2023.

⁸ California Air Resources Board, Visibility-Reducing Particles and Health, www.arb.ca.gov/research/aaqs/common-pollutants/vrp/vrp.htm, accessed October 3, 2023.

⁹ California Air Resources Board, Vinyl Chloride & Health, ww2.arb.ca.gov/resources/vinyl-chloride-and-health#:~:text=Short%2Dterm%20exposure%20to%20high,oral%20exposure%20is%20liver%20damage, accessed October 3, 2023.

California Air Resources Board, Vinyl Chloride & Health, ww2.arb.ca.gov/resources/vinyl-chloride-and-health#:~:text=Short%2Dterm%20exposure%20to%20high,oral%20exposure%20is%20liver%20damage, accessed October 3, 2023.

California Air Resources Board, Vinyl Chloride & Health,ww2.arb.ca.gov/resources/vinyl-chloride-and-health#:~:text=Short%2Dterm%20exposure%20to%20high,oral%20exposure%20is%20liver%20damage, accessed October 3, 2023.

(i) Volatile Organic Compounds (VOCs)

VOCs are organic chemical compounds of carbon and are not "criteria" pollutants themselves; however, VOCs are a prime component (along with NO_X) of the photochemical processes by which such criteria pollutants as O_3 , NO_2 , and certain fine particles are formed. They are therefore regulated as "precursors" to formation of these criteria pollutants. Some are also identified as TACs and have adverse health effects. VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids, internal combustion associated with motor vehicle usage, and consumer products (e.g., architectural coatings, etc.).

(ii) Toxic Air Contaminants (TACs)

TACs is a term used to describe airborne pollutants that may be expected to result in an increase in mortality or serious illness or which may pose a present or potential hazard to human health, and include both carcinogens and non-carcinogens. The California Air Resources Board (CARB) and the California Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in California. CARB has listed approximately 200 toxic substances, including those identified by the USEPA, which are identified on the California Air Toxics Program's TAC List. TACs are also not classified as "criteria" air pollutants. The greatest potential for TAC emissions during construction is related to diesel particulate matter (DPM) emissions associated with heavy-duty equipment. During long-term operations, sources of DPM may include heavy duty diesel-fueled delivery trucks and stationary emergency generators. The effects of TACs can be diverse and their health impacts tend to be local rather than regional; consequently ambient air quality standards for these pollutants have not been established, and analysis of health effects is instead based on cancer risk and exposure levels.

b. Regulatory Framework

There are several plans, regulations, and programs that include policies, requirements, and guidelines regarding air quality at the federal, state, regional, and local levels. As described below, these plans, guidelines, and laws include the following:

- Federal Clean Air Act
 - National Ambient Air Quality Standards
- California Clean Air Act
 - California Ambient Air Quality Standards
- California Code of Regulations

- State Programs for Toxic Air Contaminants
- Diesel Risk Reduction Program
- South Coast Air Quality Management District
 - Air Quality Management Plan
 - SCAQMD's Air Quality Guidance Documents
 - SCAQMD's Rules and Regulations
- Southern California Association of Governments' Regional Transportation Plan/Sustainable Communities Strategy
- City of Los Angeles Air Quality Element
- City of Los Angeles Plan for a Healthy LA
- City of Los Angeles Municipal Code, Ordinance No. 187,714

(1) Federal

(a) Federal Clean Air Act

The federal Clean Air Act (CAA) was enacted in 1970 and has been amended numerous times in subsequent years, with the latest amendments occurring in 1990. The CAA is the comprehensive federal law that regulates air emissions in order to protect public health and welfare. The USEPA is responsible for the implementation and enforcement of the CAA, which establishes the NAAQS, specifies future dates for achieving compliance, and requires the USEPA to designate areas as attainment, nonattainment, or maintenance. The CAA also mandates that each state submit and implement a State Implementation Plan (SIP) for each criteria pollutant for which the state has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met. The sections of the CAA most applicable to land use development projects include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

¹² 42 United States Code §7401 et seq. (1970).

¹³ United States Environmental Protection Agency, Summary of the Clean Air Act, www.epa.gov/laws-regulations/summary-clean-air-act, accessed October 3, 2023.

United States Environmental Protection Agency, Clean Air Act Overview, Clean Air Act Table of Contents by Title, last Updated May 3, 2023, www.epa.gov/clean-air-act-overview/clean-air-act-text, accessed (Footnote continued on next page)

Title I requirements are implemented for the purpose of attaining NAAQS for criteria air pollutants. Table IV.A-1 on page IV.A-3 shows the NAAQS currently in effect for each criteria pollutant and their corresponding attainment status. The Air Basin fails to meet national standards for O₃ and PM_{2.5} and, therefore, is considered a federal "non-attainment" area for these pollutants. Since 2019, no monitoring stations within the Air Basin has demonstrated an exceedance of the national standard for Pb, and an attainment redesignation for Pb is currently pending with the USEPA.

Title II pertains to mobile sources, which includes on-road vehicles (e.g., cars, buses, motorcycles) and non-road vehicles (e.g., aircraft, trains, construction equipment). Reformulated gasoline and automobile pollution control devices are examples of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_X emissions have been lowered substantially, and the specification requirements for cleaner burning gasoline are more stringent.

The NAAQS and the CAAQS for the California criteria air pollutants (discussed below) have been set at levels considered safe to protect public health, including the health of sensitive populations and to protect public welfare.

(2) State

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

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October 3, 2023. As shown therein, Title I addresses nonattainment areas and Title II addresses mobile sources.

(b) California Code of Regulations

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

(c) State Programs for Toxic Air Contaminants

The California Air Toxics Program is an established 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. 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 stationary and mobile sources, including On-Road and Off-Road Vehicle Rules. These ATCMs include measures such as limits on heavy-duty diesel motor vehicle idling and emission standards for off-road diesel construction equipment in order to reduce public exposure to DPM and other TACs. These actions are also supplemented by the Assembly Bill (AB) 2588 Air Toxics "Hot Spots" program and Senate Bill (SB) 1731, which require facilities to report their air toxics emissions, assess health risks, notify nearby residents and workers of significant risks if present, and reduce their risk through implementation of a risk management plan. SCAQMD has further 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 Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

(d) Diesel Risk Reduction Program

CARB identified particulate emissions from diesel-fueled engines as TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which moved us into the risk management phase of the program. CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines* and the *Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines*. The Diesel Advisory Committee approved these documents on September 28, 2000, paving the way for the next

The Bloc
Draft Environmental Impact Report

step in the regulatory process: the control measure phase. During the control measure phase, specific statewide regulations designed to further reduce DPM emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce DPM emissions.

(3) Regional

(a) South Coast Air Quality Management District

The SCAQMD is primarily responsible for planning, implementing, and enforcing air quality standards for the South Coast Air Basin. The Air Basin is a subregion within the western portion of the SCAQMD jurisdiction, as the SCAQMD also regulates portions of the Salton Sea Air Basin and Mojave Desert Air Basin within Riverside County.

(b) Air Quality Management Plan and RTP/SCS

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of AQMPs, which serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the area into attainment with the standards in a timely manner. The 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines for O₃ and PM_{2.5} are met and that public health is protected to the maximum extent feasible. The most significant air quality challenge in the Air Basin is to reduce NO_X emissions¹⁵ sufficiently to meet the O₃ standard deadlines as NO_X plays a critical role in the creation of O₃. Since NO_X emissions also lead to the formation of PM_{2.5}, the NO_X reductions needed to meet the O₃ standards will likewise lead to improvement of PM_{2.5} levels and attainment of PM_{2.5} standards.¹⁶ The 2022 AQMP is focused on attaining the 2015 8-hour O₃ standard of 70 parts per billion. The 2022 AQMP builds upon measures already in place from previous AQMPs and includes a variety of additional strategies such as regulation, accelerated development of available clean technologies, incentives and other CAA measures to achieve this standard.¹⁷

The SCAQMD's strategy to meet the NAAQS and CAAQS distributes the responsibility for emission reductions across federal, state, and local levels and industries. The 2016 and 2022 AQMPs are composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs, co-

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¹⁵ NOx emissions are a precursor to the formation of both O_3 and secondary PM_{2.5}.

Estimates are based on the inventory and modeling results and are relative to the baseline emission levels for each attainment year (see Final 2022 AQMP for detailed discussion).

¹⁷ SCAQMD, Final 2022 AQMP, December 2022, p. ES-2.

benefits from climate programs, mobile source strategies, and reductions from federal sources, which include aircraft, locomotives and ocean-going vessels. These strategies are to be implemented in partnership with CARB and USEPA.

The AQMPs also incorporate the transportation strategy and transportation control measures from the SCAG 2016–2040 Regional Transportation Plan/Sustainable Strategy (2016–2040 RTP/SCS) Plan and Communities 2020–2045 Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS) Plan. 18 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. 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 regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. 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. The RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP. The SCAQMD combines its portion of the AQMP with those prepared by SCAG. The 2016–2040 RTP/SCS and its Transportation Control Measures, included as Appendix IV-C of the 2016 AQMP, are based on SCAG's 2016-2040 RTP/SCS and the 2020-2045 RTP/SCS Transportation Control Measures, included as Appendix IV-C of the 2022 AQMP, are based on the 2020-2045 RTP/SCS.

The 2016 AQMP forecasts the 2031 emissions inventories "with growth" based on SCAG's 2016–2040 RTP/SCS. The region is projected to see a 12-percent growth in population, 16-percent growth in housing units, 23-percent growth in employment, and 8-percent growth in VMT between 2012 and 2031. The 2022 AQMP forecasts the 2037 emissions inventories "with growth" based on SCAG's 2020–2045 RTP/SCS. The region is projected to see a 12-percent growth in population, a 17-percent growth in housing units, a 11-percent growth in employment, and an 5-percent growth in vehicle miles traveled VMT between 2018 and 2037. Despite regional growth in the past, air quality has improved substantially over the years, primarily due to the effects of air quality control programs at the local, State and federal levels.¹⁹

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¹⁸ SCAG, Final 2020–2045 RTP/SCS, September 3, 2020.

¹⁹ SCAQMD, Final 2022 AQMP, Table 3-3.

On December 2, 2022, the SCAQMD Governing Board adopted the 2022 AQMP. On January 26, 2023, CARB adopted the 2022 AQMP which was then submitted to the EPA for final approval on February 22, 2023. The 2022 AQMP is focused on attaining the 2015 8-hour O₃ standard of 70 parts per billion. The 2022 AQMP builds upon measures already in place from previous AQMPs and includes a variety of additional strategies such as regulation, accelerated development of available clean technologies, incentives and other CAA measures to achieve this standard. SCAQMD's strategy to meet the NAAQS and CAAQS distributes the responsibility for emission reductions across the federal, state, and local levels and industries. Both AQMPs are composed of stationary 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 the CARB and USEPA. Both AQMPs incorporate the transportation strategy and transportation control measures from the RTP/SCS, 2016-2040 RTP/SCS and applicable SCAG 2020-2045 respectively.20,21

(i) SCAQMD Air Quality Guidance Documents

The SCAQMD published the *CEQA Air Quality Handbook* (approved by the SCAQMD Governing Board in 1993) to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.²² The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses. However, the SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*. While this process is underway, the SCAQMD has provided supplemental guidance on the SCAQMD website to be used in conjunction with the Handbook.²³

The SCAQMD has also adopted land use planning guidelines in its *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.²⁴ SCAQMD's siting distance recommendations are the same as those provided by CARB

²⁰ SCAG, Final 2016 RTP/SCP, 2016.

²¹ SCAG, Final 2020- RTP/SCS, 2020.

²² SCAQMD, CEQA Air Quality Handbook, 1993, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993), accessed October 3, 2023.

²³ SCAQMD, Air Quality Analysis Guidance, www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook#, accessed October 3, 2023.

²⁴ South Coast Air Quality Management District, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

(e.g., a 500-foot siting distance for sensitive land uses proposed in proximity to 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. The SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

The SCAQMD has published a guidance document called the *Final Localized Significance Threshold Methodology* for CEQA evaluations that is intended to provide guidance when evaluating the localized effects from mass emissions during construction or operation of a project.²⁵ The SCAQMD adopted additional guidance regarding PM_{2.5} emissions in a document called *Final Methodology to Calculate Particulate Matter (PM)2.5* and PM2.5 Significance Thresholds.²⁶ The latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and *Final Localized Significance Threshold Methodology*.

