IV. Environmental Impact Analysis
B. Air Quality

1. Introduction

This section evaluates the Project's potential impacts on air quality. This section estimates the air pollutant emissions generated by construction and operation of the Project and evaluates whether the Project would conflict with or obstruct implementation of the applicable air quality plan; 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; expose sensitive receptors to substantial pollutant concentrations; or result in other emissions, such as those leading to odors, affecting a substantial number of people. This section relies on calculation worksheets, assumptions, and model outputs prepared by Eyestone Environmental, which are included in the Air Quality and Greenhouse Gas Technical Appendix, provided in Appendix B of this Recirculated 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

[1] *USEPA, NAAQS Table, www.epa.gov/criteria-air-pollutants/naaqs-table, accessed May 5, 2022.*

at lower levels of exposure. For some pollutants, no clear thresholds for effects have been 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 NAAQS and CAAQS are listed further below in Table IV.B-1 on page IV.B-11.

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 SCAQMD's jurisdiction. 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 SCAQMD's Air Quality Management Plan (AQMP), which incorporates regional demographic projections and integrated regional land use and transportation strategies from SCAG's 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 levels 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 the 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

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[2] *SCAQMD, Final 2016 AQMP, 2017, Appendix I, Health Effects, p. I-69.*

[3] *SCAQMD, Map of Jurisdiction, 1999.*

Air Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Air Basin is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, and industry.

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_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_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, known as "criteria pollutants," and which are most relevant to current air quality planning and regulation in the Air Basin include: 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" as a result of the specific standards, or criteria, which have been adopted for them.

(i) Ozone (O_3)

O_3 is a gas that is formed when volatile organic compounds (VOCs) and NO_X—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O_3 irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

(ii) Particulate Matter (PM_{10} 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, PM_{10} 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, like pollen and windstorms, are naturally occurring. However, in areas like the City of Los 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 PM_{10} and $PM_{2.5}$. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

(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 winter mornings, 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 O_3, 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 (NO_2)

NO_2 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_X compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic areas, particularly in urban areas like the City of Los Angeles, may be exposed to higher concentrations of NO_2 than those indicated by regional monitors. NO_2 absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10}. NO_X irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_X is as a precursor to the formation of O_3.

(v) Sulfur Dioxide (SO_2)

Sulfur oxides (SO_X) are compounds of sulfur and oxygen molecules. SO_2 is the predominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Generally, the highest levels of SO_2 are found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. Emissions of SO_2 aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of SO_2, 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 air are usually found near Pb smelters. The major sources of Pb emissions to the air are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. Lead 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 (SO_4^{2-}), hydrogen sulfide (H_2S), 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., (H_2S) [nuisance odor] and vinyl chloride), or otherwise account for these pollutants (i.e., SO_4^{2-} and visibility reducing particles) through other criteria pollutants. For example, SO_4^{2-} 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-})

SO_4^{2-} are the fully oxidized ionic form of sulfur. SO_4^{2-} occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized during the combustion process and subsequently converted to 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 (H_2S)

H_2S is a colorless gas with the odor of rotten eggs. The most common sources of H_2S emissions are oil and natural gas extraction and processing, and natural emissions from geothermal fields. Industrial sources of H_2S include petrochemical plants and kraft paper mills. H_2S 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 H_2S 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] H_2S 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., sulfates, 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 clarity, color, and visual range.[7] Exposure to some haze-causing pollutants have been linked to adverse health impacts similar to PM_{10} 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

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[4] *CARB, Hydrogen Sulfide & Health, 2019.*

[5] *CARB, Hydrogen Sulfide & Health, 2019.*

[6] *CARB, Hydrogen Sulfide & Health, 2019.*

[7] *CARB, Visibility-Reducing Particles and Health, last reviewed October 11, 2016.*

[8] *CARB, Visibility-Reducing Particles and Health, 2019.*

[9] *CARB, Vinyl Chloride & Health, 2019.*

[10] *CARB, Vinyl Chloride & Health, 2019.*

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 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, SCAQMD has regulated pollutants other than criteria pollutants, such as VOCs, TACs, greenhouse gases, and stratospheric ozone-depleting compounds.

(i) 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 the formation of these criteria pollutants. Some are also identified as TACs and have adverse health effects. VOCs are typically formed from the 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

[11] *CARB, Vinyl Chloride & Health, 2019.*

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 and Regional Transportation Plan/Sustainable Communities Strategy
  - Air Quality Guidance Documents
  - Rules and Regulations
- City of Los Angeles Air Quality Element
- City of Los Angeles Plan for a Healthy LA

(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.[12] The

[12] *42 United States Code Section 7401 et seq. (1970).*

CAA is the comprehensive federal law that regulates air emissions in order to protect public health and welfare.[13] The USEPA is responsible for the implementation and enforcement of the CAA, which establishes 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).[14]

Title I requirements are implemented for the purpose of attaining NAAQS for criteria air pollutants. Table IV.B-1 on page IV.B-11, shows the NAAQS currently in effect for each criteria pollutant. The Air Basin fails to meet national standards for O_3 and $PM_{2.5}$ and, therefore, is considered a federal "non-attainment" area for these pollutants.

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.

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[13] *USEPA, Clean Air Act, 1963.*

[14] *USEPA, Clean Air Act Overview, Clean Air Act Table of Contents by Title, Last Updated January 3, 2017.*

Table IV.B-1
Ambient Air Quality Standards

Pollutant	Averaging Period	Federal Standard[a,b]	California Standard[a,b]	SCAQMD Attainment Status[c]	
				California Standard[d]	Federal Standard[d]
Ozone (O_3)	1 hour	—	0.09 ppm (180 µg/m^3)	Non-Attainment	—
	8 hour	0.070 ppm (137 µg/m^3)	0.07 ppm (137 µg/m^3)	Non-Attainment	Non-Attainment (Extreme)
Respirable Particulate Matter (PM_{10})	24 hour	150 µg/m^3	50 µg/m^3	Non-Attainment	Attainment
	Annual	—	20 µg/m^3		
Fine Particulate Matter ($PM_{2.5}$)	24 hour	35 µg/m^3	—	Non-Attainment	Non-Attainment (Serious)
	Annual	12 µg/m^3	12 µg/m^3		
Carbon Monoxide (CO)	1 hour	35 ppm (40 mg/m^3)	20 ppm (23 mg/m^3)	Attainment	Attainment
	8 hour	9 ppm (10 mg/m^3)	9.0 ppm (10 mg/m^3)		
Nitrogen Dioxide (NO_2)	1 hour	0.10 ppm (188 µg/m^3)	0.18 ppm (339 µg/m^3)	Attainment	Unclassified/ Attainment
	Annual	0.053 ppm (100 µg/m^3)	0.030 ppm (57 µg/m^3)		
Sulfur Dioxide (SO_2)	1 hour	0.075 ppm (196 µg/m^3)	0.25 ppm (655 µg/m^3)	Attainment	Unclassified/ Attainment
	3 hour	0.5 ppm (1,300 µg/m^3)	—		
	24 hour	0.14 ppm (365 µg/m^3)	0.04 ppm (105 µg/m^3)		
	Annual	0.03 ppm (80 µg/m^3)	—		
Lead (Pb)	30-day average	—	1.5 µg/m^3	Attainment	Partial Non-Attainment[e]
	Rolling 3-month average	0.15 µg/m^3	—		
Sulfates	24 hour	—	25 µg/m^3	Attainment	—
Hydrogen Sulfide (H_2S)	1 hour	—	0.03 ppm (42 µg/m^3)	Unclassified	—

ppm = parts per million by volume

µg/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.B-1 (Continued)
Ambient Air Quality Standards

Pollutant	Averaging Period	Federal Standard[a,b]	California Standard[a,b]	SCAQMD Attainment Status[c]	
				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 2016 AQMP.*

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

[d] *California and Federal standard attainment status based on SCAQMD's 2016 AQMP and 2018 updates from CARB, ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.*

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

Source: United States Environmental Protection Agency, NAAQS Table, www.epa.gov/criteria-air-pollutants/naaqs-table, accessed May 5, 2022; CARB, Ambient Air Quality Standards May 4, 2016.

(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 the 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.B-1 on page IV.B-11 includes the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the state. As shown in Table IV.B-1, the CAAQS include more stringent standards than the NAAQS. The Air Basin fails to meet State standards for O_3, PM_{10}, and $PM_{2.5}$ and, therefore, is considered "non-attainment" for these pollutants.

(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 operations 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 operating. 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 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.

(i) Air Quality Management Plan and Regional Transportation Plan/ Sustainable Communities Strategy

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 O_3 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 emissions[15] sufficiently to meet the upcoming O_3 standard deadlines, as NO_X plays a critical role in the creation of O_3. The AQMP's strategy to meet the 8-hour O_3 standard in 2023 should lead to sufficient NO_X emission reductions to attain the 1-hour O_3 standard by 2022. Since NO_X emissions also lead to the formation of $PM_{2.5}$, the NO_X reductions needed to meet the O_3 standards will likewise lead to improvement of $PM_{2.5}$ levels and attainment of $PM_{2.5}$ standards.[16,17] The 2022 AQMP is focused on attaining the 2015 8-hour O_3 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.

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-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.

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

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

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

The AQMPs also incorporate the transportation strategy and transportation control measures from the applicable SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS) Plan and 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS) Plan.[18,19] 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. SCAQMD combines its portion of the AQMP with those prepared by SCAG.[20] The 2016–2040 RTP/SCS and 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 SCAG's 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, 17-percent growth in housing units, 11-percent growth in employment, and a five-percent growth in vehicle miles traveled between 2015 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.[21,22]

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[18] *SCAG, Final 2016 RTP/SCS, 2016 http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx, accessed February 8, 2021.*

[19] *SCAG, Final 2020–2045 RTP/SCS, 2020 https://scag.ca.gov/read-plan-adopted-final-connect-socal-2020 Accessed March 30, 2023.*

[20] *SCAQMD, Final 2022 AQMP, 2022, p. ES-4.*

[21] *SCAQMD, Final 2016 AQMP, Figure 1-4.*

[22] *SCAQMD, Final 2022 AQMP, Figure 1-4.*

On December 2, 2022, the SCAQMD Governing Board adopted the 2022 AQMP. The 2022 AQMP is focused on attaining the 2015 8-hour O_3 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 applicable SCAG RTP/SCS, 2016–2040 RTP/SCS and 2020–2045 RTP/SCS respectively.[23,24]

(ii) SCAQMD Air Quality Guidance Documents

The SCAQMD published the *CEQA Air Quality Handbook* (approved by SCAQMD's Governing Board in 1993) to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.[25] 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.[26]

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.[27] SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity 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 risks.

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[23] *SCAG, Final 2016 RTP/SCP, 2016.*

[24] *SCAG, Final 2020- RTP/SCS, 2020.*

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

[26] *SCAQMD, Air Quality Analysis Guidance, www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook#, accessed May 5, 2022.*

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

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.[28] 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*.[29] The latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and *Final Localized Significance Threshold Methodology*.

(iii) 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 which 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 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

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

[29] *SCAQMD, Final Methodology to Calculate Particulate Matter (PM)2.5 and PM2.5 Significance Thresholds, 2006.*

dust to the project property line, restricts the net PM_{10} emissions to less than 50 micrograms per cubic meter ($\mu g/m^3$) 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 which 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 NO_X emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

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 toxic air contaminants or other non-criteria pollutants. The following is a list of rules which 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 (CI) 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 (Sustainable pLAn 2019) 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 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 which 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 the 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, lays the foundation to create healthier communities for all residents in the City. As an element of the General Plan, it provides a high-level policy 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.

d. Existing Conditions

(1) Regional Air Quality

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

The greatest air pollution throughout the Air Basin occurs from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in

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

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, the SCAQMD has adopted a series of AQMPs. Both the 2016 and 2022 AQMPs include 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 nitrogen oxide (NO_X) emissions[30] sufficiently to meet the upcoming ozone 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 om the 8-hour O_3 attainment year of 2031, due to the continued implementation of already adopted regulatory actions (baseline emissions). The 2022 AQMP provides a baseline year 2018 inventory of 351 tpd of NO_X and modeling results show that NO_X emissions are projected to be 184 tpd in the 8-hour O_3 attainment year of 2037, due to continued implementation of already adopted regulatory actions baseline emissions. The 2016 AQMP suggests that total Air Basin emissions of NOx must be reduced to 96 tpd in 2031 to attain the 8-hour O_3 standard. The 2022 AQMP suggests that total Air Basin emissions of NO_X must be reduced to 124 tpd in 2037 to attain the 8-hour O_3 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.[31,32]

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 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. In

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

[31] *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).*

[32] *SCAQMD, Final 2016 and 2022 AQMP, 2017 and 2022 (p. ES-2 2016 AQMP and ES-4 2022 AQMP).*

addition, SCAG's 2016–2040 and 2020–2045 RTP/SCS[33] include transportation programs, measures, and strategies generally designed to reduce VMT, which are contained in the AQMP.