(ii) SCAQMD Rules and Regulations

The SCAQMD has adopted several rules and regulations to regulate sources of air pollution in the Air Basin and to help achieve air quality standards for land use development projects, which include, but are not limited to the following:

Regulation IV—Prohibitions: This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events. The following is a list of rules that apply to the Project:

- Rule 401—Visible Emissions: This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.
- Rule 402—Nuisance: This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable

South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, 2008, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds, accessed October 3, 2023.

²⁶ South Coast Air Quality Management District, Final Methodology to Calculate PM 2.5 and PM2.5 Significance Thresholds, 2006.

number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

• Rule 403—Fugitive Dust: This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM₁₀ emissions to less than 50 micrograms per cubic meter (μg/m³), and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Best available control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by the USEPA.

Regulation XI—Source Specific Standards: Regulation XI sets emissions standards for specific sources. The following is a list of rules that may apply to the Project:

- Rule 1113—Architectural Coatings: This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
- Rule 1138—Control of Emissions from Restaurant Operations: This rule specifies PM and VOC emissions and odor control requirements for commercial cooking operations that use chain-driven charbroilers to cook meat.
- Rule 1146.2—Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters: This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NOx emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.
- Rule 1186—PM₁₀ Emissions from Paved and Unpaved Roads, and Livestock Operations: This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM₁₀ emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Regulation XIII—New Source Review (NSR): Regulation XIII sets requirements for preconstruction review required under both federal and state statutes for new and modified sources located in areas that do not meet the CAA standards ("non-attainment" areas). NSR applies to both individual permits and entire facilities. Any permit that has a net increase in emissions is required to apply Best Available Control Technology (BACT).

Facilities with a net increase in emissions are required to offset the emission increase by use of Emission Reduction Credits (ERCs). The regulation provides for the application, eligibility, registration, use and transfer of ERCs. For low emitting facilities, the SCAQMD maintains an internal bank that can be used to provide the required offsets. In addition, certain facilities are subject to provisions that require public notice and modeling analysis to determine the downwind impact prior to permit issuance.

Regulation XIV—Toxics and Other Non-Criteria Pollutants: Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units which emit TACs or other non-criteria pollutants. The following is a list of rules that may apply to the Project:

- Rule 1403—Asbestos Emissions from Demolition/Renovation Activities:
 This rule 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.
- Rule 1470—Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines: This rule applies to stationary compression ignition engines greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.
 - (4) Local
 - (a) City of Los Angeles General Plan
 - (i) Air Quality Element

Local jurisdictions, such as the City, have the authority and responsibility to reduce air pollution through their land use decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. In general, the City of Los Angeles' General Plan (including the Framework, Air Quality, Mobility 2035, and Health and Wellness Elements) and the City of Los Angeles' Green New Deal contain policies and programs for the protection of the environment and health through improved air quality. These serve to provide additional critical guidance for the betterment of public health for the region and the City.

The most directly related of those plans, the City's General Plan Air Quality Element, was adopted on November 24, 1992, and sets forth the goals, objectives, and policies that

guide the City in its implementation of its air quality improvement programs and strategies. A number of these goals, objectives, and policies are relevant to land use development, and relate to traffic mobility, minimizing particulate emissions from construction activities, discouraging single-occupancy vehicle trips, managing traffic congestion during peak hours, and increasing energy efficiency in City facilities and private developments.

The Air Quality Element establishes six goals:

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

The City is also responsible for the implementation of transportation control measures as outlined in the AQMP. Through capital improvement programs, the City can fund infrastructure that contributes to improved air quality by requiring such improvements as bus turnouts as appropriate, installation of energy-efficient streetlights, and synchronization of traffic signals. In accordance with CEQA requirements and the CEQA review process, 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 measures.

(ii) Plan for a Healthy Los Angeles

The Plan for a Healthy Los Angeles, adopted by the City Council on March 31, 2015, and amended in November 2021, lays the foundation to create healthier communities for all residents in the City. As an element of the General Plan, it provides high-level policy

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vision, along with measurable objectives and implementation programs, to elevate health as a priority for the City's future growth and development. With a focus on public health and safety, the Plan for a Healthy Los Angeles provides a roadmap for addressing the most basic and essential quality-of-life issues: safe neighborhoods; a clean environment (i.e., improved ambient and indoor air quality); the opportunity to thrive; and access to health services, affordable housing, and healthy and sustainably produced food.

(b) City of Los Angeles Municipal Code

In December 2022, the City approved Ordinance No. 187,714, which requires all newly constructed buildings to be all electric. Cooking equipment contained within kitchens in a public use area, such as restaurants, commissaries, cafeterias, and community kitchens are exempt as long as electrical infrastructure is installed. Gas-powered process equipment in Occupancy Groups I-2 (institutions, such as hospitals), F (industrial) and L (laboratories) are also exempt provided the electrical infrastructure is installed in accordance with Section 99.05.106.14.1.

c. Existing Conditions

(1) Regional Air Quality

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

The greatest air pollution throughout the Air Basin occurs from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Air Basin vary with location, season, and time of day. O₃ concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California. However, the Air Basin still fails to meet the national standards for O₃ and PM_{2.5} and, therefore, is considered a federal non-attainment area for these pollutants. As discussed above, since 2019, no monitoring stations within the Air Basin has demonstrated an exceedance for Pb

of the national standard, and an attainment redesignation for Pb is currently pending with the USEPA.

The 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. Both the 2016 and 2022 AQMP includes strategies to ensure that rapidly approaching attainment deadlines are met and that public health is protected to the maximum extent feasible. The most significant air quality challenge in the Air Basin is to reduce NO_X emissions²⁷ sufficiently to meet the upcoming O₃ standard deadlines. The 2016 AQMP provides a baseline year 2012 inventory of 512 tons per day (tpd) of NOx and modeling results show that NOx emissions are projected to be 214 tpd of the 8-hour O₃ attainment year of 2031, due to the 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 O₃ standard. The 2022 AQMP provides a baseline year 2018 inventory of 351 tons per day (tpd) of NO_x and modeling results show that NO_x emissions are projected to be 184 tpd in the 8-hour O₃ attainment year of 2037, due to continued implementation of already adopted regulatory actions ("baseline emissions"). The 2022 AQMP suggests that total Air Basin emissions of NO_X must be reduced to 60 tpd in 2037 to attain the 8-hour O₃ standard. Although the existing air regulations and programs will continue to lower NO_X emissions in the region, an additional 55 and 67 percent of reductions from the baseline years of 2012 and 2018 in the years 2031 and 2037 respectively, are necessary to attain the 8-hour ozone standard.^{28,29}

The overall control strategy is an integral approach relying on fair-share emission reductions from federal, State, and local levels. Both AQMPs are composed of stationary and mobile source emission reductions strategies from traditional regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile source strategies and reductions from federal sources, which include aircraft, locomotives and ocean-going vessels. These strategies are to be implemented in partnership with CARB and USEPA. The 2022 AQMP also includes transportation programs, measures, and strategies from SCAG's 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)³⁰ that are generally designed to reduce VMT.

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NOx emissions are a precursor to the formation of both ozone and secondary PM_{2.5}.

Estimates are based on the inventory and modeling results and are relative to the baseline emission levels for each attainment year (see Final 2016 and 2022 AQMP for detailed discussion).

²⁹ SCAQMD, Final 2016 and 2022 AQMP, 2017 and 2022, p. ES-2 2016 AQMP and ES-4 2022 AQMP).

³⁰ SCAG, Final 2020–2045 RTP/SCS.

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the Plan with those prepared by SCAG. The RTP/SCS and Transportation Control Measures (TCMs), included as Appendix IV-C of the 2016 and 2022 AQMP for the Basin, are based on SCAG's 2016–2040 and 2020–2045 RTP/SCS. The 2016 AQMP forecasts 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. The 2022 AQMP forecasts the 2037 emissions inventories "with growth" based on SCAG's 2020–2045 RTP/SCS. The region is projected to see a 12-percent growth in population, a 17-percent growth in housing units, a 11-percent growth in employment, and a 5-percent growth in VMT between 2018 and 2037.

Despite past regional growth, air quality within the Basin has improved substantially over the years, primarily due to the impacts of air quality control programs at the local, state and federal levels. Figure IV.A-1 on page IV.A-24 shows the percent change in air quality along with demographic data for the four-county region from the 2016 AQMP. In particular, the graphic illustrates the trends since 1990 of the 8-hour ozone levels, the 1-hour ozone levels, and annual average PM_{2.5} concentrations (since 1999), compared to the regional gross domestic product, total employment and population. Human activity in the region has an impact on achieving reductions in emissions. Figure IV.A-2 on page IV.A-25 shows the percent change in air quality along with demographic data for the four-county region from the 2022 AQMP. In particular, the graphic illustrates the trends since 1955 of the 8-hour O₃ levels, the 1-hour O₃ levels, and annual average PM_{2.5} concentrations (since 2001), 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 O₃ and PM 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.³¹

SCAQMD has released the Multiple Air Toxics Exposure study (MATES-V).³² The MATES-V Study was aimed at estimating the cancer risk from toxic air emissions throughout the Air Basin by conducting a comprehensive monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to fully characterize health risks for those living in the Air Basin. The MATES-V Study concluded that the average carcinogenic risk from air pollution in the Air Basin is approximately 424 in

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³¹ SCAQMD, Final 2022 AQMP, 2022 (p. 1-9).

³² SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES V) Final Report, August 2021.

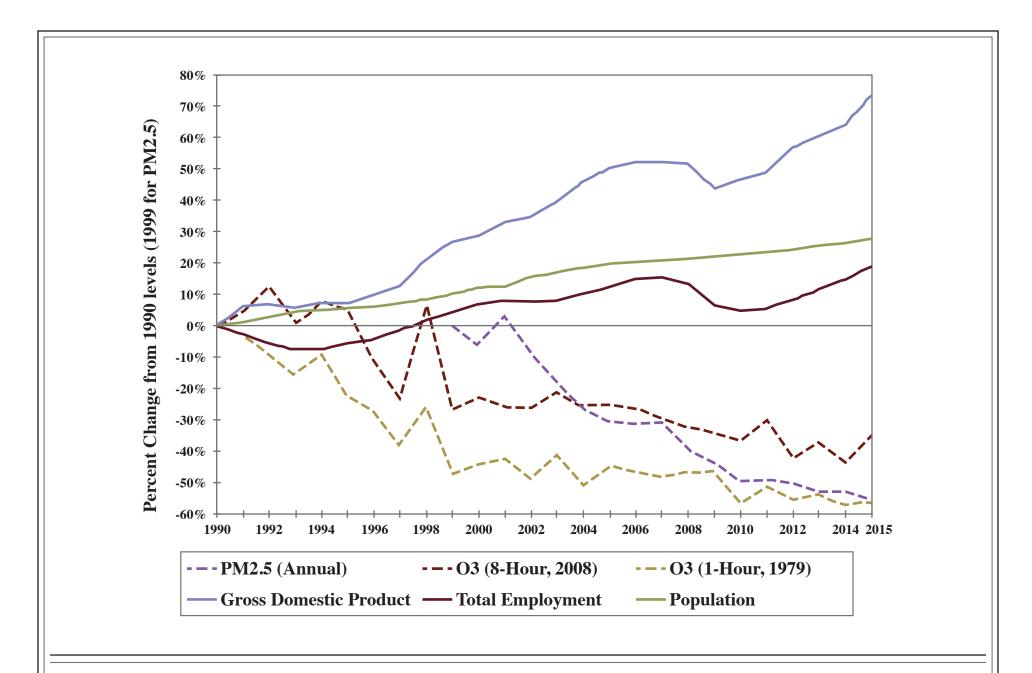


Figure IV.A-1 2016 AQMP Ozone Trends

Source: SCAQMD, 2016

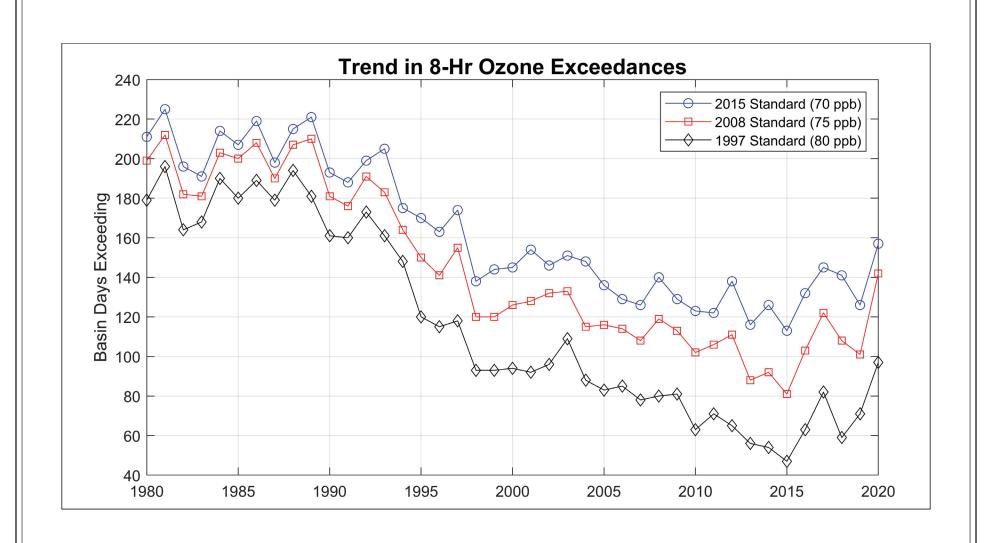


Figure IV.A-2 2022 AQMP Ozone Trends

Source: SCAQMD, 2022.

one million over a 70-year duration. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 50 percent of the risk is attributed to diesel particulate emissions, approximately 25 percent to other toxics associated with mobile sources (including benzene, butadiene, and carbonyls), and approximately 25 percent of all carcinogenic risk is attributed to stationary sources (which include large industrial operations, such as refineries and metal processing facilities, as well as smaller businesses, such as gas stations and chrome plating).³³

As part of the MATES-V Study, SCAQMD prepared a series of maps that shows regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps' estimates represent the number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years) in parts of the area. The MATES-V 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 400 to over 1,200 cancers per million over a 70-year duration.³⁴ Risk from less urbanized areas of the Air Basin range from less than 100 to 400 cancers per million. Generally, the risk from air toxins is lower near the coastline and higher risks are concentrated near large diesel sources (e.g., freeways, airports, and ports).