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the Plan with those prepared by SCAG. The 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, 17-percent growth in housing units, 11-percent growth in employment, and 5-percent growth in vehicle miles traveled between 2018 and 2037.

Despite this regional growth, air quality has improved substantially over the years, primarily due to the impacts of air quality control programs at the local, state and federal levels. The graphic included in Figure IV.B-1 on page IV.B-23 shows the percent change in air quality along with demographic data for the four-county region from the 2016 AQMP. In particular, Figure IV.B-1 illustrates the trends since 1990 of the 8-hour ozone levels, the 1-hour ozone levels, and annual average $PM_{2.5}$ concentrations (since 1999), compared to the regional gross domestic product, total employment and population. The graphic included in Figure IV.B-2 on page IV.B-24 shows the percent change in air quality along with demographic data for the four-county region from the 2022 AQMP. In particular, Figure IV.B-2 illustrates the trends since 1995 of the 8-hour ozone levels, the 1-hour ozone 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 ozone and particulate matter levels continue to trend downward as the economy and population increase, demonstrating that it is possible to maintain a healthy economy while improving public health through air quality improvements.[34]

[33] *SCAG, Final 2016 and 2020 RTP/SCS.*

[34] *SCAQMD, Final 2022 AQMP, 2022 (p. 1-6).*

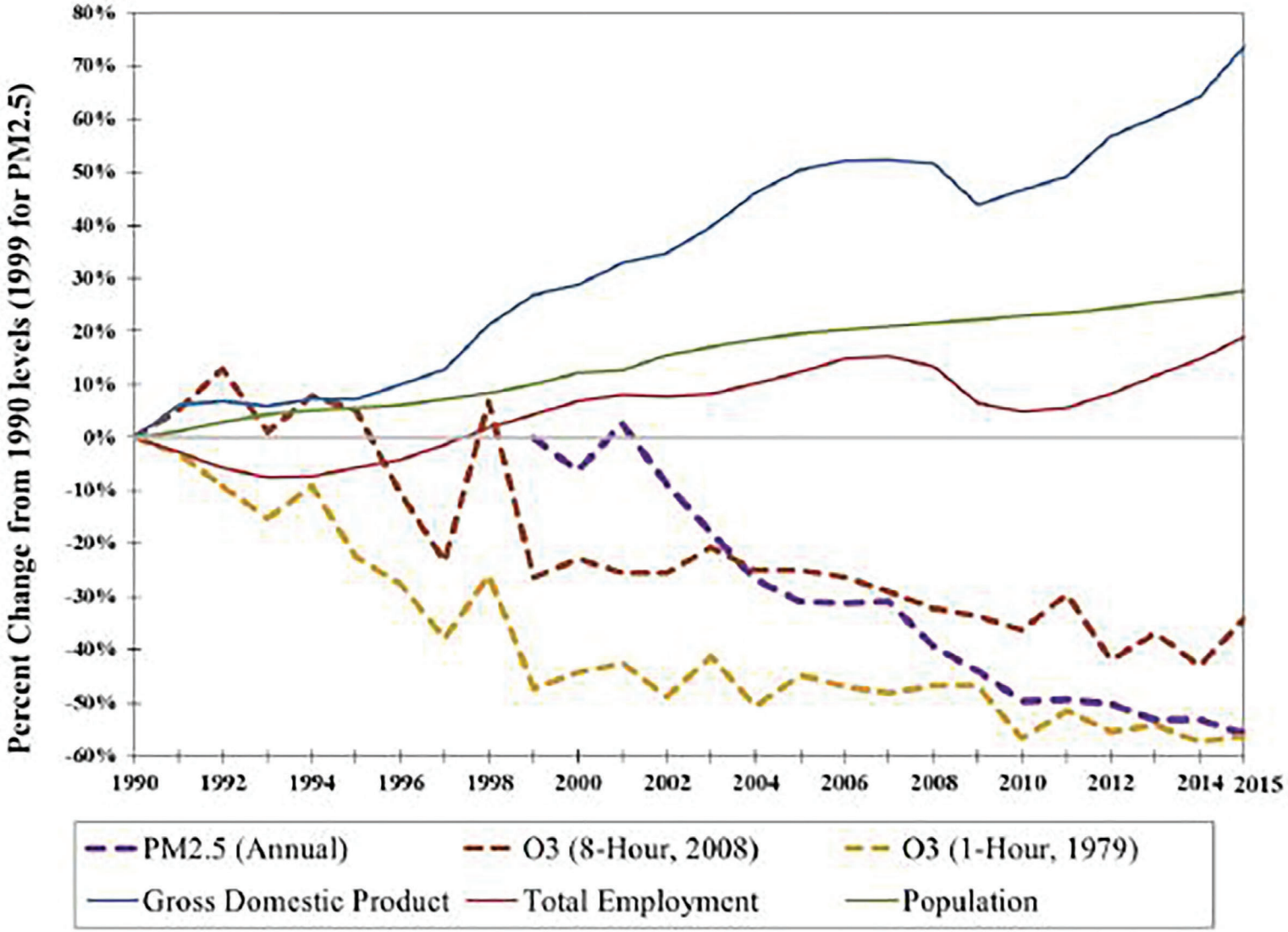

Figure IV.B-1
2016 AQMP Ozone Trends

Source: SCAQMD, 2016.

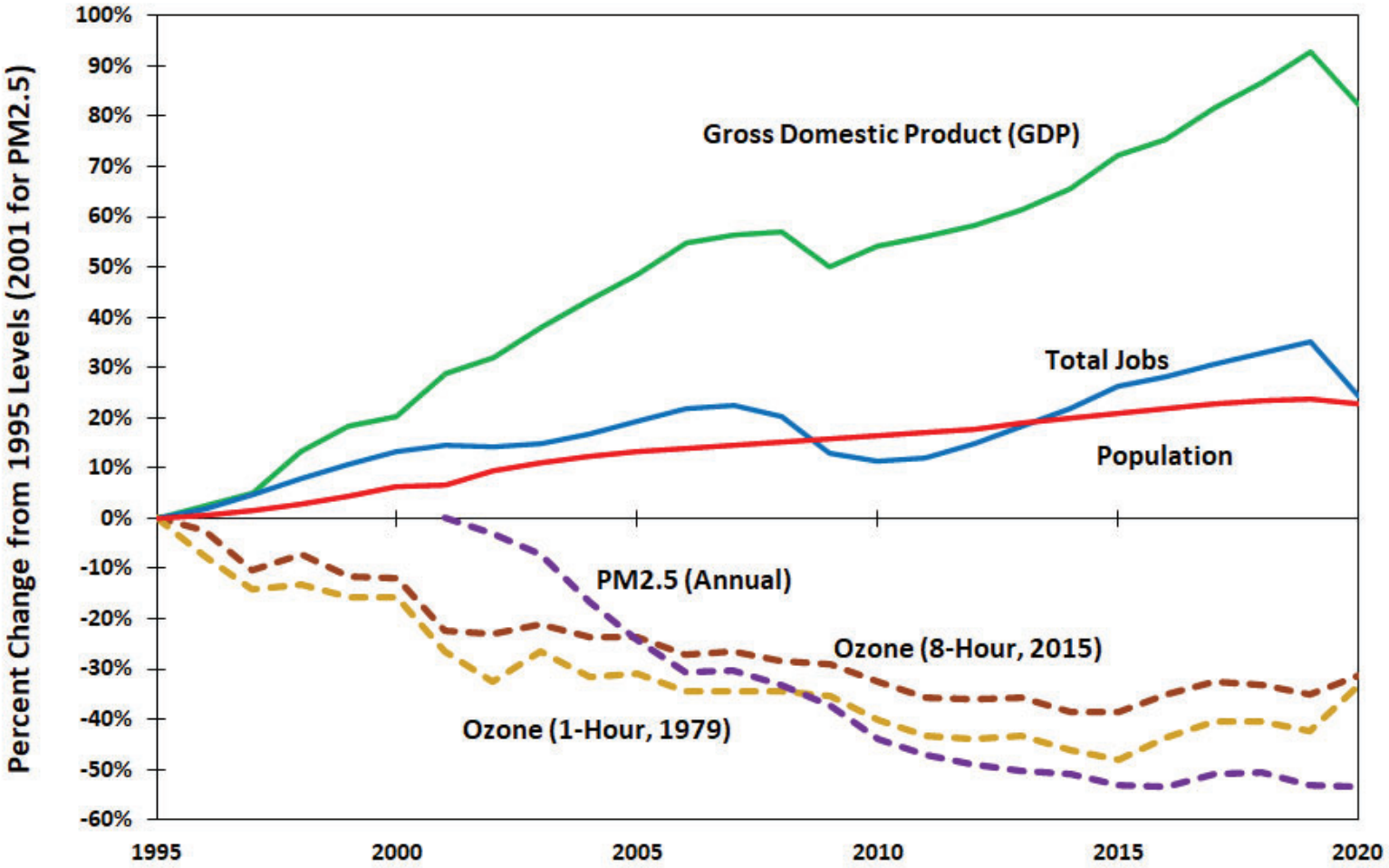

Figure IV.B-2
2022 AQMP Ozone Trends

Source: AQMP, 2022.

SCAQMD has released an Air Basin-wide air toxics study (MATES-V).[35] 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 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).

As part of the MATES-V Study, the SCAQMD prepared a series of maps that shows regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps' estimates represent the number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years) in parts of the area.

The MATES-V map is the most recently available map to represent existing conditions near the Project area (refer to Figure IV.B-4 on page IV.B-30 in the analysis further below). The estimated cancer risk for the vast majority of the urbanized area within the Air Basin ranges from 200 to over 1,200 cancers per million over a 70-year duration.[36] Generally, the risk from air toxics is lower near the coastline, and higher risks are concentrated near large diesel sources (e.g., freeways, airports, and ports).

(2) Local Air Quality

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

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

[36] *SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V), MATES V Interactive Carcinogenicity Map, 2021, https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23?views=view_38, accessed July 4, 2023.*

(a) Existing Pollutant Levels at Nearby Monitoring Stations

The SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin and has divided the Air Basin into 38 source receptor areas (SRAs) in which 31 monitoring stations operate. Figure IV.B-3 on page IV.B-27 shows the locations of the SRAs located in Los Angeles County. The Project Site is located within SRA 2, which covers the Northwest Coastal Los Angeles area. The monitoring station most representative of the Project Site is the Los Angeles–VA Hospital Station, located at the site of the West Los Angeles Medical Center (a veterans hospital) along Wilshire Boulevard, 4.5 miles northeast of the Project Site. Criteria pollutants monitored at this station include O_3, CO, and NO_2. Criteria pollutants not monitored at this station include PM_{10}, $PM_{2.5}$, SO_2, and lead. The second most representative monitoring stations for these pollutants is the Los Angeles–LAX Station, located approximately 3.1 miles south of the Project Site (for PM_{10}, SO_2, lead), and North Main Street Station, located approximately 13.4 miles northeast of the Project Site (for $PM_{2.5}$). Table IV.B-2 on page IV.B-28 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured in SRA 2 through the period of 2019–2021.

(b) Existing Health Risk in the Surrounding Area

As shown in Figure IV.B-4 on page IV.B-30, based on the MATES-V model, the calculated cancer risk in the Project area is approximately 515 in a million.[37] The cancer risk in this area is predominately related to nearby sources of diesel particulate (e.g., the Marina Expressway [SR-90]). In general, the risk at the Project Site is comparable with other urbanized areas in Los Angeles.

The OEHHA, on behalf of the California Environmental Protection Agency (CalEPA), provides a screening tool (CalEnviroScreen) that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution. According to CalEnviroScreen, the Project Site is located in the 92nd percentile, which means that the Project Site is worse than average in terms of pollution in comparison to other communities within California.[38]

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[37] *SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V), MATES Data Visualization Tool, 2021, https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-Page/?data_id=dataSource_112-7c8f2a4db79b4a918d46b4e8985a112b%3A17741&views=Click-tabs-for-other-data%2CGridded-Cancer-Risk, accessed July 4, 2023.*

[38] *OEHHA, CalEnviroScreen 4.0 MAP, https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/CalEnviroScreen-4.0/, accessed July 5, 2023.*

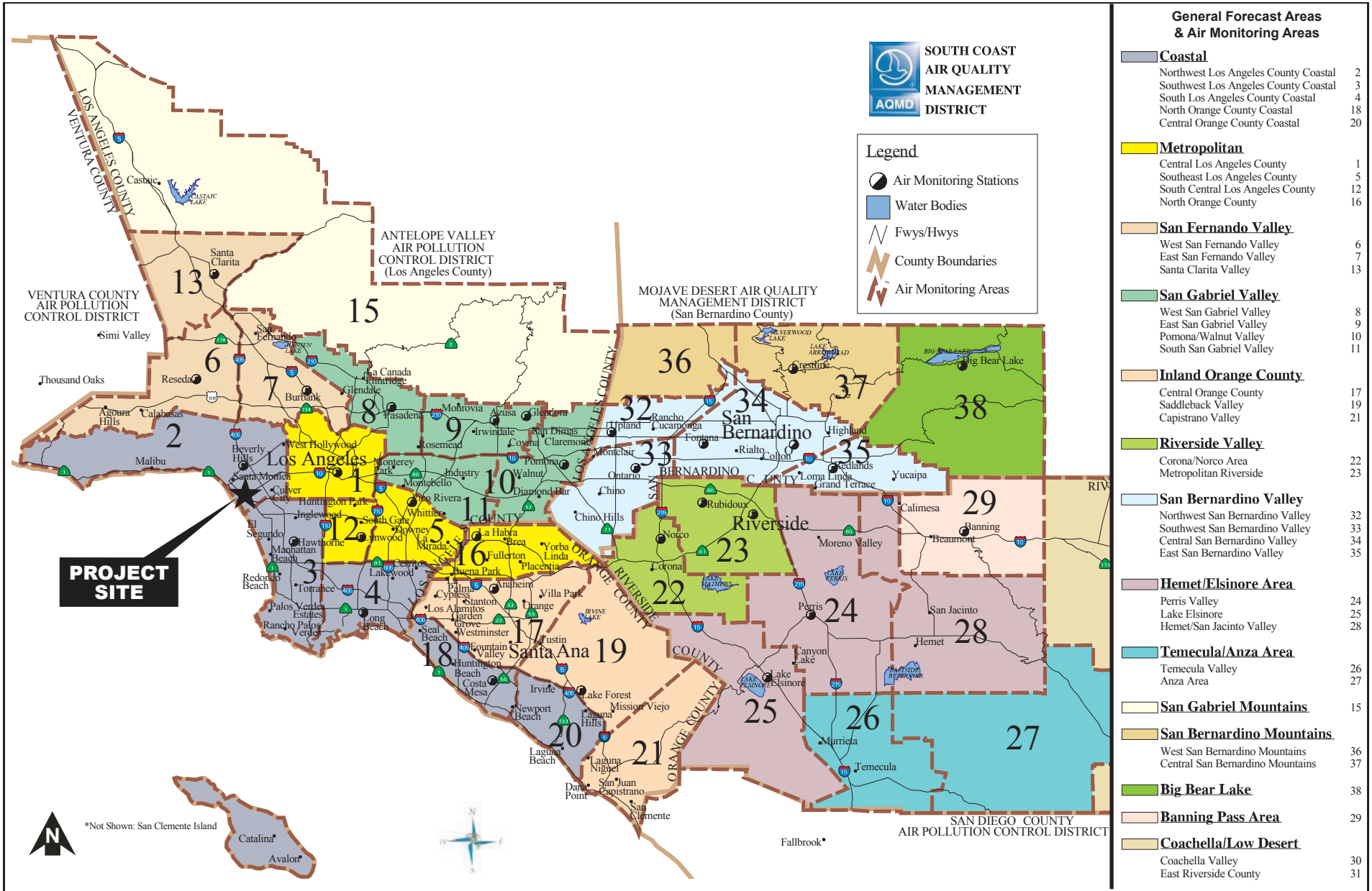

Figure IV.B-3
SCAQMD Source Receptor Areas

Source: Sierra Wade Associates, 2010.

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

Pollutant	Year		
	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	0.08
Days exceeding NAAQS (0.070 ppm)	2	22	1
Days exceeding CAAQS (0.07 ppm)	2	22	1
Respirable Particulate Matter (PM_{10})			
Maximum 24-hour Concentration (µg/m^3)	62	77	64
Days exceeding NAAQS (150 µg/m^3)	0	0	0
Days exceeding CAAQS (50 µg/m^3)	3	24	3
Annual Arithmetic Mean (µg/m3)	26	23	26
Does measured AAM exceed CAAQS (20 µg/m^3)?	**Yes**	**Yes**	**Yes**
Fine Particulate Matter ($PM_{2.5}$)			
Maximum 24-hour Concentration (µg/m^3)	44	47	61
Days exceeding NAAQS (35 µg/m^3)	1	2	12
Annual Arithmetic Mean (µg/m^3)	11	12	13
Does measured AAM exceed NAAQS (12 µg/m^3)?	No	**Yes**	**Yes**
Does measured AAM exceed CAAQS (12 µg/m^3)?	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	0.06
Days exceeding CAAQS (0.18 ppm)	0	0	0
Annual Arithmetic Mean (ppm)	0.02	0.02	0.01
Does measured AAM exceed NAAQS (0.0534 ppm)?	No	No	No
Does measured AAM exceed CAAQS (0.03 ppm)?	No	No	No
Sulfur Dioxide (SO_2)			
Maximum 1-hour Concentration (ppm)	0.01	0.004	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.B-2 (Continued)
Summary of Ambient Air Quality in the Project Vicinity

Pollutant	Year		
	2019	2020	2021
Lead[a]			
Maximum 30-day Average Concentration (µg/m^3)	0.012	0.013	0.012
Does measured concentration exceed NAAQS (1.5 µg/m^3)	No	No	No
Maximum Calendar Quarter Concentration (µg/m^3)	0.01	0.01	0.01
Does measured concentration exceed CAAQS (1.5 µg/m^3)	No	No	No
Sulfate			
Maximum 24-hour Concentration (µg/m^3)	5.1	3.3	4.4
Does measured concentration exceed CAAQS (25 µg/m^3)	No	No	No

AAM = annual arithmetic mean

ppm = parts per million by volume

µg/m^3 = micrograms per cubic meter

N/A = Not available at this monitoring station.

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

Source: South Coast Air Quality Management District Ambient Monitoring Data (2019–2021), www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed July 5, 2023.

SCAQMD developed the Facility Information Database (FIND), a web search tool that provides public information about SCAQMD-regulated facilities that are required to have a permit to operate equipment that release pollutants into the air.[39] A search was performed on the FIND and a site reconnaissance was conducted to identify potential air toxic emitting sources (e.g., freeways, diesel trucks idling at warehouse distribution facilities in excess of 100 trucks per day). Based on this screening analysis, no major sources of TACs were found within the Project vicinity.

(c) Surrounding Uses

As shown in Figure IV.B-5 on page IV.B-31, the Project Site is located in a highly urbanized area and includes a mix of low- to high-rise buildings containing a variety of land uses. Predominantly mid- to high-rise, high-density commercial, office, and multi-family residential uses line Lincoln Boulevard/Pacific Coast Highway, generally transitioning to lower density multi-family neighborhoods to the east and west of Lincoln Boulevard/Pacific

[39] *SCAQMD, Facility Information Detail (F.I.N.D.), www.aqmd.gov/nav/FIND, accessed May 5, 2022.*

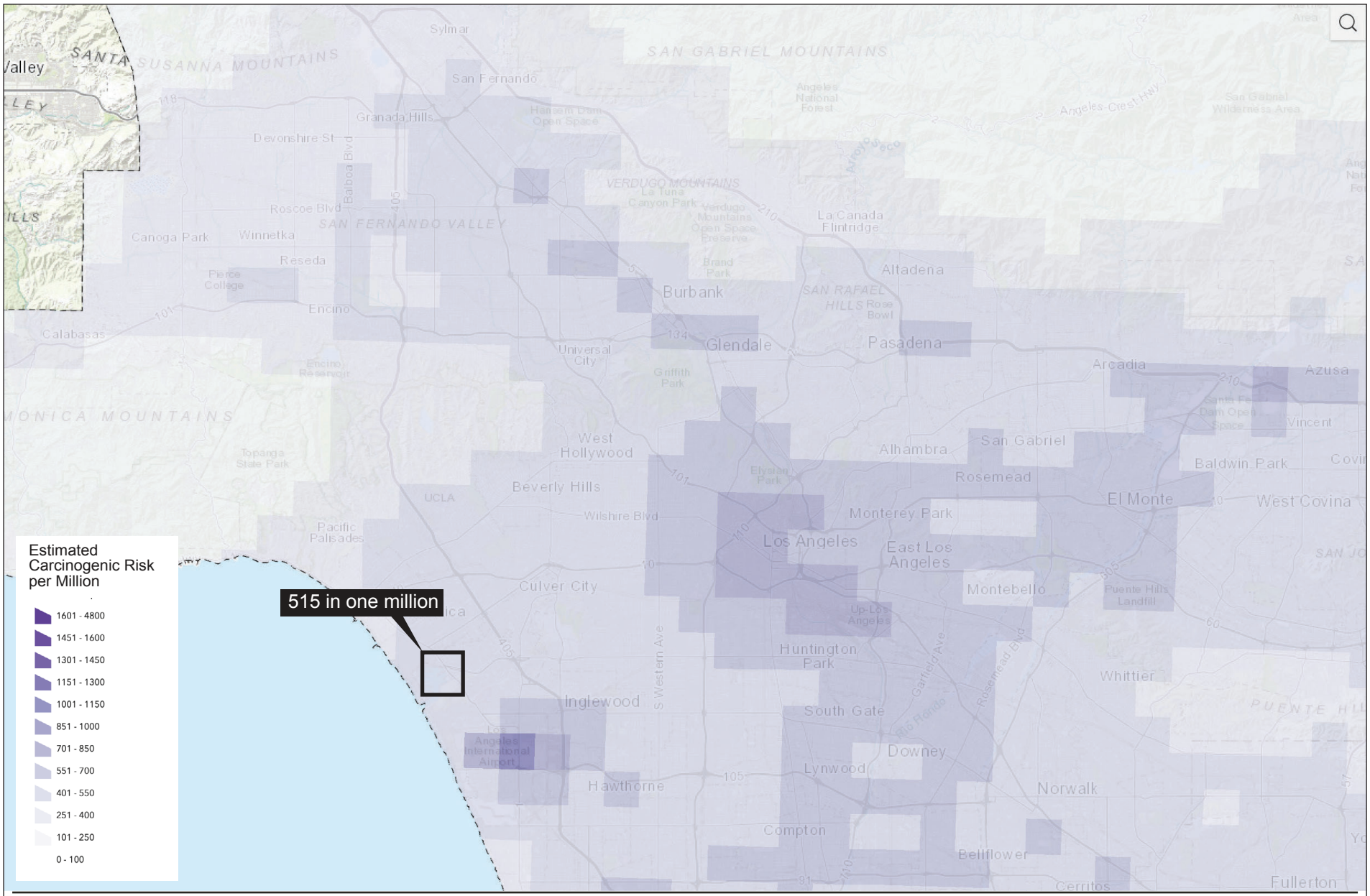

Figure IV.B-4
MATES V Total Cancer Risk for Project Area

Source: South Coast AQMD, 2021.