(2) Local Air Quality

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

(a) Existing Pollutant Levels at Nearby Monitoring Stations

SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin and has divided the Air Basin into 38 source receptor areas (SRAs) in which 31 monitoring stations operate. Figure IV.A-3 on page IV.A-27 shows the locations of the SRAs located in Los Angeles County. The Project Site is located within SRA 1, which covers the Central Los Angeles area. The monitoring station most representative of the Project Site is the North Main Street Station, located at 1630 North Main Street in the City of Los Angeles, approximately 2.2 miles northeast of the Project Site. Criteria pollutants

SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES V) Final Report, August 2021.

³⁴ SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V), MATES V Interactive Carcinogenicity Map, 2021.

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 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 Since 1977, the South Coast This air quality information is which are larger groupings of the more Southwest Los Angeles County Coastal Lake Elsinore South Los Angeles County Coastal North Orange County Coastal Air Quality Management District has transmitted to the public through specific Air Monitoring Areas. The 1-800-CUT-SMOG (1served as the local government newspapers, television, radio and Central Orange County Coastal Temecula/Anza Area agency responsible for measuring, pager services, through faxes to 800-288-7664) line also provides Metropolitan schools, through recorded messages reporting and taking steps to improve smog forecast and current smog level 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 To inform the AQMD's 15 Update telephone line, 1-800-CUT-The AQMD's Internet North Orange County 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 next day normally are posted by noon. Santa Clarita Valley Banning Pass Area San Gabriel Valley West San Gabriel Valley Coachella/Low Desert Coachella Valley East Riverside County Pomona/Walnut Valley South San Gabriel Valley Legend Air Monitoring Station Inland Orange County ANTELOPE VALLEY APCD* 14 Water Bodies Central Orange County ANTELOPE VALLEY AIR POLLUTION √ Fwys/Hwys MOJAVE DESERT AOMD* Capistrano Valle County Boundaries 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 *These agencies contract with the South Coast AOMD for forecasting services. Also, the Antelope Valley APCD contracts with the Mojave San Bernardino Valley Desert AQMD for other services. For more air quality information Northwest San Bernardino Valley in these areas, please call the Mojave Desert AOMD at (760) 245-1661. Southwest San Bernardino Valley Central San Bernardino Valley East San Bernardino Valley

MOJAVE DESERT AIR QUALITY
MANAGEMENT DISTRICT
(San Bernardino County)

Twentynine Palms

RIVERSIDE COUNTY

IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT

Figure IV.A-3
SCAQMD SRAs

RIVERSIDE COUNTY

Source: Sierra Wade Associates, 1999.

SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT monitored at this station include PM₁₀, PM_{2.5}, O₃, CO, NO₂, Pb, and SO₄². Table IV.A-2 on page IV.A-29 identifies the national and State ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at this station through the period of 2019–2021.

(b) Existing Health Risk in the Surrounding Area

As shown in Figure IV.A-4 on page IV.A-31, based on the MATES-V model, the calculated cancer risk in the Project area is approximately 822 in one million.³⁵ The cancer risk in this area is predominately related to nearby sources of diesel particulate (e.g., US-101, SR-110, and I-10). In general, the risk at the Project Site is comparable with other urbanized areas in Los Angeles, which have a similar calculated cancer risk as the Project area.

Potential sources of TACs within the Project Site vicinity were identified using SCAQMD's Facility Information Database (FIND) search and site reconnaissance to identify potential non-permitted air toxic emitting sources (e.g., freeways, diesel trucks idling at warehouse distribution facilities in excess of 100 trucks per day). Based on the FIND search conducted, no major sources of TACs are located within a 0.25-mile radius of the Project Site. Minor emissions sources, such as boilers or emergency generators, are located within the Project vicinity, but no substantial permitted stationary sources (e.g., gasoline stations, dry cleaners, chrome plating operations) of TAC emissions within the Project Site vicinity were identified.

(c) Surrounding Uses

As shown in Figure IV.A-5 on page IV.A-32, the land uses surrounding the Project Site include a mix of commercial and residential uses. Properties to the north of the Project Site along 7th Street are developed with the mid-rise Roosevelt Lofts and 655 Hope Condos adaptive reuse buildings. These multi-story, mixed-use buildings contain ground floor commercial uses that include various dining establishments. Properties to the south of the Project Site along West 8th Street are improved with two multi-story mixed-use buildings with ground floor commercial uses (8th+Hope Apartments and the Gas Company Lofts). Properties to the east of the Project Site along South Hope Street are improved with mid-rise commercial and retail building, a small religious structure (the Third Church of Christ, Scientist Reading Room of Los Angeles), and parking facilities. A future mixed-use development will be occupied by the start of construction on the northeast corner of

³⁵ SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V), MATES V Interactive Carcinogenicity Map, 2021.

³⁶ SCAQMD, Facility Information Detail (F.I.N.D.), www.agmd.gov/nav/FIND, accessed October 3, 2023.

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

	Year			
Pollutant	2019	2020	2021	
Ozone (O ₃)				
Maximum 1-hour Concentration (ppm)	0.09	0.19	0.10	
Days exceeding CAAQS (0.09 ppm)	0	14	1	
Maximum 8-hour Concentration (ppm)	0.08	0.12	0.09	
Days exceeding NAAQS (0.070 ppm)	2	22	2	
Days exceeding CAAQS (0.07 ppm)	2	22	2	
Respirable Particulate Matter (PM ₁₀)	- 1			
Maximum 24-hour Concentration (μg/m³)	62	77	64	
Days exceeding NAAQS (150 μg/m³)	0	0	0	
Days exceeding CAAQS (50 μg/m³)	3	24	3	
Annual Arithmetic Mean (µg/m³)	26	23	26	
Does measured AAM exceed CAAQS (20 µg/m³)?	Yes	Yes	Yes	
Fine Particulate Matter (PM _{2.5})				
Maximum 24-hour Concentration (μg/m³)	44	47	61	
Days exceeding NAAQS (35 μg/m³)	1	2	12	
Annual Arithmetic Mean (µg/m³)	11	12	13	
Does measured AAM exceed NAAQS (12 µg/m³)?	No	Yes	Yes	
Does measured AAM exceed CAAQS (12 μg/m³)?	No	Yes	Yes	
Carbon Monoxide (CO)				
Maximum 1-hour Concentration (ppm)	2	2	2	
Days exceeding NAAQS (35.0 ppm)	0	0	0	
Days exceeding CAAQS (20.0 ppm)	0	0	0	
Maximum 8-hour Concentration (ppm)	2	2	2	
Days exceeding NAAQS and CAAQS (9 ppm)	0	0	0	
Nitrogen Dioxide (NO ₂)				
Maximum 1-hour Concentration (ppm)	0.07	0.06	0.08	
Days exceeding CAAQS (0.18 ppm)	0	0	0	
Annual Arithmetic Mean (ppm)	0.02	0.02	0.02	
Does measured AAM exceed NAAQS (0.0534 ppm)?	No	No	No	
Does measured AAM exceed CAAQS (0.03 ppm)?	No	No	No	
Sulfur Dioxide (SO ₂)	- 1			
Maximum 1-hour Concentration (ppm)	0.01	0.004	0.002	
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)?	0	0	0	

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

	Year			
Pollutant	2019	2020	2021	
Lead ^a				
Maximum 30-day Average Concentration (μg/m³)	0.012	0.013	0.012	
Does measured concentration exceed NAAQS (1.5 µg/m³)	No	No	No	
Maximum Calendar Quarter Concentration (µg/m³)	0.010	0.011	0.012	
Does measured concentration exceed CAAQS (1.5 µg/m³)	No	No	No	
Sulfate				
Maximum 24-hour Concentration (μg/m³)	5.1	3.3	4.4	
Does measured concentration exceed CAAQS (25 µg/m³)	No	No	No	

AAM = annual arithmetic mean

ppm = parts per million by volume

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

N/A = Not available at this monitoring station.

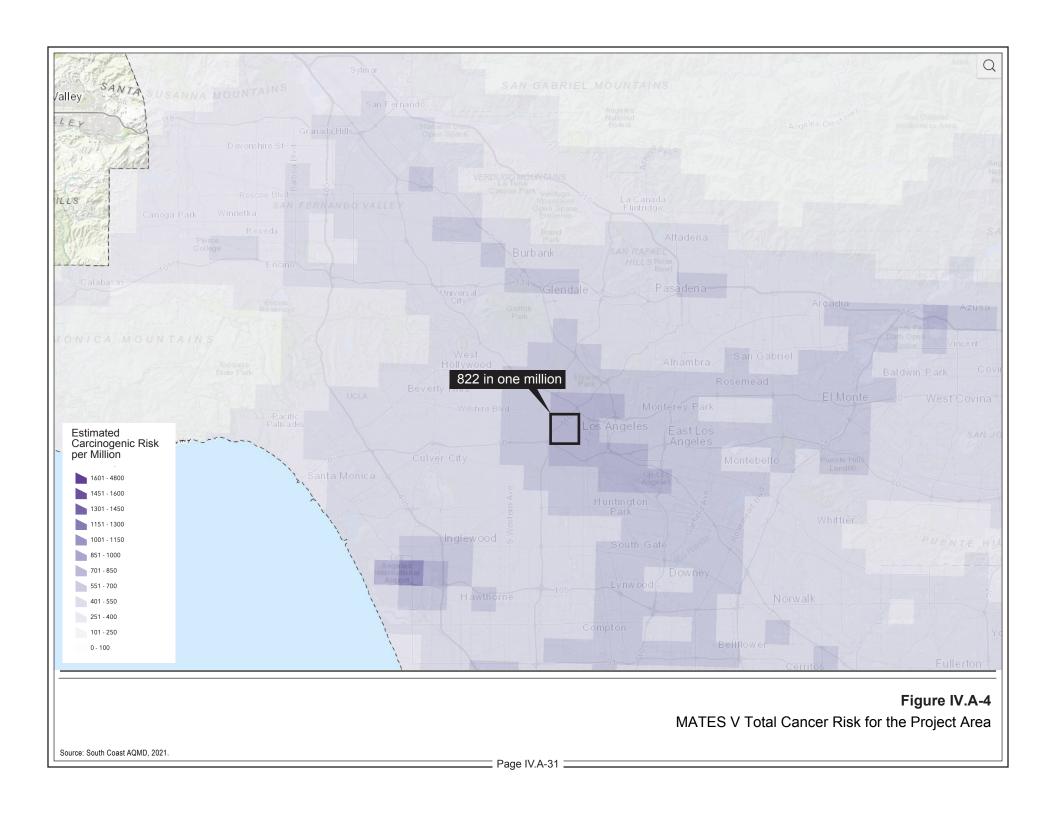
Source: South Coast Air Quality Management District Ambient Monitoring Data (2019–2021).