Figure IV.B-5
Air Quality Sensitive Receptor Locations

Source: Google Earth, 2016.

Coast Highway. Land uses surrounding the Project Site specifically include commercial, retail, and residential uses to the north-northeast, along Maxella Avenue; multi-family residential uses to the east, along Glencoe Avenue; additional Marina Marketplace shopping center-related commercial and retail uses and associated parking to the south; the six-story multi-family Stella apartment complex to the west; and the Hotel MdR and associated parking located southwest of the Project Site.

Some population groups, including children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to air pollution than others. As shown in Figure IV.B-5 on page IV.B-31, the closest sensitive land uses to the Project Site are residential uses associated with the Stella apartment complex located west of and directly adjacent to the Project Site.

(d) Existing Project Site Emissions

The Project Site is currently occupied by three structures, including a two-story Barnes & Noble bookstore located along the northeast corner of the Project Site, near the Maxella Avenue and Glencoe Avenue intersection; a single-story building providing a variety of retail uses located generally within the southern portion of the Project Site, along Glencoe Avenue; a two-story commercial and retail building located generally within the western portion of the Project Site; and surface parking and circulation areas. Vehicular access to the Project Site is currently available via driveways on Maxella Avenue and Glencoe Avenue. Pedestrian access is available from the vehicular access points and from other areas along Maxella Avenue and Glencoe Avenue.

Area source emissions are generated by maintenance equipment, landscape equipment, and use of products that contain solvents. In addition, energy source emissions are associated with building natural gas usage at the Project Site. Mobile source emissions from the existing uses are generated by motor vehicle trips to and from the Project Site. Table IV.B-3 on page IV.B-33 presents an estimate of the existing emissions within the Project Site.

Table IV.B-3
Estimated Existing Daily Regional Operational Criteria Pollutant Emissions

Emission Source	Pollutant Emissions (pounds per day)[a]					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Winter						
Area	2	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	15	16	120	<1	8	2
Stationary	<1	<1	<1	<1	<1	<1
Total Existing Emissions	**18**	**16**	**120**	**<1**	**8**	**2**
Summer						
Area	3	<1	4	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	16	14	131	<1	8	2
Stationary	<1	<1	<1	<1	<1	<1
Total Existing Emissions	**19**	**14**	**135**	**<1**	**8**	**2**

Numbers may not add up exactly due to rounding.

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

Source: Eyestone Environmental, 2023.

3. Project Impacts

a. Thresholds of Significance

(1) State CEQA Guidelines Appendix G

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

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

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

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

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

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

(2) 2006 L.A. CEQA Thresholds Guide

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

(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 Roads

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

(iv) Other Mobile Source Emissions

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

(b) Operation

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

Pollutant	Significance Threshold (lbs/day)
ROG	55
NO_X	55
CO	550
PM_{10}	150
SO_X	150

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

(c) Toxic Air Contaminants

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

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

(3) SCAQMD's CEQA Air Quality Handbook

To assist in answering the Appendix G Threshold questions and thresholds provided by SCAQMD, the City of Los Angeles utilizes SCAQMD's CEQA Air Quality Handbook and the thresholds of significance below as the guidance documents for the environmental review of development proposals within the Air Basin. Table IV.B-4 on page IV.B-37 shows SCAQMD's currently recommended significance thresholds, provide numerical thresholds for evaluating the significance of a project's estimated air quality emissions.

(a) Construction

Based on the criteria set forth in the SCAQMD's *CEQA Air Quality Handbook*,[40] the Project may have a significant impact with regard to construction emissions if any of the following would occur:

- Emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels identified in Table IV.B-4.

- Maximum on-site daily localized emissions exceed the Localized Significance Thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m^3] over a 1-hour period or 9.0 ppm [10,350 µg/m^3] averaged over an 8-hour period) and NO_2 (0.18 ppm [339 µg/m^3] over a 1-hour period, 0.1 ppm [188 µg/m^3] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [57 µg/m^3] averaged over an annual period).[41]

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

(b) Operation

Based on the criteria set forth in the SCAQMD's *CEQA Air Quality Handbook*,[42] the Project may have a significant impact with regard to operational emissions if any of the following would occur:

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

[41] *SCAQMD, LST Methodology, October 2009.*

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

Table IV.B-4
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds[a]		
Pollutant	**Construction**[b]	**Operation**[c]
NO_X	100 lbs/day	55 lbs/day
VOC[d]	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead[e]	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 Pollutants		
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)[e] & 2.5 $\mu g/m^3$ (operation) 1.0 $\mu g/m^3$	
$PM_{2.5}$ 24-hour average	10.4 $\mu g/m^3$ (construction)[e] & 2.5 $\mu g/m^3$ (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 $\mu g/m^3$ (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average Rolling 3-month average	1.5 $\mu g/m^3$ (state) 0.15 $\mu g/m^3$ (federal)	

lbs/day = pounds per day

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

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

[d] *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.*

[e] *While the South Coast Air Quality Management District CEQA Air Quality Handbook contains*

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

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 Recirculated Draft EIR.

Source: South Coast Air Quality Management District, 2019.

- Emissions from both direct and indirect sources would exceed any of the SCAQMD prescribed threshold levels identified in Table IV.B-4 on page IV.B-37.

- Maximum on-site daily localized emissions exceed the Localized Significance Thresholds (LST), resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an 8-hour period) and NO_2 (0.18 ppm over a 1-hour period, 0.1 ppm over a 3-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm averaged over an annual period).[43]

- Maximum on-site localized operational PM_{10} and $PM_{2.5}$ emissions exceed the incremental 24-hour threshold of 2.5 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.[44]

- 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 the SCAQMD's *CEQA Air Quality Handbook*, the Project may have a significant toxic air contaminant impact, if:[45]

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

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[43] *SCAQMD, LST Methodology.*

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

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

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

- The project results in the exposure of sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0.[46] For projects with a maximum incremental cancer risk between 1 in one million and 10 in one million, a project would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

(d) Consistency with Applicable Air Quality Plans

Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with the SCAQMD's *CEQA Air Quality Handbook*,[47] the following criteria were used to evaluate the Project's consistency with SCAQMD and SCAG regional plans and policies, including the AQMP:

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

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

[47] *SCAQMD, CEQA Air Quality Handbook, April 1993, p. 12-3.*

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

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

(e) Cumulative Impacts

Based on SCAQMD guidance, individual construction projects that exceed 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.[48] 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.*[49]

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

b. Methodology

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.

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[48] *Wong, Jillian, SCAQMD CEQA Specialist, personal communication, August 8, 2016.*

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

SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*.[50]

In order to assist the CEQA practitioner in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/information is provided on the SCAQMD website (www.aqmd.gov/ceqa/hdbk.html) and includes: (1) EMission FACtor model (EMFAC) on-road vehicle emission factors; (2) background CO concentrations; (3) localized significance thresholds; (4) mitigation measures and control efficiencies; (5) mobile source toxics analysis; (6) off-road mobile source emission factors; (7) $PM_{2.5}$ significance thresholds and calculation methodology; and (8) updated SCAQMD Air Quality Significance Thresholds. The SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

SCAQMD has also adopted land use planning guidelines in the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, which considers impacts to sensitive receptors from facilities that emit TAC emissions.[51] SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity of freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risks. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

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

(1) Construction Emissions Methodology

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

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[50] *SCAQMD, Air Quality Analysis Handbook, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed August 21, 2020.*

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

demolition and various soil-handling activities. Mobile source emissions, primarily NO_X, 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 were forecasted based on the proposed, conservative construction schedule (assuming all construction occurs at the earliest feasible date) and applying the mobile-source and fugitive dust emissions factors derived from the SCAQMD recommended California Emissions Estimator Model (CalEEMod). 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 the City.

CalEEMod is based on outputs from Off-road Emissions Inventory Program model[52] (OFFROAD) and EMFAC,[53] which are emissions estimation models developed by CARB, and used to calculate emissions from construction activities, including off- and on-road vehicles, respectively. CalEEMod also relies upon known emissions data associated with certain activities or equipment (often referred to as "default" data, values or factors) that can be used if site-specific information is not available. CalEEMod contains default values to use in each specific local air district region. Default values within CalEEMod were obtained from a survey of construction sites conducted by SCAQMD. The construction survey data was used to determine appropriate construction equipment based on lot size and project type.[54] Appropriate statewide default values can be used, if regional default values are not defined.

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[52] *CARB, MSEI, Documentation, Off-Road, Diesel Equipment, ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msei-documentation-road, accessed May 5, 2022.*

[53] *CARB, EMFAC 2021, https://arb.ca.gov/emfac/, accessed May 5, 2022.*

[54] *CAPCOA, California Emissions Estimator Model, Appendix E1: Construction Survey and SCAQMD, October 2017.*

The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Construction tasks were aggregated to reflect overlapping tasks and identify the reasonably expected maximum construction emissions occurring over the course of Project construction. To be conservative, this analysis evaluates the Project's air quality impacts during construction based on reasonably expected maximum construction emissions even though such emissions would not occur throughout the entire construction phase. Details of the modeling assumptions and emission factors are provided in Appendix B of this Recirculated 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 the SCAQMD's localized significance thresholds (LST) methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling, where appropriate.[55] SCAQMD provides LSTs applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. SCAQMD does not provide an LST for SO_2, Pb, and H_2S since land use development projects typically result in negligible construction and long-term operation emissions of these pollutants. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. These ambient air quality standards were established at levels that provide public health protection and allow an adequate margin of safety, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to 5 acres. For projects that exceed 5 acres, the 5-acre LST look-up values can be used as a screening tool to determine which pollutants require

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

detailed analysis.[56] This approach is conservative as it assumes that all on-site emissions would occur within a 5-acre area and would over predict potential localized impacts (i.e., more pollutant emissions occurring within a smaller area and within closer proximity to potential sensitive receptors). As an example, if a project site is 10 acres (40,470 square meters) with an emission rate of 100 pounds per day from on-site activities, then the pollutant emissions would result in 0.0025 pounds per square meter per day. If the same amount of pollutant emissions occurred over a 5-acre site, then the emission rate would be 0.005 pounds per square meter per day or double the emission rate per square meter. The AERMOD dispersion model is a Gaussian model, so a receptor's pollutant concentration from area and volume sources is proportional to the distance to receptor and pollutant emission rate. A higher emission rate would result in a higher pollutant concentration at a receptor given the same distance. A larger site would cause emissions to be more spread out resulting in lower fenceline concentrations due to increased dispersion. If the same emissions were assumed for a smaller site, emissions would be concentrated within a smaller area resulting in higher fenceline concentrations. As shown in the SCAQMD's LST look-up tables, an increase in the site acreage from 1, 2, to 5 acres allows for more pollutant emissions without exceeding significance thresholds. If the project exceeds the LST look-up values, then the SCAQMD recommends that project specific air quality modeling be performed.

(2) Operation

(a) Regional Emissions

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

Criteria pollutants are also emitted during the generation of electricity at fossil fuel power plants. When electricity is used in buildings, the electricity generation typically takes place offsite 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

[56] *Telephone Conversation, Ian MacMillan, SCAQMD CEQA Program Supervisor, November 10, 2011.*

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 building electricity use.

Similar to construction, SCAQMD's CalEEMod software was used for the evaluation of Project emissions during operation. Mobile-source emissions were calculated within CalEEMod. However, CalEEMod default VMT was bypassed to account for the Project-related VMT provided using the Los Angeles Department of Transportation (LADOT) VMT Calculator. The VMT Calculator was developed by the City and LADOT to comply with SB 743, which requires lead agencies to adopt VMT criteria to determine transportation-related impacts.

Previously, trip generation for land uses was calculated based on survey data collected by the Institute of Transportation Engineers (ITE). However, these ITE trip generation rates were based on data collected at suburban, single-use, free-standing sites, which may not be representative of urban mixed-use environments. Beginning in 2019, the USEPA has sponsored a study to collect travel survey data from mixed-use developments in order provide a more representative trip generation rate for multi-use sites. Results of the USEPA survey indicate that trip generation and VMT are affected by factors such as resident and job density, availability of transit, and accessibility of biking and walking paths. Based on these factors, the USEPA has developed equations known as the EPA Mixed-Use Development (MXD) model to calculate trip reductions for multi-use developments.[57] 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.[58]

By default, CalEEMod calculates Project VMT based on the number of trips generated by the Project, multiplied by default trip lengths for Los Angeles County. However, for consistency the Project's trips and VMT calculated by the LADOT VMT Calculator were input directly into CalEEMod. CalEEMod then converts EMFAC2014 emission rates into CalEEMod vehicle emission factors.[59] The LADOT VMT Calculator estimates the reduction in trips and VMT by calculating the internal capture of trips within

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[57] *Environmental Protection Agency, Mixed-Use Trip Generation Model. www.epa.gov/smartgrowth/mixed-use-trip-generation-model, accessed on May 5, 2022.*

[58] *Linscott Law & Greenspan, Transportation Assessment for the Paseo Marina Project, July 2021.*

[59] *CAPCOA, California Emissions Estimator Model, Appendix A: Calculation Details for CalEEMod, May 2021.*

mixed-use developments as well as walking and transit use for trips starting or ending in mixed-use developments.

Area source emissions are based on landscaping equipment and consumer product usage (including paints) rates provided in CalEEMod. Energy (natural gas) usage factors in CalEEMod are based on the California Energy Commission California Commercial End Use Survey data set, which provides energy demand by building type and climate zone. Emissions associated with use of emergency generators were calculated using CalEEMod, in which emission factors are based on Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel Engines) from EPA's AP-42: Compilation of Air Pollutant Emission Factors. In addition, the emergency generator would also be required to comply with particulate matter limits provided in Table 1 of SCAQMD Rule 1470. The emissions are based on the horsepower rating of the diesel generator and the number of hours operated per year for testing purposes.

To determine if a significant air quality impact would occur, the net increase in regional operational emissions generated by the Project was compared against the SCAQMD's significance thresholds.[60]

(b) Localized Emissions

(i) On-Site Emissions

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

(ii) Off-Site Emissions

Potential localized CO concentrations from induced traffic at nearby intersections are addressed consistent with the methodologies and assumptions used in the consistency analysis provided in the 2003 AQMP.[61]

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[60] *SCAQMD, SCAQMD Air Quality Significance Thresholds, revised April 2019. SCAQMD based these thresholds, in part, on the federal Clean Air Act and, to enable defining "significant" for CEQA purposes, defined the setting as the South Coast Air Basin. (See SCAQMD, CEQA Air Quality Handbook, April 1993, pp. 6-1–6-2.).*

[61] *The latest CO hotspots modeling and attainment demonstration was performed as part of the 2003 AQMP. Results of the attainment demonstration were eventually incorporated into the redesignation request and approved by the USEPA.*

It has long been recognized that CO exceedances are caused by vehicular emissions,[62] primarily when idling at intersections.[63,64] 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.[65] Since the first regulation of CO emissions from vehicles (model year 1966) in California, vehicle emissions standards for CO applicable to light duty vehicles have decreased by 96 percent for automobiles,[66,67] and new cold weather CO standards have been implemented, effective for the 1996 model year.[68] 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).[69] With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the Air Basin have steadily declined.

The analysis prepared for CO attainment in the Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the Air Basin. CO attainment was thoroughly analyzed as part of the 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).[70] As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of the 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in the Los Angeles area at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland

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

63 *SCAQMD, CEQA Air Quality Handbook, Section 4.5, 1993.*

64 *SCAQMD, Air Quality Management Plan, 2003.*

65 *USEPA, Milestone in Auto Emissions Control, August 1994.*

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

67 *Kavanagh, Jason, Untangling U.S. Vehicle Emissions Regulations, 2008.*

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

69 *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.*

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

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.[71] The Los Angeles County Metropolitan Transportation Authority 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.[72] 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 using California LINE Source Dispersion Model, version 4 (CALINE4), which is a model used to assess air quality impacts near transportation facilities (i.e., roadways, intersections, street canyons, and parking facilities).

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

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.[73] SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity of freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). The SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

Potential TAC impacts are evaluated by conducting a qualitative analysis consistent with CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).[74] SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air*

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

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

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

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

Quality Issues in General Plans and Local Planning.[75] Given that Page 2-3 of the SCAQMD guidance states that "the potential for public health impacts remains unchanged when siting sensitive receptors near a pollution source or a pollution source near a sensitive receptor," the City as Lead Agency has elected to use the siting distances in Table 1-1 of the CARB Handbook for evaluating health risk impacts from both TAC sources and sensitive uses. The qualitative analysis consists of reviewing the Project to identify any new or modified TAC emissions sources. If the qualitative evaluation does not rule out significant impacts from a new source, or modification of an existing TAC emissions source, a more detailed analysis is conducted. For the detailed analysis, downwind sensitive receptor locations are identified, and site-specific dispersion modeling is conducted to estimate Project impacts.

c. Project Design Features

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

d. Analysis of Project Impacts

As set forth in Section II, Project Description, of this Recirculated Draft EIR, the Project proposes two development options—Option A and Option B. Under Option A, the Project proposes the development of 658 multi-family residential units and 27,300 square feet of neighborhood-serving commercial uses, including approximately 13,650 square feet of retail space and approximately 13,650 square feet of restaurant space. Option B proposes the development of 425 multi-family residential units, 90,000 square feet of office space, and 40,000 square feet of neighborhood-serving commercial uses, including approximately 20,000 square feet of retail space and approximately 20,000 square feet of restaurant space. Both development options are evaluated in the following analysis.

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

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

To assess whether Option A or Option B of the Project would conflict with or obstruct implementation of an applicable air quality plan, this analysis evaluates the Project's consistency with SCAQMD's 2016 and 2022 AQMPs and SCAG's 2016–2040 and 2020–2045 RTP/SCS'. In accordance with SCAQMD's *CEQA Air Quality Handbook*, Chapter 12, the following criteria are considered as part of this evaluation:

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

(i) Criterion 1

The Project is an infill mixed-use development near transit bus service (Metro, LADOT Transit Commuter Express, Culver CityBus, and City of Santa Monica Big Blue Bus) within an existing urbanized area that would concentrate new residential, office (Option B), restaurant, and retail uses within a SCAG-designated HQTA. This means the Project advances regional goals to reduce VMT through infill development near transit services that has the co-benefit of reducing air emissions compared to the average regional project. As shown below, the Project, under either Option A or Option B, would not exceed any SCAQMD localized significance thresholds for air quality emissions.

Localized concentrations of NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ have been analyzed for both Option A and Option B. Due to California Low Sulfur Diesel Fuel requirements,

calculations shown below demonstrate that SO_2 emissions would be negligible during construction and long-term operations, and, therefore, would not have the potential to cause or affect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

The Project's maximum potential NO_X, CO, PM_{10}, and $PM_{2.5}$ daily emissions during construction were analyzed to ascertain potential effects on localized concentrations and to determine if there is a potential for such emissions to cause or affect a violation of an applicable ambient air quality standard. As shown in Table IV.B-9 on page IV.B-73 in the analysis below, maximum construction emissions would not exceed the SCAQMD-recommended localized screening thresholds for NO_X, CO, PM_{10}, and $PM_{2.5}$. **Therefore, Project construction of either Option A or Option B would not result in a significant impact with regard to localized air quality.**

Because the Project would not introduce any substantial stationary sources of emissions, CO is the preferred benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.[76] As indicated below, under the analysis for Threshold (c), no intersections would require a CO hotspot analysis, and impacts would be less than significant. **Therefore, neither Project Option A nor Option B would increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.**

As discussed above, an analysis of potential localized operational impacts from on-site activities was conducted. As shown in Table IV.B-10 on page IV.B-75 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, neither Project Option A nor Option B would delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.**

(ii) Criterion 2

The projections in the AQMPs 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;

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

(2) project mitigation measures; and (3) appropriate incorporation of AQMP control measures. The following discussion provides an analysis with respect to each of these three criteria.

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

A project is consistent with the 2016 and 2022 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 AQMPS, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's 2016–2020 and 2020–2045 RTP/SCS'.

As described in Section IV.H, Land Use and Planning, of this Recirculated Draft EIR, the City's General Plan serves as a comprehensive, long-term plan for future development of the City. SCAG's adopted the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS, which are included in the 2016 and 2022 AQMPs respectively. Both RTP/SCS' provide socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review.

The Project would generate short-term construction jobs, but these jobs would not necessarily bring new construction workers or their families into the region since construction workers are typically drawn from an existing regional pool of construction workers who travel among construction sites within the region as individual projects are completed and are not typically brought from other regions to work on developments such as the Project. Moreover, these jobs would be relatively small in number and temporary in nature. Therefore, the Project's construction jobs would not conflict with the long-term employment or population projections upon which the 2016 and 2022 AQMPs are based.

According to SCAG's 2016–2040 RTP/SCS, the forecasted population for the City of Los Angeles Subregion in 2023 is approximately 4,145,604 persons.[77] As compared to

[77] *Based on a linear interpolation of 2012–2040 data. The 2023 extrapolated value is calculated using SCAG's 2012 and 2040 values to find the average increase between years and then applying that annual increase to 2020: ((4,609,400 – 3,845,500) ÷ 28)*11) + 3,845,500 = 4,145,604.*

SCAG's 2020–2045 RTP/SCS, the forecasted population for the City's Subregion in 2023 is approximately 4,135,955 persons.[78]

According to the 2016–2040 RTP/SCS, in 2027, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have a population of approximately 4,254,732 persons.[79] Therefore, the projected population growth between 2023 and 2027 is approximately 109,129 persons. Based on a household size factor of 2.25 persons per household for multi-family housing units, the Project under Option A is estimated to generate a residential population of 1,481 persons at full buildout.[80,81] The estimated 1,481 residents generated by the Project under Option A would represent approximately 1.36 percent of the population growth forecasted by SCAG in the City of Los Angeles Subregion between 2023 and 2027. The Project under Option B is estimated to generate a residential population of 957 persons at full buildout.[82] The estimated 957 residents generated by the Project under Option B would represent approximately 0.88 percent of the population growth forecasted by SCAG in the City of Los Angeles Subregion between 2023 and 2027.

According to the 2020–2045 RTP/SCS, in 2027, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have a population of approximately 4,251,472 persons.[83] Therefore, the projected population growth between 2023 and 2027 is approximately 115,517 persons. Based on a household size factor of 2.25 persons per household for multi-family housing units, the Project under Option A is estimated to generate a residential population of 1,481 persons at full buildout.[84,85] The estimated 1,481 residents generated by the Project under Option A would represent

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[78] *Based on a linear interpolation of 2016–2045 data. The 2023 extrapolated value is calculated using SCAG's 2016 and 2045 values to find the average increase between years and then applying that annual increase to 2023: ((4,771,300 – 3,933,800) ÷ 29)*7) + 3,933,800 = 4,135,955.*

[79] *Based on a linear interpolation of 2012–2040 data. The 2027 extrapolated value is calculated using SCAG's 2012 and 2040 values to find the average increase between years and then applying that annual increase to 2027 ((4,609,400 – 3,845,500) ÷ 28)*15) + 3,845,500 = 4,254,732.*

[80] *Based on employment generation factors from City of Los Angeles VMT Calculator Documentation, May 2020, Table 1.*

[81] *658 * 2.25 = ~1,481 persons.*

[82] *425 * 2.25 = ~957 persons.*

[83] *Based on a linear interpolation of 2016–2045 data. The 2027 extrapolated value is calculated using SCAG's 2016 and 2045 values to find the average increase between years and then applying that annual increase to 2027 ((4,771,300 – 3,933,800) ÷ 28)*15) + 3,993,800 = 4,251,472.*

[84] *Based on employment generation factors from City of Los Angeles VMT Calculator Documentation, May 2020, Table 1.*

[85] *658 * 2.25 = ~1,481 persons.*

approximately 1.28 percent of the population growth forecasted by SCAG in the City of Los Angeles Subregion between 2023 and 2027. The Project under Option B is estimated to generate a residential population of 957 persons at full buildout.[86] The estimated 957 residents generated by the Project under Option B would represent approximately 0.83 percent of the population growth forecasted by SCAG in the City of Los Angeles Subregion between 2023 and 2027.