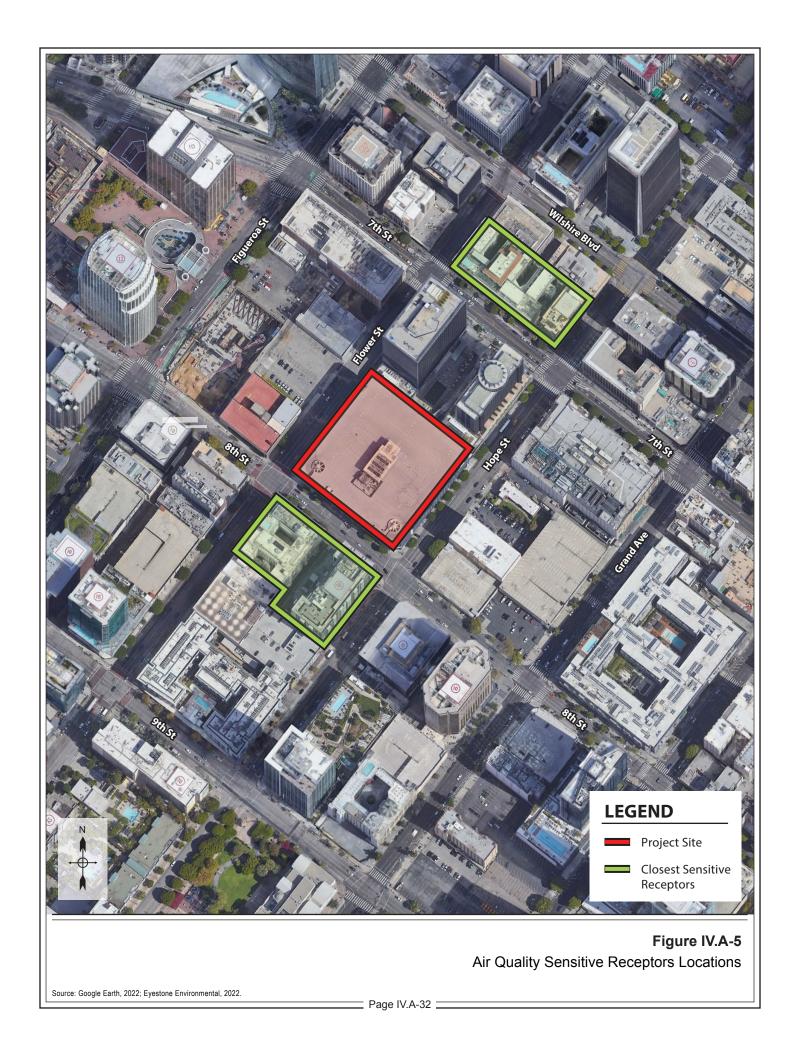
8th Street and Hope Street. Properties to the west of the Project Site along Flower Street are improved with two multi-story parking garages, a surface parking lot, and a multi-story office building with ground floor commercial uses that include dining establishments. In addition, construction of a 41-story mixed-use building is underway at the intersection of Figueroa Street and 8th Street. In the Project vicinity, beyond these land uses, are numerous high-rise commercial and residential buildings that form the Downtown skyline.

(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. Sensitive land uses in the Project vicinity include residential uses located to the north, east, and south along 7th Street, Hope Street, and 8th Street, as discussed above and shown in Figure IV.A-5 on page IV.A-32. All other air quality sensitive receptors are located at greater distances from the Project Site and would be less impacted by Project emissions. Therefore, Project's local (ambient) impacts are quantified only for the sensitive receptors depicted in Figure IV.A-5.

^a As of 2019, no monitoring stations within the South Coast Air Basin demonstrated an exceedance of the lead NAAQS. Attainment redesignation for lead is currently pending with the USEPA. Values presented represent ambient concentrations from the SRA1 monitoring station.





(e) Existing Project Site Emissions

The Project Site is currently occupied by a mixed-use development known as The Bloc. The northern portion of the Project Site (outside of the Development Area) contains an office tower, a high-rise hotel, commercial/retail uses and an expansive plaza that includes a portal to the Metro 7th Street/Metro Center Station. The southern portion of the Project Site constitutes the Development Area and is currently developed with an existing 9-story parking/retail podium building, which includes five stories of enclosed parking, four stories of existing commercial/retail floor area, and rooftop parking. The Project Site also has two existing basement levels below the podium building, which consist of one level of vehicle parking and one level of loading areas and a gym/fitness use. Existing uses within The Bloc comprise approximately 1,424,314 square feet of floor area, consisting of 656,423 square feet of office space, 28,599 square feet of medical office space, 269,622 square feet of retail uses, 23,180 square feet of restaurant/dining areas, 30,363 square feet of fitness uses, a 28,770-square-foot theater that includes 569 fixed seats, and a 387,357-square-foot hotel that includes 496 rooms and 25,282 square feet of meeting/banquet spaces. The Project Site also includes approximately 1,971 parking spaces. Area source emissions are generated by maintenance equipment, landscape equipment, and use of products that contain solvents. Energy source emissions are typically associated with the building's natural gas usage. Mobile source emissions are generated by motor vehicle trips to and from the Project Site. Table IV.A-3 below presents an estimate of the existing emissions from uses to be removed within the Project Site.

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

	Pollutant Emissions (pounds per day)					
Emission Source	VOC	NO _X	СО	SO _X	PM ₁₀	PM _{2.5}
Winter	•	1	•	•	1	•
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	2	2	18	<1	3	<1
Total Existing Emissions ^a	3	2	18	<1	3	<1
Summer						
Area	<1	<1	1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	2	2	19	<1	3	<1
Total Existing Emissions ^a	3	2	20	<1	3	<1

Numbers may not add up exactly due to rounding.

Source: Eyestone Environmental, 2023.

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

3. Project Impacts

a. Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the Appendix G of the State CEQ 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 provided above are relied upon. The analysis utilizes factors and considerations identified in the *L.A. CEQA Thresholds Guide*, as appropriate, to assist in answering the Appendix G Threshold questions.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide identifies the following factors to evaluate air quality impacts:

- (a) Construction
 - (i) Combustion Emissions from Construction Equipment
- Type, number of pieces and usage for each type of construction equipment;
- Estimated fuel usage and type of fuel (diesel, natural gas) for each type of equipment; and
- Emission factors for each type of equipment.
 - (ii) Fugitive Dust—Grading, Excavation and Hauling
- Amount of soil to be disturbed on-site or moved off-site;

- Emission factors for disturbed soil;
- Duration of grading, excavation and hauling activities;
- Type and number of pieces of equipment to be used; and
- Projected haul route.
 - (iii) Fugitive Dust—Heavy-Duty Equipment Travel on Unpaved Road
- Length and type of road;
- Type, number of pieces, weight and usage of equipment; and
- Type of soil.
 - (iv) Other Mobile Source Emissions
- Number and average length of construction worker trips to Project Site, per day;
 and
- Duration of construction activities.
 - (b) Operation
- Operational emissions exceed 10 tons per year of volatile organic gases or any of the daily thresholds presented below (as reprinted from the CEQA Air Quality Handbook):

Pollutant	Significance Threshold (lbs/day)
ROG	55
NO_X	55
CO	550
PM ₁₀	150
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.

(c) Toxic Air Contaminants

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

- The regulatory framework for the toxic material(s) and process(es) involved;
- The proximity of the 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.

(3) SCAQMD's CEQA Air Quality Handbook

To assist in answering the Appendix G Threshold questions and factors identified in the City's *L.A. CEQA Thresholds Guide* for purposes of this analysis, the City of Los Angeles utilizes the thresholds of significance in SCAQMD's *CEQA Air Quality Handbook and SCAQMD supplemental information*, as identified below, to assess the significance of the Project's estimated air quality impacts. Specifically, Table IV.A-4 on page IV.A-37 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 SCAQMD's *CEQA Air Quality Handbook and SCAQMD supplemental information*,³⁷ the Project would have a significant impact if the Project's estimated construction emissions would cause any of the following to occur:

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

³⁷ SCAQMD, CEQA Air Quality Handbook, 1993.

Table IV.A-4 SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds ^a						
Pollutant	Construction ^b	Operation				
NO _X	100 lbs/day	55 lbs/day				
VOC ^c	75 lbs/day	55 lbs/day				
PM ₁₀	150 lbs/day	150 lbs/day				
PM _{2.5}	55 lbs/day	55 lbs/day				
SOx	150 lbs/day	150 lbs/day				
СО	550 lbs/day	550 lbs/day				
Lead ^d	3 lbs/day	3 lbs/day				
Toxic Air	Contaminants (TACs) and Odor	Thresholds				
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)					
Odor Project creates an odor nuisance pursuant to SCAQMD Rule 402						
Ambient Air Quality Standards for Criteria Pollutantse						
NO ₂ 1-hour average Annual Arithmetic Mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)					
PM ₁₀ 24-hour average Annual Average	10.4 μg/m3 (construction) ^f & 2.5 μg/m3 (operation) 1.0 μg/m3					
PM _{2.5} 24-hour average	10.4 μg/m3 (constructio	n) & 2.5 μg/m3 (operation)				
SO ₂ 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal—99th percentile) 0.04 ppm (state)					
Sulfate 24-hour average	25 μg/r	m3 (state)				
CO 1-hour average 8-hour average	contributes to an exceedance of 20 ppm (state) a	oject is significant if it causes or the following attainment standards: nd 35 ppm (federal) state/federal)				
Lead 30-day average Rolling 3-month average		m3 (state) m3 (federal)				

lbs/day = pounds per day

- ^a SCAQMD CEQA Handbook (SCAQMD, 1993), Pages 6-2 and 6-3.
- b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).
- 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.

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

- 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.
- Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.
- f Ambient air quality threshold based on South Coast AQMD Rule 403.

Source: South Coast Air Quality Management District, 2019.

- Maximum on-site daily localized emissions exceed the localized significance thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 μg/m³] over a 1-hour period or 9.0 ppm [10,350 μg/m³] averaged over an 8-hour period) and NO₂ (0.18 ppm [338.4 μg/m³] over a 1-hour period, 0.1 ppm [188 μg/m³] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [56.4 μg/m³] averaged over an annual period).
- Maximum on-site localized PM₁₀ or PM_{2.5} emissions during construction exceed the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed the incremental 24-hr threshold of 10.4 μg/m³ or 1.0 μg/m³ PM₁₀ averaged over an annual period.

(b) Operation

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*,³⁸ the Project would have a significant impact if the Project's operational estimated emissions would cause any of the following to occur:

- Regional emissions from the Project's direct and indirect sources would exceed any of the SCAQMD significance threshold levels identified in Table IV.A-4 on page IV.A-37.
- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an 8-hour period) and NO₂ (0.18 ppm

³⁸ SCAQMD, CEQA Air Quality Handbook, 1993.

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).³⁹

- Maximum on-site localized operational PM $_{10}$ and PM $_{2.5}$ emissions exceed the incremental 24-hr threshold of 2.5 $\mu g/m^3$ or 1.0 $\mu g/m^3$ PM $_{10}$ averaged over an annual period.
- The Project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively; or
- The Project creates an odor nuisance pursuant to SCAQMD Rule 402 (i.e., objectionable odor at the nearest sensitive receptor).

(c) Toxic Air Contaminants

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*, the Project would have a significant toxic air contaminant impact, if:⁴¹

- The Project emits carcinogenic or toxic air contaminants that exceed the maximum incremental chronic and acute cancer risk as provided in Table IV.A-4 on page IV.A-37.
 - (d) Consistency with Applicable Air Quality Plans

Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with SCAQMD's CEQA Air Quality Handbook,⁴² the following criteria are used to evaluate the Project's consistency with SCAQMD's 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

³⁹ SCAQMD, LST Methodology, June 2003, revised 2008.

⁴⁰ SCAQMD, Final-Methodology to Calculate PM 2.5 and PM_{2.5} Significance Thresholds, October 2006.

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

⁴² SCAQMD, <u>CEQA Air Quality Handbook</u>, Chapter 12, Assessing Consistency with Applicable Regional Plans, 1993.

- 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 AOMP?
 - 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?

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

(e) Cumulative Impacts

Based on SCAQMD guidance, individual construction projects that exceed 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.⁴³ As discussed in 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.⁴⁴

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

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

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

b. Methodology

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

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Air Basin, such as the Project. Instead, SCAQMD published the *CEQA Air Quality Handbook* in November 1993 to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects proposed in the Air Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*.⁴⁵

In order to assist the CEQA practitioner in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/information is provided on the SCAQMD website and includes (1) EMFAC on-road vehicle emission factors, (2) background CO concentrations, (3) localized significance thresholds, (4) mitigation measures and control efficiencies, (5) mobile source toxics analysis, (6) off-road mobile source emission factors, (7) PM_{2.5} significance thresholds and calculation methodology, and (8) updated SCAQMD Air Quality Significance Thresholds.⁴⁶ 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.

(1) Construction

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

SCAQMD, Air Quality Analysis Handbook, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed October 3, 2023.

⁴⁶ SCAQMD, Air Quality Analysis Handbook, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed October 3, 2023.

demolition and various soil-handling activities. Mobile source emissions, primarily NOx, 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 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 2022.1) 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 model⁴⁷ (OFFROAD) and EMission FACtor model⁴⁸ (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. Appropriate Statewide default values can be used if regional default values are not defined. 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

⁴⁷ CARB, EMFAC2021 Offroad Emissions, https://arb.ca.gov/emfac/emissions-inventory/61ef289e927 b79fc507d282ca9b8db79e44c93e7, accessed September 25, 2023.

⁴⁸ CARB, EMFAC 2021 Onroad Emissions, https://arb.ca.gov/emfac/emissions-inventory/61ef289e927 b79fc507d282ca9b8db79e44c93e7, accessed September 25, 2023.

based on reasonably expected maximum construction emissions even though such emissions would not occur throughout the entire construction phase. Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix B 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 potentially impacted by the Project according to SCAQMD's LST methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling, where appropriate, to assess whether the Project's local emissions would exceed SCAQMD's significance thresholds, as described above. SCAQMD provides LSTs applicable to the following criteria pollutants: NOx, CO, PM10, and PM2.5. SCAQMD does not provide an LST for SO2, Pb and H2S since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. 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.⁵¹

(2) Operation

(a) Regional Emissions

Analysis of the Project's impact on regional air quality during long-term Project operations (i.e., after construction is complete) takes into consideration four types of sources: (1) area, (2) energy, (3) mobile, and (4) stationary. Area source emissions are generated by, among other things, landscape equipment, fireplaces, and the use of

⁴⁹ SCAQMD, LST Methodology Appendix C-Mass Rate LST Look-Up Table, October 2009.

⁵⁰ SCAQMD, LST Methodology, June 2003, revised July 2008, p. 1-4.

As discussed below, the LSTs were derived for the 2.3-acre Development Area portion of the Project Site.

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.

Criteria pollutants are emitted during the generation of electricity at fossil fuel power plants. When electricity is used in buildings, the electricity generation typically takes place at off-site power plants, the majority of which burn fossil fuels. Because power plants are existing stationary sources permitted by air districts and/or the USEPA, criteria pollutant emissions are generally associated with the power plants themselves and not individual buildings or electricity users. Additionally, criteria pollutant emissions from power plants are subject to local, State, and federal control measures, which can be considered to be the maximum feasible level of mitigation for stack emissions. CalEEMod, therefore, does not calculate criteria pollutant emissions from regional power plants associated with on-site electricity use.

Similar to construction, SCAQMD's CalEEMod model was used to estimate Project emissions during operation. Mobile-source emissions were calculated using CalEEMod. The CalEEMod default for VMT was bypassed to account for the Project-related VMT provided in the Transportation Assessment for the Project, included as Appendix B of this Draft EIR, which was conducted consistent with Los Angeles Department of Transportation's (LADOT) *Transportation Assessment Guidelines*. ⁵² Consistent with these guidelines, the City and LADOT developed a "VMT Calculator" to comply with SB 743, which requires lead agencies to adopt VMT criteria to determine transportation-related impacts. CalEEMod calculates mobile-source emissions using the Project's VMT, trip generation, and emission factors based on EMFAC2021.53 Area source emissions are based on landscaping equipment, and consumer product usage (including paints) rates provided in CalEEMod. 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 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 SCAQMD's

Gibson Transportation Consulting, Inc., Transportation Assessment for The Bloc Residential Tower and Signage SUD Project, Los Angeles, California, January 2023, revised February 2024.

⁵³ CAPCOA, California Emissions Estimator Model, Appendix C: Calculation Details for CalEEMod, April 2022.

significance thresholds.⁵⁴ 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 B of this Draft EIR for additional information regarding methodology.

(b) Localized Emissions

(i) On-Site Emissions

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

(ii) Off-Site Emissions

Potential localized CO concentrations from induced traffic at nearby intersections are also addressed, consistent with the methodologies and assumptions used in the consistency analysis provided in the 2003 AQMP. The 2003 AQMP was the latest AQMP to perform the modeling attainment demonstration for CO.⁵⁵

It has been recognized that CO exceedances are caused by vehicular emissions,⁵⁶ primarily when idling at intersections.^{57,58} 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.⁵⁹ Currently, the CO standard in California is a maximum of 3.4 grams/mile for passenger cars (with provisions for certain cars to emit even less).⁶⁰ With the turnover of older vehicles, introduction of

⁵⁴ SCAQMD, SCAQMD Air Quality Significance Thresholds, revised March 2015. SCAQMD based these thresholds, in part, on the federal Clean Air Act and, to enable defining "significant" for CEQA purposes, defined the setting as the South Coast Air Basin. (See SCAQMD, CEQA Air Quality Handbook, April 1993, pp. 6-1 and 6-2.)

⁵⁵ SCAQMD, 2003 Air Quality Management Plan, Final 2003 AQMP Appendix V Modeling and Attainment Demonstrations, August 2003

⁵⁶ USEPA, Air Quality Criteria for Carbon Monoxide, EPA 600/P-099/001F, 2000.

⁵⁷ SCAQMD, CEQA Air Quality Handbook, Section 4.5, 1993.

⁵⁸ SCAQMD, Air Quality Management Plan, 2003.

⁵⁹ USEPA, Timeline of Major Accomplishments in Transportation, Air Pollution, and Climate Change, www. epa.gov/air-pollution-transportation/timeline-major-accomplishments-transportation-air-pollution-and-climate, accessed October 3, 2023.

⁶⁰ 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.

cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the Air Basin have steadily declined.

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

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. intersections evaluated included: Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which had a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.⁶² 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/Veteran Avenue intersection and found it to be Level E at peak morning traffic and Level F at peak afternoon traffic. 63,64 As an initial screening step, if a project intersection does not exceed 400,000 vehicles per day, then the project does not need to prepare a detailed CO hot spot analysis. If a project would potentially result in a CO hotspot based on the initial screening, detailed modeling may be performed using California LINE Source Dispersion Model, version 4 (CALINE4), which is a model used to

⁶¹ SCAQMD, Federal Attainment Plan for Carbon Monoxide, 1992.

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

Metro measured traffic volumes and calculated the LOS for the intersection Wilshire Boulevard/ Sepulveda Avenue, which is a block west along Wilshire Boulevard, still east of Interstate 405.

⁶⁴ Metro, Congestion Management Program for Los Angeles County, 2004, Exhibit 2-6 and Appendix A.

assess air quality impacts near transportation facilities (i.e., roadways, intersections, street canyons, 65 and parking facilities).

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

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. ⁶⁶ SCAQMD's siting distance recommendations (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) are the same as those provided by CARB in its Air Quality and Land Use Handbook: A Community Health Perspective (CARB Land Use Handbook). 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.

Potential TAC impacts are initially evaluated by conducting a qualitative analysis consistent with SCAQMD and CARB guidance. 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 following project design features are applicable to the Project with regard to criteria pollutant emissions:

Project Design Feature AQ-PDF-1: The following equipment used during Project construction activities shall be electric-powered: air compressor, aerial lift, cement mixer, concrete saw, tower crane, excavator, forklift and welder.⁶⁷

⁶⁵ Street canyons occur when tall buildings tower over both sides of a street.

⁶⁶ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

⁶⁷ This PDF is included in the quantitative analysis.

The Project would require some construction activities to be performed in confined spaces without adequate ventilation for combustion powered equipment. Accordingly, the Project proposes implementation of Project Design Feature AQ-PDF-1 which would use electric powered equipment allowing for construction to be performed within these confined spaces. In addition, the Project would incorporate project design features to support and promote environmental sustainability as discussed under Section IV.D, Greenhouse Gas Emissions, of this Draft EIR. Project Design Feature GHG-PDF-1 would implement a number of sustainability features such as use of energy efficient appliances, LED lighting and bicycle parking. While these features are designed primarily to reduce GHG emissions, they would also serve to reduce criteria air pollutants discussed herein. However, the reduction in criteria pollutant emissions from implementation of Project Design Feature GHG-PDF-1 is not easily quantifiable. Although Project Design Feature GHG-PDF-1 would reduce Project operational criteria pollutant emissions, this reduction was not assumed in the Project's emissions inventory as a conservative measure.

d. Analysis of Project Impacts

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

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

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

- 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 High Quality Transit Area (HQTA). 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 regional project.

With respect to the first criterion, as discussed under the analysis for **Threshold (c)**, below, localized concentrations of NO₂ as NO_X, CO, PM₁₀, and PM_{2.5} have been analyzed for the Project. SO₂ emissions would be negligible during construction and long-term operations and, therefore, would not have the potential to cause or affect a violation of the SO₂ ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. Due to the role VOCs play in O₃ formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

As shown in Table IV.A-6 on page IV.A-62 in the analysis below, the increases in PM₁₀ and PM_{2.5} emissions during construction would not exceed the SCAQMD-recommended significance thresholds at sensitive receptors in proximity to the Project Site. Additionally, the Project's maximum potential NO_X and CO daily emissions during construction were analyzed to ascertain potential effects on localized concentrations and to determine if there is a potential for such emissions to cause or affect a violation of an applicable ambient air quality standard. As shown in Table IV.A-8 on page IV.A-66 in the analysis below, and detailed in Appendix B (CalEEMod Construction Output file) of this Draft EIR, NO_X and CO would not exceed the SCAQMD-recommended localized significance thresholds.

Because the Project would not introduce any substantial stationary sources of emissions (e.g., gasoline stations, dry cleaners, chrome plating operations), CO is the preferred benchmark pollutant for assessing local area air quality impacts from

⁶⁸ SCAG 2016–2040 RTP/SCS, Exhibit 5.1: High Quality Transit Areas In The SCAG Region For 2040 Plan, p. 77.

⁶⁹ SCAG 2020–2045 RTP/SCS, Exhibit 3.8: Priority Growth Area – High Quality Transit Areas.

post-construction motor vehicle operations.⁷⁰ As indicated below, under the analysis for **Threshold (c)**, no intersections would require a CO hotspot analysis, and impacts would be less than significant.

An analysis of potential localized operational impacts from on-site activities was also conducted. As shown in Table IV.A-9 on page IV.A-67 in the analysis below, localized NO_2 as NO_X , CO, PM_{10} , and $PM_{2.5}$ operational impacts would be less than significant. Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants and 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 2016–2040 and 2020–2045 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 AQMPs, 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 and 2022 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's 2016–2040 and 2020–2045 RTP/SCS.

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

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

The Project Site is located within the Central City Community Plan area, which encourages the development of new uses which contribute housing opportunities near major employment centers for residents living in the Community Plan area.⁷¹

The 2016–2040 and 2020–2045 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. Economic assumptions including employment rates and migration due to jobs are also included as part of the RTP/SCS forecast projections.

According to the 2016–2040 RTP/SCS, the population forecast for the City of Los Angeles Subregion in 2022 was approximately 4,118,321 residents.⁷² In 2031, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have approximately 4,366,579 residents.⁷³ According to the 2020–2045 RTP/SCS, the population forecast for the City of Los Angeles Subregion in 2022 was approximately 4,107,076 residents.⁷⁴ In 2031, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have approximately 4,366,990 residents.⁷⁵

As discussed in Section II, Project Description, of this Draft EIR, the Project would develop 466 new residential units. Based on generation rates provided by the City of Los Angeles VMT Calculator Documentation, the Project would generate approximately 1,050 new residents.⁷⁶ Thus, the Project's estimated increase of 1,050 residents would constitute approximately 0.48 percent and 0.40 percent of the population growth forecasted between 2022 and 2031 under the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS respectively.^{77,78}

A detailed list of the goals, objectives, and policies of the Community Plan applicable to the Project Site is included in Table 5 of Appendix E of this Draft EIR

⁷² Based on a linear interpolation of 2012–2040 data.

⁷³ Based on a linear interpolation of 2012–2040 data.

⁷⁴ Based on a linear interpolation of 2016–2045 data.

⁷⁵ Based on a linear interpolation of 2016–2045 data.

Based on City of Los Angeles VMT Calculator Documentation (Version 1.3), May 2020, Table 1: Land Use and Trip Generation Base Assumptions. The generation rate of 2.25 people per dwelling unit for "Multi-Family Residential" land use is applied to the 466 dwelling units. As documented in Appendix A, VMT Analysis LADOT Calculator Worksheets, of the Project's Transportation Assessment (Appendix B of this Draft EIR), the Project would generate approximately 1,050 residents.