With regard to employment, according to SCAG's 2016–2040 RTP/SCS, the employment forecast for the City of Los Angeles Subregion in 2023 is approximately 1,882,104 employees.[87] As compared to SCAG's 2020–2045 RTP/SCS, the forecasted population for the City's Subregion in 2023 is approximately 1,917,721 employees.[88]

As projected by the 2016–2040 RTP/SCS, in 2027, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have approximately 1,949,632 employees.[89] Therefore, the projected employment growth in the City between 2023 and 2027 based on SCAG's 2020–2045 RTP/SCS is approximately 67,529 employees. The 27,300 square feet of commercial uses proposed under Option A would generate approximately 82 employees.[90] Under Option B, the development of up to 90,000 square feet of office uses and 40,000 square feet of neighborhood-serving retail and restaurant uses would generate approximately 480 employees.[91] Thus, the Project's 82 estimated employees under Option A would constitute approximately 0.12 percent of the employment growth forecasted between 2023 and 2027. The Project's 480 estimated employees under Option B would constitute approximately 0.71 percent of the employment growth forecasted between 2023 and 2027.

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[86] *425 * 2.25 = ~957 persons.*

[87] *Based on a linear interpolation of 2012 and 2040 data. The 2023 extrapolated value is calculated using SCAG's 2012 and 2040 values to find the average increase between years and then applying that annual increase to 2023: ((2,169,100 – 1,696,400) ÷ 28) * 11) + 1,696,400 = 1,882,104.*

[88] *Based on a linear interpolation of 2016–2045 data. The 2023 extrapolated value is calculated using SCAG's 2016 and 2045 values to find the average increase between years and then applying that annual increase to 2023: ((2,135,900 – 1,848,300) ÷ 29)*7) + 1,848,300 = 1,917,712.*

[89] *Based on a linear interpolation of 2012 and 2040 data. The 2027 extrapolated value is calculated using SCAG's 2012 and 2040 values to find the average increase between years and then applying that annual increase to 2027: ((2,169,100 – 1,696,400) ÷ 28) * 15) + 1,696,400 = 1,949,632.*

[90] *Based on employment generation factors from City of Los Angeles VMT Calculator Documentation, May 2020, Table 1.*

[91] *Based on employment generation factors from City of Los Angeles VMT Calculator Documentation, May 2020, Table 1.*

As projected by the 2020–2045 RTP/SCS, in 2027, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have approximately 1,957,390 employees.[92] Therefore, the projected employment growth in the City between 2023 and 2027 based on SCAG's 2020–2045 RTP/SCS is approximately 39,669 employees. The 27,300 square feet of commercial uses proposed under Option A would generate approximately 82 employees.[93] Under Option B, the development of up to 90,000 square feet of office uses and 40,000 square feet of neighborhood-serving retail and restaurant uses would generate approximately 480 employees.[94] Thus, the Project's 82 estimated employees under Option A would constitute approximately 0.21 percent of the employment growth forecasted between 2023 and 2027. The Project's 480 estimated employees under Option B would constitute approximately 1.21 percent of the employment growth forecasted between 2023 and 2027.

The Project would be consistent with both the growth projections in the AQMP and 2020–2045 RTP/SCS, meaning the AQMP and 2020–2045 RTP/SCS took into account development such as the Project in its modeling and analysis, and the 2020–2045 RTP/SCS vehicle trip and VMT reduction goals and policies. Since these growth assumptions are built into the 2022 Final AQMP attainment demonstration of national and state standards,[95] it is also expected that the Project would not delay the attainment of national and state standards. SCAQMD guidance provides that projects whose growth is included in the projections used in the formulation of the AQMP are considered to be consistent with the AQMP and not to interfere with its attainment, even if a project results in emissions of air pollutants that exceed applicable significance thresholds.[96] **Because 2016–2040 RTP/SCS projections form the basis of the 2016 AQMP and the 2020–2045 RTP/SCS projections form the basis of the 2022 AQMP, the Project would be consistent with the projections in the AQMPs.**

- Does the project implement feasible air quality mitigation measures?

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[92] *Based on a linear interpolation of 2016 and 2045 data. The 2027 extrapolated value is calculated using SCAG's 2016 and 2045 values to find the average increase between years and then applying that annual increase to 2027: ((2,135,900 – 1,848,300) ÷ 29) * 11) + 1,848,300 = 1,957,390.*

[93] *Based on employment generation factors from City of Los Angeles VMT Calculator Documentation, May 2020, Table 1.*

[94] *Based on employment generation factors from City of Los Angeles VMT Calculator Documentation, May 2020, Table 1.*

[95] *SCAQMD, NAAQS/CAAQS and Attainment Status for South Coast Air Basin, 2016, www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=2. Accessed May 5, 2022.*

[96] *SCAQMD, CEQA Air Quality Handbook, p. 12-1.*

The Project would comply with all applicable regulatory standards (e.g., SCAQMD Rule 403, etc.) as required by the SCAQMD, as summarized above. The Project also would incorporate project design features to support and promote environmental sustainability as discussed in Section IV.E, Greenhouse Gas Emissions, of this Recirculated Draft EIR. While these features are designed primarily to reduce GHG emissions, they would also serve to reduce the criteria air pollutants discussed herein. Furthermore, implementation of Mitigation Measure AIR-MM-1, which includes requirements to include Tier 4 Final off-road construction equipment would reduce regional construction air quality impact to be less than significant. **As such, the Project meets this AQMP consistency criterion since feasible mitigation measures, which would reduce air quality impacts, would be implemented.**

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

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the AQMP with those prepared by SCAG. Appendix IV-C to the 2016 and 2022 AQMPs for the Air Basin, include the regional land use and transportation strategies and the transportation control measures contained in SCAG's 2016–2040 and 2020–2045 RTP/SCS, respectively.

For land use developments, such as the Project, the AQMP's land use control measures (i.e., goals and policies) focus on the reduction of vehicle trips and VMT. The Project represents an infill development within an existing urbanized area that would concentrate new residential and commercial retail uses within a HQTA. The Project would be designed and constructed with sustainability and transit orientation as guiding principles. The Project is based on principles of smart growth and environmental sustainability, as evidenced in its mixed-use nature, the accessibility of public transit, and the availability of existing infrastructure to service the proposed uses. As further discussed in Section IV.H, Land Use and Planning, of this Recirculated Draft EIR, the Project is in proximity to a variety of public transit options provide by Metro, LADOT Transit Commuter Express, Culver CityBus, and City of Santa Monica Big Blue Bus. In addition, the Project would provide required short- and long-term bicycle parking spaces in compliance with the requirements of the Los Angeles Municipal Code (LAMC). The increase in transit accessibility and the bicycle parking spaces provided on-site would further reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation. The Project design would also provide pedestrian access that minimizes barriers and links the Project Site with external streets to encourage people to walk instead of drive. By designing the Project to incorporate these land use strategies identified in the 2020–2045 RTP/SCS, the Project would serve to both reduce length and number of trips of

automobiles, thereby reducing vehicle emissions. Furthermore, the Project would comply with the City's EV charging requirements, which specify that 10 percent of new parking spaces would require EV charging equipment. In addition, 30 percent of all new parking spaces would be required to be EV "ready," which will be capable of supporting future EV charging equipment.

Accounting for these VMT reduction features, the LADOT VMT Calculator shows that the Project results in a 19.4-percent reduction in overall VMT under Option A and a 18.8 reduction (35.0-percent reduction with incorporation of Mitigation Measure TR-MM-1) under Option B (see Appendix J of this Recirculated Draft EIR).[97] **Accordingly, the Project would support AQMP and RTP/SCS objectives of reducing VMT and the related vehicular air emissions.**

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of the Project on air quality in the Air Basin. The Project represents an infill development within an existing urbanized area that would concentrate new residential and commercial retail 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 implement measures for control of NO_X. Also, the Project would be consistent with the goals and policies of the AQMP for the control of fugitive dust. **As discussed above, the Project, under either Option A or Option B, would be consistent with the goals and policies of the AQMP and, therefore, is considered consistent with SCAQMD's AQMP.**

(b) City of Los Angeles Policies

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

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

[97] *The 2020–2045 RTP/SCS reflects CARB's updated SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035.*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

As an infill development located in a HQTA, the Project advances regional and City goals to reduce VMT and related vehicle emissions, which has the co-benefit of decreasing air pollutants from mobile sources. In particular, the Project would provide required short- and long-term bicycle parking spaces in compliance with the requirements of the Los Angeles Municipal Code (LAMC). The Project is also located in an area well-served by public transit provided by Los Angeles County Metropolitan Transit Authority, Los Angeles Department of Transportation Transit Commuter Express, Culver City Bus, and City of Santa Monica Big Blue Bus. Specifically, the Project Site is currently served by a total of 12 bus routes. As such, the Project would provide opportunities for the use of alternative modes of transportation, including convenient access to public transit and opportunities for walking and biking, thereby facilitating a reduction in VMT. Furthermore, the Project includes neighborhood-serving commercial uses, including retail and restaurant uses that would primarily serve Project residents, thereby reducing VMT that would otherwise be required to travel to similar retail uses elsewhere in the community. Additionally, the Project would be consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near transit options. The Project also includes entrances to the Project Site for pedestrians and bicyclists that would be safe, easily accessible, and a short distance from transit stops. A more detailed analysis of the Project's consistency with the City's General Plan is presented in Table IV.B-5 on page IV.B-60, which identifies specific goals and policies of the City's General Plan and demonstrates the Project's consistency with these goals.

Based on the above, the Project is consistent or not conflict with applicable policies of the City of Los Angeles Air Quality Element. Specifically, development of the Project would include implementation of certain features that would serve to reduce vehicular trips, reduce VMT, and encourage use of alternative modes of transportation.

Refer to Section IV.H, Land Use and Planning, of this Recirculated Draft EIR, for an analysis of the Project's consistency with the City's General Plan. As concluded therein, the Project would serve to implement applicable policies of the City of Los Angeles pertaining to air quality. Specifically, development of the Project would include implementation of certain features that would serve to reduce vehicular trips, reduce VMT, and encourage use of alternative modes of transportation.

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

Recommendation	Analysis of Project Consistency
Air Quality Element	
Goal 1: Good air quality and mobility in an environment of continued population growth and health economic structure.	**No Conflict.** The Project would reduce VMT since it is within an HQTA, as identified by SCAG. As such, Project residents can live near their work and have access to convenient modes of transportation that provide options for reducing reliance on automobiles, thereby minimizing associated air pollutant emissions. As discussed in more detail in Section IV.E Greenhouse Gas Emissions, of this Recirculated Draft EIR, the Project would be consistent with the City of Los Angeles Green Building Code and the State of California Green Building Standards Code (CALGreen Code) and incorporates project design features to promote environmental sustainability and energy efficiency including meeting the standards of LEED Silver® or equivalent green building standards.
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.	**No Conflict.** 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 2016–2040 RTP/SCS and 2020–2045 RTP/SCS that are similar to those used in preparing the 2016 AQMP and 2022 AQMP respectively. This development within an HQTA would be served by a total of 12 bus routes. In addition, the Project Site's proximity to a variety of commercial uses and services would allow residents of the Project Site to walk to nearby destinations to meet their shopping needs, thereby reducing VMT and improving air quality. The Project would reduce air pollutants, 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.	**No Conflict.** The Project Site 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 the CARB In-Use Off-Road Diesel Vehicle Regulation, which aims to reduce emissions through the installation of diesel particulate matter filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. In addition, the Project would not have large areas of unpaved surfaces and would also replace existing surface parking areas. Parking areas would be maintained with good housekeeping practices.
Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.	**No Conflict.** The Project Site is located in an area in proximity to a regional job center, commercial uses, and other residential developments thereby reducing the distance traveled for future residents and employees, respectively. Future residents and employees on the

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

Recommendation	Analysis of Project Consistency
	Project Site would be served by a total of 12 bus routes and have access to short- and long-term bicycle parking spaces in compliance with the requirements of the LAMC. The Project's proximity to both job centers and retail, and the option to use alternative modes of transportation would reduce reliance on single-occupant vehicles, consistent with this goal.
Objective 2.1: It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.	**No Conflict.** The Project is in an HQTA, as designated by SCAG, and well served by 12 bus routes. The Project would include housing, office (Option B), retail, restaurant, and open space, in one location, which would reduce trips and encourage employees to utilize alternative modes of transportation. The Project would also provide bicycle parking spaces in compliance with the requirements of LAMC, which would further encourage the use of alternative transportation.
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.	**No Conflict**. This Project is in an HQTA and well served by 12 bus routes and would develop uses, including housing, office (Option B), retail, restaurant, and open space, in one location. The Project would incorporate pedestrian pathways that would connect to the existing sidewalk network.
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.	**No Conflict.** The Project proposes the redevelopment of the Project Site within an HQTA, as designated by SCAG. The Project Site's location would facilitate a reduction of vehicle trips and associated VMT. The Project is also consistent with the 2022 AQMP and 2020–2045 RTP/SCS.
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.	**No Conflict.** The Project analysis of potential air quality impacts relied upon the numeric indicators established by SCAQMD, which considers attainment of the ambient air quality standards. Air quality impacts would be less than significant with incorporation of Mitigation Measures AIR-MM-1 and would not cause or contribute to an exceedance of the ambient air quality standards. The Project also incorporates land use characteristics, including a mix of residential and commercial uses and bicycle parking that would reduce land use planning-related air pollutant emissions.
Objective 4.2: It is the objective of the City of Los Angeles to reduce vehicle trips and VMT associated with land use patterns.	**No Conflict.** The Project, which is in an HQTA and well served by 12 bus routes, would develop a mix of uses, including housing, office (Option B), retail, restaurant, and open space in one location which would reduce trips and VMT associated with land use patterns.
Policy 4.2.2: Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.	**No Conflict.** The Project would develop a mix of uses, including housing, office (Option B), retail, restaurant, and open space in one location, thereby facilitating

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

Recommendation	Analysis of Project Consistency
	accessibility to a variety of uses.
Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	**No Conflict.** The Project would incorporate pedestrian pathways that would connect to the existing sidewalk network. The Project would also comply with City requirements for providing electric vehicle charging capabilities and electric vehicle charging stations within the proposed parking areas. Also, in the vicinity of the Project Site is the Marvin Braude Bike Trail, which runs from Will Rogers State Beach in Pacific Palisades to Washington Boulevard west of the Project Site. Furthermore, Maxella Avenue and Glencoe Avenue, segments of which border the Project Site, are designated as part of the City's Neighborhood Enhanced Network (NEN), a selection of streets that provide safe routes for non-motorized modes of travel such as bicycling.
Policy 4.2.4: Require that air quality impacts be a consideration in the review and approval of all discretionary projects.	**No Conflict.** The environmental review conducted for the Project includes an analysis of air quality impacts; the decision-maker(s) for the discretionary actions would be responsible for determining that the environmental review was conducted in compliance with CEQA.
Policy 4.2.5: Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	**No Conflict.** The Project, which is in an HQTA and well served by 12 bus routes, would develop a mix of uses, including housing, office (Option B), retail, restaurant, and open space in one location which would reduce trips and encourage alternative transit. Also, in the vicinity of the Project Site is the Marvin Braude Bike Trail, which runs from Will Rogers State Beach in Pacific Palisades to Washington Boulevard west of the Project Site. Furthermore, Maxella Avenue and Glencoe Avenue, segments of which border the Project Site, are designated as part of the City's Neighborhood Enhanced Network (NEN), a selection of streets that provide safe routes for non-motorized modes of travel such as bicycling.

Source: Eyestone Environmental, 2023.

(c) Conclusion

In conclusion, analysis of Threshold (a) was based on the Project's consistency with the AQMP as well as the City of Los Angeles policies. With regard to AQMP consistency, which is primarily concerned with the long-term influence of the Project on air quality in the Air Basin, the Project under either Option A or Option B would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these

pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. In addition, because the Project includes similar projections that form the basis of the 2016 and 2022 AQMPs, it can be concluded that the Project would be consistent with the projections in the AQMPs. Furthermore, as the Project implements feasible air quality mitigation measures, which would reduce air quality impacts, the Project meets this AQMP consistency criterion. Additionally, as the Project would support the City's and SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project would be consistent with AQMPs' control measures. **Thus, the Project would not conflict with or obstruct implementation of the 2016 and/or 2022 AQMP. With regard to the City policies, as discussed above, the Project would serve to implement applicable policies pertaining to air quality. Based on the above, impacts to Threshold (a) would be less than significant.**

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Project-level impacts related to Threshold (a) were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

(a) Regional Emissions

(i) Construction

As described in Section II, Project Description, of this Recirculated Draft EIR, construction of the Project under both Option A and Option B is anticipated to occur in one phase and is estimated to commence in 2024 and be completed in 2027.[98] Construction of the Project, which would be approximately 41 months, would commence with removal of the existing buildings and the existing surface parking areas, followed by grading and

[98] *For conservative purposes, this analysis maintains a buildout of 2026.*

excavation for the subterranean parking garages. Building foundations would then be laid, followed by building construction, paving/concrete installation, and landscape installation. It is estimated that approximately 241,800 cubic yards and 251,000 cubic yards of soil would be hauled from the Project Site during the excavation phase under Option A and Option B, respectively. For additional construction assumptions, refer to Appendix J of this Recirculated Draft EIR.

Construction of the Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment, such as dozers, loaders, and cranes. During the finishing phase of a building, paving and the application of architectural coatings (e.g., paints) would potentially release VOCs. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

The emissions levels in Table IV.B-6 on page IV.B-65 represent the highest daily emissions projected to occur during each year of construction under Option A and Option B. As presented in Table IV.B-6, construction-related daily maximum regional construction emissions (i.e., combined on-site and off-site emissions) would not exceed the SCAQMD daily significance thresholds for VOC, CO, SO_X, PM_{10} and $PM_{2.5}$. However, maximum construction emissions would exceed the SCAQMD daily NO_X significance threshold under both Option A and Option B.

Based on the above, regional construction emissions resulting from the Project would result in a significant short-term impact. However, as discussed below mitigation measures would reduce impacts to a less than significant level. Therefore, impacts would be less than significant after implementation of feasible mitigation.

(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.E, Greenhouse Gas Emissions, of this Recirculated Draft EIR. While these features are designed primarily to reduce GHG emissions, they would also serve to reduce criteria air pollutants discussed herein. Project design features incorporated in this analysis include

Table IV.B-6
Estimate of Regional Project Construction Emissions[a]
(pounds per day)

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Option A (Winter)						
2023	10	107	110	<1	19	6
2024	10	102	114	<1	19	6
2025	26	80	116	<1	15	5
2026	26	77	113	<1	15	5
Maximum Construction Emissions	**26**	**107**	**116**	**<1**	**19**	**6**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(49)**	**7**	**(434)**	**(150)**	**(131)**	**(49)**
Exceed Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**
Option A (Summer)						
2023	7	79	81	<1	18	5
2024	13	127	152	<1	25	8
2025	23	54	87	<1	13	4
2026	23	50	76	<1	9	3
Maximum Construction Emissions	**23**	**127**	**152**	**<1**	**25**	**8**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(52)**	**27**	**(398)**	**(150)**	**(125)**	**(47)**
Exceed Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**
Option B (Winter)						
2023	10	107	110	<1	19	6
2024	10	102	114	<1	19	6
2025	25	79	115	<1	15	5
2026	24	76	112	<1	15	5
Maximum Construction Emissions	**25**	**107**	**115**	**<1**	**19**	**6**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(50)**	**7**	**(435)**	**(150)**	**(133)**	**(49)**
Exceed Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**
Option B (Summer)						
2023	7	79	81	<1	18	5
2024	13	128	165	<1	27	8
2025	22	54	86	<1	12	4
2026	21	49	76	<1	9	3
Maximum Construction Emissions	**22**	**128**	**165**	**<1**	**27**	**8**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(53)**	**28**	**(385)**	**(150)**	**(123)**	**(47)**

Table IV.B-6 (Continued)
Estimate of Regional Project Construction Emissions[a]
(pounds per day)

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Exceed Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this document. It is noted that while the Project is anticipated to be completed in 2027, this analysis maintains a buildout of 2026 to provide a conservative analysis.*

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

Source: Eyestone Environmental, 2023.

the Project Site's accessibility to job centers and transit, increase in diversity of uses and density, and walkability. These project design features are explained further in Section IV.E, Greenhouse Gas Emissions, of this Recirculated Draft EIR.

As shown in Table IV.B-7 on page IV.B-67, regional emissions resulting from operation of the Project would not exceed any of the SCAQMD's daily regional operational thresholds under both Option A and Option B. **Therefore, regional operational emissions resulting from the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Air quality impacts from Project operational emissions would be less than significant.**

(b) Localized Emissions

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

(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 and provided in Table IV.B-9 on page IV.B-73, maximum construction emissions would not exceed SCAQMD-recommended localized screening threshold for CO, NO_X, PM_{10}, and

Table IV.B-7
Project Regional Operational Emissions—At Project Buildout
(pounds per day)

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Option A (Winter)						
Area	13	<1	<1	<1	<1	<1
Energy[a]	<1	<1	1	<1	<1	<1
Mobile	5	4	39	<1	3	<1
Stationary	2	<1	5	<1	<1	<1
Total Project Emissions	**20**	**5**	**44**	**<1**	**3**	**<1**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(35)**	**(50)**	**(506)**	**(150)**	**(147)**	**(54)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Option A (Summer)						
Area	19	<1	55	<1	<1	<1
Energy[a]	<1	<1	1	<1	<1	<1
Mobile	2	3	36	<1	3	<1
Stationary	2	<1	5	<1	<1	<1
Total Project Emissions	**23**	**5**	**97**	**<1**	**3**	**<1**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(32)**	**(50)**	**(453)**	**(150)**	**(147)**	**(54)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Option B (Winter)						
Area	11	<1	<1	<1	<1	<1
Energy[a]	<1	<1	<1	<1	<1	<1
Mobile[b]	6	5	54	<1	5	<1
Stationary	2	<1	5	<1	<1	<1
Total Project Emissions	19	7	59	<1	5	1
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(36)**	**(48)**	**(491)**	**(150)**	**(145)**	**(54)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Option B (Summer)						
Area	17	<1	48	<1	<1	<1
Energy[a]	<1	<1	<1	<1	<1	<1
Mobile	3	5	55	<1	5	<1
Stationary	2	<1	5	<1	<1	<1
Total Project Emissions	22	6	108	<1	5	1
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(33)**	**(49)**	**(442)**	**(150)**	**(145)**	**(54)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Table IV.B-7 (Continued)
Project Regional Operational Emissions—At Project Buildout
(pounds per day)

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$

Numbers may not add up exactly due to rounding.

[a] *The Project would comply with the City's Ordinance No. 187,714 (passed in December 2022), 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.*

[b] *CalEEMod analysis for Option B overstates daily trips and VMT in comparison to the Transportation Assessment (5,589 versus 5,574 daily trips and 45,271 versus 45,178 VMT).*

Source: Eyestone Environmental, 2023.

$PM_{2.5}$. **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. While SCAQMD LST methodology evaluates emissions from on-site sources (e.g. water heaters, cooking appliances, HVAC), off-site sources such as Project-related vehicle trips were also evaluated for potential exceedances of ambient air quality standards. As analyzed in Threshold (c) below, Project-related operational emissions from on-site and off-site sources would not exceed localized thresholds. **Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.**

(c) Conclusion

The construction-related daily maximum regional and local construction emissions would not exceed the SCAQMD daily significance thresholds for VOC, CO, SO_X, PM_{10} and $PM_{2.5}$. However, maximum construction emissions would exceed the SCAQMD daily NO_X significance threshold under both Option A and Option B. **Therefore, construction emissions resulting from the Project would result in a significant short-term impact. However, as discussed below mitigation measures would reduce impacts to a less than significant level. Therefore, construction impacts to Threshold (b) would be less than significant after implementation of feasible mitigation.**

Regional emissions resulting from operation of the Project would not exceed any of the SCAQMD's daily regional operational thresholds under both Option A and Option B. Project-related operational emissions were also evaluated based on SCAQMD LST

methodology. Project-related operational emissions from on-site and off-site sources would not exceed localized thresholds. **Therefore, operational emissions resulting from the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Air quality impacts from Project operational emissions would be less than significant. Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.**

(2) Mitigation Measures

The following mitigation measures set forth a program of air pollution control strategies designed to reduce the Project's air quality impacts to the extent feasible during construction.