The Project's increase in residents (1,050) ÷ Increase in employment in City of LA subregion from 2022 to 2031 (218,257) = 0.45 percent

The Project's increase in residents (1,050) ÷ Increase in employment in City of LA subregion from 2022 to 2031 (259,914) = 0.40 percent

Therefore, the Project's contribution to population growth would be consistent with projections contained in the 2020–2045 RTP/SCS.

As discussed previously, the AQMP is based on the 2020–2045 RTP/SCS, which incorporates data from General Plans, as well as local land use data, such as the Community Plan. The Project-related population growth would be well within the Citywide growth projections. As such, the Project would be consistent with the growth projections in the AQMP and meets this AQMP consistency criterion.

Does the project implement feasible air quality mitigation measures?

The Project would comply with all applicable regulatory standards (e.g., SCAQMD Rule 403, etc.) as required by SCAQMD, as summarized above. The Project also would incorporate Project Design Feature AQ-PDF-1, which requires certain pieces of construction equipment to be electric. 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. While these features are designed primarily to reduce GHG emissions, they would also serve to reduce the criteria air pollutants discussed herein. As a conservative measure, no credit for implementation of Project Design Feature GHG-PDF-1 is assumed in the Project's criteria pollutant emissions inventory. Furthermore, and as analyzed in detail below under **Threshold (b)**, 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. Therefore, the Project is not required to implement air quality mitigation measures. As such, the Project meets this AQMP consistency criterion.

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

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the Plan with those prepared by SCAG. The TCMs, included as Appendix IV-C of the 2022 AQMP/SIP for the Basin, are based on SCAG's 2020–2045 RTP/SCS.

With regard to land use developments, such as the Project, the 2020–2045 RTP/SCS land use control measures (i.e., goals and policies) focus on locating future growth within HQTAs and reducing vehicle trips and VMT. The Project represents an infill development within an existing urbanized area that would concentrate new residential uses

within an HQTA.^{79,80} Therefore, the Project would be consistent with SCAG's 2020–2045 RTP/SCS as it is located within an HQTA. The Project would be designed and constructed with sustainability and transit orientation as guiding principles. The Project Site contains a portal to the Metro 7th Street/Metro Center Station that provides connections to the Metro B (Red) Line, Metro D (Purple) Line, Metro A (Blue) Line, and Metro E (Exposition) Line. Additional transit options include the LADOT Commuter Express lines 409, 431, 437A, 438, 448, and 534; LADOT DASH lines B, E, and F; Metro local lines 51, 52, and 460; Metrolink route 799; and Metro J (Silver) Line. The Project would also provide short- and long-term bicycle parking spaces in compliance with the requirements of the Los Angeles Municipal Code (LAMC).

As further discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project design includes characteristics that would reduce trips and VMT as compared to a standard project without such features.81 As discussed in more detail below, the LADOT VMT Calculator, which was used to calculate Project trips and VMT, accounts for project features, such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. While these Project characteristics primarily reduce GHG emissions, they would also reduce criteria air pollutants discussed herein. These relative reductions in vehicle trips and VMT from a standard project within the Air Basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project on an infill site within an HQTA that promotes alternative modes of transportation. Specifically, the Project would introduce residential uses on the Project Site in proximity to other existing office, retail, and restaurant uses, which would reduce VMT by encouraging walking and non-automotive forms of transportation; introduce new residential uses in close proximity to job centers, including Downtown Los Angeles; and increase transit accessibility by locating new residential units adjacent to existing bus routes and the Metro 7th Street/Metro Center Station, which is accessed directly from the Project Site through an on-site portal. Details regarding VMT reduction due to Project Site characteristics are provided in Appendix B of this Draft EIR.

Previously, trip generation for land uses was calculated based on survey data collected by the Institute of Transportation Engineers (ITE). However, these ITE trip

Defined by the 2020–2045 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.

SCAG, High Quality Transit Areas (HQTA) 2045—SCAG Region, https://gisdata-scag.opendata.arcgis.com/datasets/SCAG::high-quality-transit-areas-hqta-2045-scag-region/explore?location=34.150218%2C-117.742800%2C9.70, accessed February 16, 2023.

[&]quot;Standard Project" refers to a Project that would be developed under Statewide average conditions (assumed analogous to an ITE baseline), which assumes that a development would not be located in an urban setting in close proximity to job centers or major transit stations.

generation rates were based on data collected at suburban, single-use, free standing sites, which may not be representative of urban mixed-use environments. Beginning in 2019, the USEPA has sponsored a study to collect travel survey data from mixed-use developments in order provide a more representative trip generation rate for multi-use sites. Results of the USEPA survey indicate that trip generation and VMT are affected by factors, such as resident and job density, availability of transit, and accessibility of biking and walking paths. Based on these factors, the USEPA has developed equations known as the EPA Mixed-Use Development (MXD) model to calculate trip reductions for multi-use developments.⁸² The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project features, such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. As shown in Appendix B, incorporation of USEPA MXD VMT reduction features and City requirements applicable to the Project results in a 52-percent reduction in overall VMT and resultant pollutant emissions compared to the baseline ITE trip generation rates.

As mentioned above, the Project would promote the use of alternative modes of transportation, including convenient access to public transit, 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. Implementation of these sustainability features would contribute to a reduction in air quality emissions via a reduction in VMT. Accordingly, as the Project would support SCAG's and SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project is consistent with the 2020–2045 RTP/SCS (i.e., control measures of the AQMP).

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of the Project on air quality in the Air Basin. The Project represents 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 impact on the region's ability to meet State and federal air quality standards. The Project would comply with SCAQMD Rule 403 and would comply with regulations to control NOx, PM₁₀, and PM_{2.5} emissions. The Project would also be consistent with the goals and policies of the AQMP for the control of fugitive dust. As discussed above, the Project would be consistent with the goals and policies of the AQMP.

² Environmental Protec

The Bloc Draft Environmental Impact Report

Environmental Protection Agency, Mixed-Use Trip Generation Model. www.epa.gov/smartgrowth/mixed-use-trip-generation-model, accessed on October 3, 2023.

(b) City of Los Angeles Policies

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

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. Specifically, the Project includes 214 bicycle parking spaces consisting of 22 short-term spaces and 192 long-term spaces. In addition, the Project would be consistent with the development pattern in the vicinity that features greater concentration of 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 adjacent to major transit stops. Additionally, as discussed in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, the Project would comply with City's applicable electric vehicle (EV) charging requirements. Provisions of the electric vehicle supply equipment (EVSE) and EV parking spaces would help to facilitate and encourage use of alternative fueled vehicles.

A more detailed analysis of the Project's consistency with the City's General Plan is presented in Table IV.A-5 on page IV.A-56 and demonstrates the Project's consistency with these goals. Accordingly, the Project would promote the City of Los Angeles General Plan Air Quality Element goals, objectives, and policies applicable to the Project.

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

(c) Conclusion

In conclusion, analysis of Threshold (a) was based on the Project's consistency with the AQMP, as well as the City of Los Angeles plans and policies. The determination of AQMP consistency is based on the long-term impacts of the Project on air quality in the Air Basin. As discussed above, the Project would not increase the frequency or severity of an existing air quality violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the State and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. In addition, because the Project is consistent with growth projections that form the basis of the 2022 AQMP, the Project would be consistent with the emissions

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

Goals, Objectives, and Policies	Analysis of Project Consistency
Goal 1: Good air quality and mobility in an environment of continued population growth and healthy economic structure.	Consistent. The Project would introduce residential land uses contributing to the continued development of Downtown Los Angeles as a residential, employment, retail, and entertainment center. The Project's residential uses would allow for residents to travel to jobs, dining, shopping, and entertainment venues nearby, resulting in a reduction in VMT. The Project would also provide required short- and long-term bicycle parking spaces in compliance with the requirements of the LAMC. Transit accessibility and the bicycle parking spaces provided onsite would further reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation.
Objective 1.1: It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.	Consistent. The Project's location, land use characteristics, and Project design features would reduce emissions associated with energy and transportation. As discussed under Threshold (a), the Project would be consistent with the relevant SCAG growth projections in the SCAG 2020–2045 RTP/SCS which are used in preparing the 2022 AQMP. The Project includes bicycle parking spaces for the proposed uses as required by the LAMC and is well served by transit, including local and regional bus and rail lines. The Project would also provide multi-modal transportation solutions to connect with surrounding public transit lines, encourage alternative means of transportation, and focus growth in a high-density, jobs-rich area in close proximity to transit. The Project would, thus, reduce air emissions and increase traffic mobility while also sustaining economic growth.
Objective 1.3: It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites. Policy 1.3.1: Minimize particulate emission from construction sites.	Consistent. The Project would comply with SCAQMD Rule 403, which requires dust control measures during construction activities. The Project would require the construction contractor(s) to comply with the applicable provisions of CARB's In-Use Off-Road Diesel Vehicle Regulation, which aims to reduce emissions through the installation of diesel particulate matter filters and the retirement, replacement, or repowering of older, dirtier engines with newer emission-controlled models. In addition, the Project would not include large areas of unpaved surfaces and would replace existing surface parking lots with structured parking. Parking areas would be maintained in a clean and well-kept manner. The Project would, thus, reduce air emissions emanating from unpaved areas, parking lots, and construction sites.
Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.	Consistent. The Project Site is located adjacent to mass transit, encouraging the use of alternative modes of transit, thereby reducing the overall VMT for future residents. Future residents on the Project Site would have access to 14 bus lines and convenient access to

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

Goals, Objectives, and Policies	Analysis of Project Consistency
	the Metro 7th Street/Metro Center Station via the on-site portal. The Project's mix of uses, proximity to jobs and commercial services, and the option to use alternative modes of transportation would reduce reliance on single-occupant vehicles. Therefore, the Project would be consistent with this goal.
Objective 2.1: It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.	Consistent. The Project is served by 14 bus lines and an on-site portal to the Metro 7th Street/Metro Center Station. The accessibility to mass transit would encourage residents to utilize alternative modes of transportation, which would contribute to the reduction in work trips. The Project would also locate new housing within a major employment center, facilitating jobs that are accessible by walking and biking.
Policy 2.1.1: Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce Vehicle Trips and/or Vehicle Miles Traveled (VMT) as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.	Consistent. The Project includes a portal to the Metro 7 th Street/Metro Center Station and is served by 14 bus lines. The Project includes four existing pedestrian pathways that would connect to the existing sidewalk network. The Project would improve walking facilities by providing new pedestrian access to retail and residential uses. In addition, the Project would improve bicycling related facilities by providing 214 bicycle parking spaces, including 22 short-term and 192 long-term spaces.
Objective 2.2: It is the objective of the City of Los Angeles to increase vehicle occupancy for non-work trips by creating disincentives for single passenger vehicles, and incentives for high occupancy vehicles. Policy 2.2.2: Encourage multi-occupant vehicle travel and discourage single-occupant vehicle travel by instituting parking management practices.	Consistent. The Project would provide less parking than provided by code (reduced parking supply) and bicycle parking to encourage alternative modes of transportation.
Goal 4: Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.	Consistent. The Project would reduce VMT due to its infill location, development of residential uses near high density areas, a regional jobs center, and access to public transportation immediately adjacent to the Project Site.
Objective 4.1: It is the objective of the City of Los Angeles to include the regional attainment of ambient air quality standards as a primary consideration in land use planning.	Consistent. The Project analysis of potential air quality impacts relied upon the numeric indicators established by the SCAQMD, which considers attainment of the ambient air quality standards. The Project also incorporates land use characteristics, such as high density and mixed use development, as well as proximity to mass transit, that would reduce land use planning-related air pollutant emissions. Moreover, the Project would be developed in a HQTA and TPA, which are primary considerations in land use planning that contribute to the reduction in VMT and, thus, air pollutant emissions.

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

Goals, Objectives, and Policies	Analysis of Project Consistency
Policy 4.1.2: Ensure that project level review and approval of land use development remain at the local level.	Consistent. The Project environmental review and approval would occur at the local level. This project-level EIR is being conducted by the City pursuant to CEQA requirements.
Objective 4.2: It is the objective of the City of Los Angeles to reduce vehicle trips and VMT associated with land use patterns.	Consistent. The Project would reduce VMT due to its infill location, development of residential uses near high density areas and job centers in Downtown Los Angeles, and access to public transportation immediately adjacent to the Project Site.
Policy 4.2.2: Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.	Consistent. The Project would improve accessibility due to its infill location, development of residential uses near places of employment, and access to public transportation immediately adjacent to the Project Site. The Project Site also contains a shopping center providing access to retail and restaurant uses.
Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	Consistent. The Project contains existing internal pedestrian pathways that connect to the existing sidewalk network. In addition, the Project would provide 214 bicycle parking spaces, including 22 short-term and 192 long-term spaces.
	The Project would also comply with City requirements for providing electric vehicle charging capabilities and electric vehicle charging stations within the proposed parking areas.
	The Project would locate new housing immediately adjacent to transit, including 14 bus lines and an on-site portal to the Metro 7th Street/Metro Center Station.
Policy 4.2.4: Require that air quality impacts be a consideration in the review and approval of all discretionary projects.	Consistent. The environmental review conducted for the Project includes an analysis of air quality impacts, as presented in this section of this Draft EIR, which would be considered by the decision-makers prior to taking any actions on the Project's discretionary approvals.
Policy 4.2.5: Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	Consistent. The Project would occupy an infill location that is immediately adjacent to existing public transportation, which would help to promote transit usage and, in turn, reduce the number of vehicle trips to and from the Project Site. In addition, the Project would provide 214 bicycle parking spaces, including 22 short-term and 192 long-term spaces. Moreover, the Project is providing reduced parking compared to the current code, encouraging alternative modes of transit.
Goal 5: Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels, and the implementation of conservation measures including passive methods such as site	Consistent. The Project's location, land use characteristics, and Project design features would reduce emissions associated with energy and transportation. As discussed under Threshold (a), the Project would be consistent with the relevant SCAG growth projections in the SCAG 2020–2045 RTP/SCS which are used in

The Bloc Draft Environmental Impact Report City of Los Angeles March 2024

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

Goals, Objectives, and Policies	Analysis of Project Consistency
orientation and tree planting.	preparing the 2022 AQMP. The Project includes bicycle parking spaces for the proposed uses as required by the LAMC and is well served by transit, including local and regional bus and rail lines. Moreover, the Project would install EV charging stations at 10 percent of total new spaces on the new parking levels. The Project will also comply with City Ordinance 187714, prohibiting the installation of natural gas for residential uses.
Objective 5.1: It is objective of the City of Los Angeles to increase energy efficiency of City facilities and private developments. Policy 5.1.2: Effect a reduction in energy consumption and shift to non-polluting sources of energy in its building and operations.	Consistent. The Project's location, land use characteristics, and Project design features would reduce emissions associated with energy and transportation. As discussed under Threshold (a), the Project would be consistent with the relevant SCAG growth projections in the SCAG 2020–2045 RTP/SCS which are used in preparing the 2022 AQMP. The Project includes bicycle parking spaces for the proposed uses as required by the LAMC and is well served by transit, including local and regional bus and rail lines. Moreover, the Project would install EV charging stations at 10 percent of total new spaces on the new parking levels. The Project would also comply with City Ordinance 187714, prohibiting the installation of natural gas for residential uses.
Objective 5.3: It is the objective of the City of Los Angeles to reduce the use of polluting fuels in stationary sources. Policy 5.3.1: Support the development and use of equipment powered electric or low-emitting fuels.	Consistent. During operations, the Project would comply with the CARB Small Offroad Engine (SORE) regulations which ban the sale of combustion powered landscaping equipment starting in 2024 and small combustion powered stationary generators starting in 2028.
Source: Eyestone Environmental, 2023.	

forecasts in the AQMP. Furthermore, the Project would comply with all applicable regulatory standards and would incorporate Project Design Feature AQ-PDF-1 and the project design features identified in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, that would serve to reduce the criteria air pollutants discussed herein. Additionally, as the Project would support the City of Los Angeles and SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project would be consistent with AQMP control measures. Thus, the Project would not conflict with or obstruct implementation of the AQMP. With regard to the City of Los Angeles policies, as discussed above, the Project would serve to implement applicable policies of the City of Los Angeles pertaining to air quality. Based on the above, impacts related to Threshold (a) would be less than significant.

(2) Mitigation Measures

Project-level impacts with regard to implementation of the applicable air quality plan would be less than significant during construction and over the long-term operating life 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, and the impact level remains less than significant.

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

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

Project construction would occur in sequential phases (e.g., demolition, structural upgrades, grading, building construction), with buildout expected to be completed in 2031. Construction of the 53-story tower that includes a residential component would commence with the structural upgrade of the existing nine-story parking/retail podium building and subterranean levels below and the demolition/reconfiguration of a portion of this building. In particular, new building foundations would be provided, which would require some grading and excavation. This would be followed by new building construction, concrete installation, new building façades, and landscape installation. The Project would require limited excavation associated with building foundations within the existing below-grade parking levels. Specifically, excavation for the Project would extend approximately 10 feet below the existing parking garage level. However, the Project may include the installation of drilled cast-in-place concrete pile foundations to support the new proposed structure, which would extend to a depth of 110 feet. It is estimated that approximately 18,239 cubic yards of soil would be hauled from the Project Site during excavation.

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 haul trucks and construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment, such as dozers, loaders, and cranes. The Project would also commit to using electric powered

equipment in place of construction equipment traditionally powered by diesel through implementation of Project Design Feature AQ-PDF-1. Use of electric powered construction equipment would reduce combustion emissions in comparison to diesel powered equipment. Electric powered equipment used during construction includes aerial lifts, cement mixers, concrete saws, excavators, forklifts and welders. 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. Construction assumptions, including construction schedule, heavy-duty construction equipment mix, and the number of employees and delivery and haul truck trips, are included in Appendix B (CalEEMod Construction Output file).

The emissions levels in Table IV.A-6 on page IV.A-62 represent the highest daily emissions projected to occur during each year of construction. As presented in Table IV.A-6, construction-related daily maximum regional construction emissions (i.e., combined on-site and off-site emissions) without mitigation would not exceed the SCAQMD daily significance thresholds for VOC, NOx, CO, SOx, PM₁₀, or PM_{2.5}. In addition, the Project proposes to use electric-powered equipment in place of construction equipment traditionally powered by diesel through implementation of Project Design Feature AQ-PDF-1. Electric-powered equipment, which may be used during construction, includes aerial lifts, cement mixers, concrete saws, excavators, forklifts and welders. Use of electric-powered construction equipment would reduce combustion emissions in comparison to diesel powered equipment. Therefore, regional construction emissions resulting from the Project would result in a less-than-significant 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 GHG emissions relative to a standard default project as analyzed by CalEEMod within the Air Basin, the features would also serve to reduce relative criteria air pollutants discussed herein. As discussed above, although Project Design Feature GHG-PDF-1 would reduce Project operational criteria pollutant emissions, this reduction was not assumed in the Project's emissions inventory as a conservative measure.

Table IV.A-7 on page IV.A-63 provides the Project's net increase in operational emissions. As discussed in Section II, Project Description, portions of the existing podium

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

Construction Year	VOC ^b	NOx	СО	SOx	PM ₁₀	PM _{2.5}
Regional Construction Emissions Winter						
Year 2027	2	21	31	<1	4	1
Year 2028	7	70	103	<1	21	6
Year 2029	5	31	68	<1	13	4
Year 2030	3	15	41	<1	9	2
Year 2031	20	14	36	<1	8	2
Maximum Unmitigated Construction	20	70	104	<1	21	6
SCAQMD Daily Significance Thresholds	75	100	550	150	150	55
Over/(Under)	(55)	(30)	(447)	(150)	(129)	(49)
Exceed Threshold?	No	No	No	No	No	No
Regional Construction Emissions Summer						
Year 2027	3	26	43	<1	5	2
Year 2028	5	46	68	<1	11	4
Year 2029	5	32	78	<1	14	4
Year 2030	3	15	46	<1	9	2
Year 2031	20	14	36	<1	8	2
Maximum Unmitigated Construction	20	46	78	<1	14	4
SCAQMD Daily Significance Thresholds	75	100	550	150	150	55
Over/(Under)	(55)	(54)	(472)	(150)	(136)	(51)
Exceed Threshold?	No	No	No	No	No	No

Numbers may not add up exactly due to rounding.

Source: Eyestone Environmental, 2023.

building would be seismically upgraded to comply with City regulations for non-ductile concrete buildings, would be modified to accommodate the new tower's floors and structural supports, and would be reconfigured to allow continued pedestrian and vehicular access between the floors of the new tower within the podium and the surrounding podium levels. Existing credit (vehicle trips and emissions) was taken for the 24,342 square feet of existing commercial (theater and retail) uses to be converted to residential uses. As shown

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

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

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

Table IV.A-7
Estimate of Net Increase in Maximum Regional Project Daily Operational Emissions—At Project Buildout (2031)^a

	Pollutant Emissions (pounds per day)						
Emission Source	VOC NO _X CO SO _X PM ₁₀ PM						
Existing Winter	•	1	1	•	•	•	
Area	<1	<1	<1	<1	<1	<1	
Energy (Natural Gas) ^b	<1	<1	<1	<1	<1	<1	
Mobile	2	1	11	<1	3	<1	
Stationary	<1	<1	<1	<1	<1	<1	
Total	2	1	11	<1	3	<1	
Project Winter							
Area	10	<1	<1	<1	<1	<1	
Energy (Natural Gas) ^b	0	0	0	0	0	0	
Mobile	3	2	20	<1	5	1	
Stationary	<1	1	1	<1	<1	<1	
Total	14	3	22	<1	5	<1	
Project less Existing Winter							
Area	10	<1	<1	<1	<1	<1	
Energy (Natural Gas) ^b	-<1	-<1	-<1	-<1	-<1	-<1	
Mobile	2	<1	9	<1	2	<1	
Stationary	<1	1	1	<1	<1	<1	
Total Proposed Uses Emissions	12	2	10	<1	2	<1	
SCAQMD Significance Threshold	55	55	550	150	150	55	
Over/(Under)	(43)	(53)	(540)	(150)	(148)	(54)	
Exceed Threshold?	No	No	No	No	No	No	
Existing Summer							
Area	<1	<1	1	<1	<1	<1	
Energy (Natural Gas) ^b	<1	<1	<1	<1	<1	<1	
Mobile	2	1	12	<1	3	<1	
Stationary	<1	<1	<1	<1	<1	<1	
Total	2	1	13	<1	3	<1	
Project Summer	'	•	•	•			
Area	14	<1	34	<1	<1	<1	
Energy (Natural Gas) ^b	0	0	0	0	0	0	
Mobile	3	2	22	<1	5	1	
Stationary	<1	1	1	<1	<1	<1	
Total	17	4	57	<1	5	<1	

Table IV.A-7 (Continued)
Estimate of Net Increase in Maximum Regional Project Daily Operational Emissions—At Project
Buildout (2031)

	nt Emissio	Emissions (pounds per day)				
Emission Source	VOC	NOx	СО	SOx	PM ₁₀	PM _{2.5}
Project less Existing Summer	<u> </u>	•	-1	1	•	<u> </u>
Area	13	<1	33	<1	<1	<1
Energy (Natural Gas) ^b	-<1	-<1	-<1	-<1	-<1	-<1
Mobile	2	<1	10	<1	2	<1
Stationary	<1	1	1	<1	<1	<1
Total Proposed Uses Emissions	15	2	44	<1	2	<1
SCAQMD Significance Threshold	55	55	550	150	150	55
Over/(Under)	(40)	(53)	(506)	(150)	(148)	(55)
Exceed Threshold?	No	No	No	No	No	No

Numbers may not add up exactly due to rounding.

Source: Eyestone Environmental, 2023.

in Table IV.A-7 on page IV.A-63, regional emissions resulting from operation of the Project would not exceed any of SCAQMD's daily regional operational thresholds. Therefore, regional operational emissions resulting from the Project would result in a less-than-significant impact.

(b) Localized Emissions

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

(i) Construction

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

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

^b The Project would comply with the City of LA's All-Electric Ordinance, which does not allow for natural gas usage in residential buildings.

standard. Therefore, localized construction emissions resulting from the Project would result in a less-than-significant air quality impact.

(ii) Operation

Project-related operational emissions were also evaluated based on SCAQMD LST methodology from on-site sources (e.g., water heaters, cooking appliances, HVAC). The potential to cause or contribute to CO hotspots (potential exceedances of ambient air quality standards) from post-construction motor vehicle operations was also evaluated. As analyzed in Threshold (c) below, Project-related operational emissions from on-site and off-site sources would not exceed localized thresholds. Thus, localized operational emissions resulting from the Project would not exceed any air quality standard. Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.

(c) Conclusion

According to SCAQMD guidance, individual projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would have a cumulatively considerable contribution to emissions for those pollutants for which the Air Basin is in non-attainment. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.⁸³ As shown in Table IV.A-6 and Table IV.A-7 on pages IV.A-62 and IV.A-63, respectively, Project construction and operational daily emissions at the Project Site would not exceed any of SCAQMD's regional thresholds. Accordingly, the Project's contribution to cumulative constructionrelated and operation-related regional emissions would not be cumulatively considerable and, therefore, would be less than significant. In addition, construction and operational emissions from the Project would not exceed any of SCAQMD's localized significance thresholds at Project buildout as shown in Table IV.A-8 and Table IV.A-9 on pages IV.A-66 and IV.A-67, respectively. Thus, construction and operation of the Project would have less-than-significant impacts with regard to localized emissions as well. Therefore, the Project would not result in a cumulatively considerable net increase of O₃ and PM_{2.5} under the NAAQS or O₃, PM₁₀, and PM_{2.5} under the CAAQS for which the Air Basin is non-attainment. As such, based on the above, impacts to Threshold (b) would be less than significant.

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

Table IV.A-8
Estimate of Maximum Localized Daily Project Construction Emissions–Unmitigated (pounds per day)^{a, b}

Construction Year	NOx	СО	PM ₁₀	PM _{2.5}
Winter		•	<u> </u>	1
Year 2027	14	23	<1	<1
Year 2028	36	54	2	1
Year 2029	21	31	<1	<1
Year 2030	11	16	<1	<1
Year 2031	10	16	<1	<1
Maximum Unmitigated Daily Localized Emissions	36	54	2	1
SCAQMD Localized Significance Thresholds ^c	78	1,090	9	5
Over/(Under)	(42)	(1,036)	(7)	(4)
Exceed Threshold?	No	No	No	No
Summer				
Year 2027	18	29	1	1
Year 2028	26	45	1	1
Year 2029	21	31	<1	<1
Year 2030	11	16	<1	<1
Year 2031	10	16	<1	<1
Maximum Unmitigated Daily Localized Emissions	26	45	1	1
SCAQMD Localized Significance Thresholds ^c	78	1,090	9	5
Over/(Under)	(52)	(1,045)	(8)	(4)
Exceed Threshold?	No	No	No	No

Numbers may not add up exactly due to rounding.

Source: Eyestone Environmental, 2023.

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

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

Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1 for a 2.3 acre site which utilizes a linear interpolation between the 2-acre and 5-acre thresholds. The closest existing sensitive receptor is a residential use across 8th Street to the southwest 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.

Table IV.A-9
Estimate of Maximum Localized Project Daily Operational Emissions—At Project Buildout (2031) (pounds per day)^a

	Poll	Pollutant Emissions (pounds per day)				
Emission Source	NOx	СО	PM ₁₀	PM _{2.5}		
Existing Winter	-					
Area	<1	<1	<1	<1		
Energy (Natural Gas)	<1	<1	<1	<1		
Stationary	<1	<1	<1	<1		
Total	<1	<1	<1	<1		
Project Winter	1		-	•		
Area	<1	<1	<1	<1		
Energy (Natural Gas)	0	0	0	0		
Stationary	1	1	<1	<1		
Total	1	1	<1	<1		
Project less Existing Winter	1		<u> </u>			
Area	<1	<1	<1	<1		
Energy (Natural Gas)	-<1	-<1	-<1	-<1		
Stationary	1	1	<1	<1		
On-Site Total	1	1	<1	<1		
SCAQMD Significance Threshold ^{b,c}	78	1,090	2	2		
Over/(Under)	(77)	(1,089)	(2)	(1)		
Exceed Threshold?	No	No	No	No		
Existing Summer						
Area	<1	<1	<1	<1		
Energy (Natural Gas)	<1	<1	<1	<1		
Stationary	<1	<1	<1	<1		
Total	<1	<1	<1	<1		
Project Summer	<u> </u>	- 1	1			
Area	<1	34	<1	<1		
Energy (Natural Gas)	0	0	<1	<1		
Stationary	1	1	<1	<1		
Total	2	35	1	1		
Project less Existing Summer	•					
Area	<1	33	<1	<1		
Energy (Natural Gas)	-<1	-<1	-<1	-<1		
Stationary	1	1	<1	<1		
On-Site Total	2	34	<1	<1		
SCAQMD Significance Threshold ^{b,c}	78	1,090	2	2		
Over/(Under)	(77)	(1,056)	(2)	(1)		

Table IV.A-9 (Continued) Estimate of Maximum Localized Project Daily Operational Emissions—At Project Buildout (2031) (pounds per day)

	Pollutant Emissions (pounds per day)					
Emission Source	NO _X CO PM ₁₀ PM ₂					
Exceed Threshold?	No	No	No	No		

Numbers may not add up exactly due to rounding.

- ^a The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this Draft EIR.
- Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1 for a 2.3-acre site which is interpolated between the 2-acre and 5-acre thresholds. The closest sensitive receptor is a residential use adjacent to the southwest 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.
- Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. In addition, SCAQMD does not provide an LST for SO₂ since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant.

Source: Eyestone Environmental, 2023.

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

(1) Impact Analysis

(a) Construction

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

As discussed above in Subsection IV.A.3.b, Methodology, the localized construction air quality analysis was conducted using the methodology promulgated by SCAQMD.

Look-up tables provided by SCAQMD were used to determine localized construction emissions thresholds for the Project.⁸⁴

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 (2019–2021) for the Project area, as presented in Table IV.A-8 on page IV.A-66. Although the trend shown in Table IV.A-8 demonstrates that ambient air quality is improving in the area, the localized construction emissions analysis conservatively did not apply a reduction in background pollutant concentrations for subsequent years of construction (i.e., 2027–2031). By doing so, the allowable pollutant increment to not exceed an ambient air quality standard is more stringent. The analysis and LSTs have been adapted to take into account existing background ambient air quality monitoring data (2019–2021). Calculations of the LSTs are provided in Appendix B of this Draft EIR.

Maximum on-site daily construction emissions for NOx, CO, PM₁₀, and PM_{2.5} were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for SRA 1 based on a 2.3-acre portion of the Project Site, which is comprised of the Development Area. Potential impacts were evaluated at the closest off-site sensitive receptor, which are future residential uses located to the west, adjacent to the Project Site.⁸⁵ Ambient air quality standards for NOx and CO have averaging times of 1-hour and 8-hour respectively. 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.⁸⁶

The maximum daily localized emissions from Project construction and LSTs are presented in Table IV.A-8, which shows that maximum construction emissions would not exceed the SCAQMD localized screening thresholds. Therefore, impacts would be less than significant impact with regard to localized emissions.

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⁸⁴ SCAQMD, LST Methodology Appendix C-Mass Rate LST Look-up Table, revised October 2009.

⁸⁵ Construction of this development would be completed, and the development would be occupied by the time the Project begins construction.

⁸⁶ SCAQMD, Final Localized Significance Threshold Methodology, revised July 2008.

(ii) Off-Site Construction 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.

The highest average daily trips at an intersection under the Existing Condition would be approximately 62,000 vehicles per day at the Flower Street and 8th Street intersection.⁸⁷ Project construction would result in a maximum of 500 worker trips and up to 680 haul trips (340 round trips) per day during the mat foundation phase of construction. Please refer to Appendix B for detailed construction assumptions.

Conservatively, assuming that all of the Project construction would drive through this intersection, it would result in approximately 63,180 vehicles per day, which is significantly lower than the daily traffic volumes of 400,000 vehicles per day that would be expected to generate CO exceedances as evaluated in the 2003 AQMP.⁸⁸ This daily trip estimate is based on the peak hour conditions of the intersection. Therefore, Project off-site construction activities, including the highest daily trips, would not expose sensitive receptors to substantial CO concentrations. As a result, impacts related to localized construction mobile-source CO emissions are considered less than significant.

(iii) Off-Site Construction Activities (TACs)

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, which 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 35 months, the Project would not result in a long-term (i.e., 70-year) source of TAC emissions. Additionally, SCAQMD's CEQA guidance does not require a health risk assessment (HRA) for short-term construction emissions. It is, therefore, not necessary to quantitatively evaluate long-term cancer impacts from construction activities, which occur over a relatively short duration. The Project construction activities, including generation of TACs, would not expose sensitive receptors to substantial pollutant

Daily trips calculated based on Caltrans K factors for the nearest freeway monitoring station. Details are provided in Appendix B of this Draft EIR.

Values are presented as passenger car equivalents (PCE). Trucks are assumed to be equivalent to 2.5 passenger cars. Daily trips calculated based on Caltrans K factors for the nearest freeway monitoring station. Details are provided in Appendix B of this Draft EIR.

concentrations. Project-related TAC impacts during construction would be less than significant.

(b) Operation

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

Operation of the Project would not introduce any major new sources of air pollution within the Project Site. Emissions estimates for criteria air pollutants from on-site sources are presented in Table IV.A-9 on page IV.A-67. The SCAQMD LST mass rate look-up tables were used to evaluate potential localized impacts. As shown in Table IV.A-9, on-site operational emissions would not exceed any of the LSTs. The Project on-site operational activities, including generation of criteria pollutants, would not expose sensitive receptors to substantial pollutant concentrations. Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.

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

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

At buildout of the Project, the highest average daily trips at an intersection would be approximately 81,000 vehicles per day at the Flower Street and 8th Street,⁸⁹ which is well below the daily traffic volumes of 400,000 vehicles per day that would be expected to generate CO exceedances as evaluated in the 2003 AQMP.⁹⁰ 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 Flower Street and 8th Street intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP. In addition, CO background concentrations within the vicinity of the modeled intersection have substantially decreased since preparation of the 2003 AQMP primarily due to ongoing fleet turn over of older on-road light duty vehicles and use of cleaner fuels.⁹¹ In 2003, the 1-hour background CO concentration was 5 ppm

Daily trips calculated based on Caltrans K factors for the nearest freeway monitoring station and peak hour traffic through the intersection for Project plus existing conditions. Details are provided in Appendix B of this Draft EIR.

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.

⁹¹ SCAQMD, Carbon Monoxide Redesignation Request and Maintenance Plan, February 2005.

and has decreased to 2 ppm in 2018.⁹² Therefore, the Project does not trigger the need for a detailed CO hotspots model and would not cause any new or exacerbate any existing CO hotspots. The supporting data for this analysis is included in Appendix B of this Draft EIR. The Project off-site operational activities, including the highest average daily trips, would not expose sensitive receptors to substantial CO concentrations. As a result, impacts related to localized mobile-source CO emissions are considered less than significant.

(iii) Toxic Air Contaminants

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. As discussed above, CARB has published and adopted the CARB Land Use Handbook, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*. Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to TAC sources and the addition of new TAC sources in proximity to existing sensitive land uses.

The primary source of potential TACs associated with Project operations is DPM from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets) and, to a lesser extent, facility operations (e.g., emergency generators). However, these activities and the land uses associated with the Project are not considered land uses that generate substantial TAC emissions based on review of the air toxic sources listed in SCAQMD's and CARB's guidelines. The Project would only result in minimal emissions of TACs from the use of consumer products and landscape maintenance activities, among other things. As a result, toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the Project. 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

⁹² SCAQMD, 2018 Air Quality Data Table.

⁹³ CARB, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.

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

study under the California Accidental Release Program (CalARP). As the Project would not contain substantial TAC sources and is consistent with the CARB and SCAQMD guidelines, the Project would generate TAC emissions that wouldexceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0. Therefore, the Project would not result in the exposure of off-site sensitive receptors to carcinogenic or toxic air contaminants, potential TAC impacts would be less than significant.

(c) Conclusion

Based on the above, the Project's on- and off-site construction and operational emissions would not exceed the SCAQMD localized screening thresholds. Similarly, the Project's TAC emissions would not exceed SCAQMD thresholds. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts to Threshold (c) would be less than significant.

(3) 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.

(4) 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): Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As discussed in Section VI, Other CEQA Considerations, of this Draft EIR, and in the Initial Study prepared for the Project, which is included as Appendix A of this Draft EIR, the Project would not create or result in other emissions, such as those leading to objectionable odors, that may impact a substantial number of people. Thus, the Project would have a less-than-significant impact with respect to Threshold (d). No further analysis of this issue is required.

e. Cumulative Impacts

(1) Impact Analysis

The following cumulative impacts analysis is based on the recommendations included in SCAQMD's CEQA Air Quality Handbook. According to SCAQMD, individual projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

SCAQMD recommends evaluating cumulative impacts for individual projects based on whether the project exceeds 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.A-6 and Table IV.A-7 on pages IV.A-62 and IV.A-63, respectively, Project construction and operational daily emissions at the Project Site would not exceed any of 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 with regard 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 with regard to air quality during both construction and operation 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.