Mitigation Measure AIR-MM-1: Prior to demolition, the Project representative shall make available to the City of Los Angeles Department of Building and Safety and the South Coast Air Quality Management District a comprehensive inventory of all off-road construction equipment, equal to or greater than 25 horsepower, that will be used for construction of the Project. The inventory shall include the horsepower rating, engine production year, and certification of the specified Tier standard. A copy of each unit's certified tier specification, Best Available Control Technology documentation, and California Air Resources Board or Air Quality Management District operating permit shall be available onsite at the time of mobilization of each applicable unit of equipment to allow the Construction Monitor to compare the on-site equipment with the inventory and certified Tier specification and operating permit. Off-road diesel-powered equipment within the construction inventory list described above shall meet the Tier 4 Final standards.

(3) Level of Significance After Mitigation

(a) Construction

Implementation of the mitigation measures described above would reduce construction emissions. Table IV.B-8 on page IV.B-70 provides the peak daily mitigated regional emissions by construction year. As presented in Table IV.B-8, with full implementation of **Mitigation Measures AIR-MM-1**, peak daily regional NO_X emissions would be reduced below the SCAQMD regional threshold of 100 pounds per day. **As such, Project construction would result in a less-than-significant Project-level and cumulative regional impacts with incorporation of feasible mitigation measures.**

Table IV.B-8
Estimate of Regional Project Construction (Mitigated) Emissions[a]
(pounds per day)

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Option A (Winter)						
2023	5	81	137	<1	17	4
2024	5	79	148	<1	17	4
2025	22	55	147	<1	13	3
2026	21	54	145	<1	13	3
Maximum Construction Emissions	**22**	**81**	**148**	**<1**	**17**	**4**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(53)**	**(19)**	**(402)**	**(150)**	**(133)**	**(51)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Option A (Summer)						
2023	3	58	97	<1	16	4
2024	7	97	191	<1	22	6
2025	20	40	110	<1	11	3
2026	20	34	96	<1	8	2
Maximum Construction Emissions	**20**	**97**	**191**	**<1**	**22**	**6**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(55)**	**(3)**	**(359)**	**(150)**	**(128)**	**(49)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Option B (Winter)						
2023	5	80	145	<1	17	4
2024	5	78	148	<1	17	4
2025	20	54	146	<1	13	3
2026	20	53	144	<1	13	3
Maximum Construction Emissions	**20**	**80**	**148**	**<1**	**17**	**4**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(55)**	**(20)**	**(402)**	**(150)**	**(133)**	**(51)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Option B (Summer)						
2023	3	57	105	<1	16	4
2024	7	95	214	<1	24	6
2025	19	40	100	<1	11	3
2026	18	33	95	<1	7	2
Maximum Construction Emissions	**19**	**95**	**214**	**<1**	**24**	**6**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(56)**	**(5)**	**(336)**	**(150)**	**(126)**	**(49)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Table IV.B-8 (Continued)
Estimate of Regional Project Construction (Mitigated) Emissions[a]
(pounds per day)

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$

Numbers may not add up exactly due to rounding.

[a] *The CalEEMod model printout sheets and/or calculation worksheets are presented in Appendix B (CalEEMod Output) of this document. It is noted that while the Project is anticipated to be completed in 2027, this analysis maintains a buildout of 2026 to provide a conservative analysis.*

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

Source: Eyestone Environmental, 2023.

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 the methodology subsection, the localized construction air quality analysis was conducted using the methodology promulgated by the SCAQMD. Look-up tables provided by the SCAQMD were used to determine localized construction emissions thresholds for the Project.[99] 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 presented in Table IV.B-2 on page IV.B-28.

Although the trend shown in Table IV.B-2 demonstrates that ambient air quality is improving in the area, the localized construction emissions analysis conservatively did not apply a reduction in background pollutant concentrations for subsequent years of construction (i.e., 2023–2026). By doing so, the allowable pollutant increment to not exceed an ambient air quality standard is more stringent. The analysis is based on existing background ambient air quality monitoring data (2019–2021).

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

Maximum on-site daily construction emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for SRA 2 based on a construction site of 5 acres.[100] Potential impacts were evaluated at the closest sensitive receptor, which are residential uses west of and directly adjacent to the Project Site. As stated on page 3-3 of the LST methodology, "[T]he closest receptor distance on the mass rate LST lookup tables is 25 meters. It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters."[101,102] Based on this guidance, potential impacts at the residential uses were evaluated using the 25-meter mass rate LST lookup tables.[103]

The maximum daily localized emissions from Project construction and LSTs are presented in Table IV.B-9 on page IV.B-73. As presented in Table IV.B-9, maximum localized construction emissions for offsite sensitive receptors would not exceed SCAQMD-recommended localized screening thresholds for NO_X, CO, PM_{10} and $PM_{2.5}$ under both Option A and Option B.

The Project's on-site construction activities, including the generation of criteria pollutants, would not expose sensitive receptors to substantial pollutant concentrations. **As a result, Project-related construction activities would result in a less-than-significant impact with regard to localized emissions.**

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

The greatest potential for TAC emissions during construction would be from diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk-assessment methodology. Because the construction schedule estimates that the phases which require the most heavy-duty diesel vehicle usage, such as site grading/excavation, would last for a much shorter duration (e.g., approximately nine months), construction of the Project would not result in a substantial, long-term (i.e., 70-year) source of TAC emissions. Additionally,

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[100] *As discussed above, for projects that exceed 5 acres, the 5-acre LST look-up values can be used as a screening tool to determine which pollutants require detailed analysis.*

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

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

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

Table IV.B-9
Estimate of Localized Project Construction Emissions
(pounds per day)

Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$
Option A (Winter)				
2023	73	82	9	3
2024	69	82	9	3
2025	65	79	5	3
2026	62	79	5	2
Maximum Daily Localized Emissions	**73**	**82**	**9**	**3**
SCAQMD Localized Significance Thresholds[a]	**221**	**1,531**	**13**	**6**
Over/(Under)	**(148)**	**(1,449)**	**(4)**	**(3)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option A (Summer)				
2023	50	62	9	**3**
2024	89	104	10	4
2025	42	50	4	2
2026	43	54	3	2
Maximum Daily Localized Emissions	**89**	**104**	**10**	**4**
SCAQMD Localized Significance Thresholds[a]	**221**	**1,531**	**13**	**6**
Over/(Under)	**(132)**	**(1,427)**	**(3)**	**(2)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option B (Winter)				
2023	73	82	9	3
2024	69	82	9	3
2025	64	78	5	2
2026	61	78	5	2
Maximum Daily Localized Emissions	**73**	**82**	**9**	**3**
SCAQMD Localized Significance Thresholds[a]	**221**	**1,531**	**13**	**6**
Over/(Under)	**(148)**	**(1,449)**	**(4)**	**(3)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option B (Summer)				
2023	50	62	10	3
2024	89	106	10	4
2025	41	50	4	2
2026	41	53	3	2
Maximum Daily Localized Emissions	**89**	**106**	**10**	**4**
SCAQMD Localized Significance Thresholds[a]	**221**	**1,531**	**13**	**6**
Over/(Under)	**(132)**	**(1,425)**	**(3)**	**(2)**
Exceed Threshold?	**No**	**No**	**No**	**No**

Table IV.B-9 (Continued)
Estimate of Localized Project Construction Emissions
(pounds per day)

Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$

Numbers may not add up exactly due to rounding.

[a] *Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 2. Maximum active construction activities would occur on approximately 5 acres at a distance of approximately 25 meters from sensitive land uses (the shortest distance available for LSTs). It is noted that while the Project is anticipated to be completed in 2027, this analysis maintains a buildout of 2026 to provide a conservative analysis.*

Source: Eyestone Environmental, 2023.

the SCAQMD CEQA guidance does not require a HRA for short-term construction emissions. It is, therefore, not necessary to evaluate long-term cancer impacts from construction activities which occur over a relatively short duration. In addition, there would be no residual emissions or corresponding individual cancer risk after construction. **The Project's off-site construction activities, including generation of TACs, would not expose sensitive receptors to substantial pollutant concentrations**. **Project-related TAC impacts during construction would be less than significant.**

(b) Operation

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

Operation of the Project would not introduce any major new sources of air pollution within the Project Site. Emissions estimates for criteria air pollutants from on-site sources are presented in Table IV.B-10 on page IV.B-75. The SCAQMD LST mass rate look-up tables, which apply to projects that have active areas that are less than or equal to 5 acres in size, were used to evaluate potential localized impacts. As shown in Table IV.B-10, on-site operational emissions would not exceed any of the LSTs under Option A and Option B. **The Project's on-site operational activities, including generation of criteria pollutants, would not expose sensitive receptors to substantial pollutant concentrations. Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.**

(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, 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 15,190 trips under Option A and 15,230 trips under Option B at the

Table IV.B-10
Project Localized Operational Emissions—At Project Buildout
(pounds per day)

Emission Source	NO_X	CO	PM_{10}	$PM_{2.5}$
Option A (Winter)				
Area	<1	<1	<1	<1
Energy [a]	<1	<1	<1	<1
Stationary	<1	5	<1	<1
On-Site Total	**1**	**5**	**<1**	**<1**
SCAQMD Significance Threshold[b]	**221**	**1,531**	**3**	**2**
Over/(Under)	**(220)**	**(1,526)**	**(3)**	**(2)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option A (Summer)				
Area	<1	55	<1	<1
Energy [a]	<1	<1	<1	<1
Stationary	<1	5	<1	<1
On-Site Total	**2**	**61**	**<1**	**<1**
SCAQMD Significance Threshold[b]	**221**	**1,531**	**3**	**2**
Over/(Under)	**(219)**	**(1,470)**	**(3)**	**(2)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option B (Winter)				
Area	<1	<1	<1	<1
Energy [a]	<1	<1	<1	<1
Stationary	<1	5	<1	<1
On-Site Total	**1**	**5**	**<1**	**<1**
SCAQMD Significance Threshold[b]	**221**	**1,531**	**3**	**2**
Over/(Under)	**(220)**	**(1,526)**	**(3)**	**(2)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option B (Summer)				
Area	<1	48	<1	<1
Energy[a]	<1	<1	<1	<1
Stationary	<1	5	<1	<1
On-Site Total	**2**	**53**	**<1**	**<1**
SCAQMD Significance Threshold[b]	**221**	**1,531**	**3**	**2**
Over/(Under)	**(219)**	**(1,478)**	**(3)**	**(2)**
Exceed Threshold?	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *The Project would comply with the City's Ordinance No. 187,714 (passed in December 2022), 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.*

[b] *Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor*

Table IV.B-10 (Continued)
Project Localized Operational Emissions—At Project Buildout
(pounds per day)

Emission Source	NO_X	CO	PM_{10}	$PM_{2.5}$
Area 2. Maximum active operational activities would occur on approximately 5 acres at a distance of approximately 25 meters from sensitive land uses (the shortest distance available for LSTs).				
Source: Eyestone Environmental, 2023.				

Mindanao Way and SR-90 Eastbound Ramp intersection,[104] which is significantly below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP. This daily trip estimate is based on the peak hour conditions of the intersection. There is no reason unique to the Air Basin meteorology to conclude that the CO concentrations at the Mindanao Way and SR-90 Eastbound Ramp intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP.[105] Therefore, the Project does not trigger the need for a detailed CO hotspots model and would not cause any new or exacerbate any existing CO hotspots. As a result, impacts related to localized mobile-source CO emissions are considered less than significant. The supporting data for this analysis is included in Appendix B of this Recirculated Draft EIR. **The Project's off-site operational activities, including the highest average daily trips, would not expose sensitive receptors to substantial pollutant concentrations**. **As a result, impacts related to localized mobile-source CO emissions are considered less than significant.**

(iii) Toxic Air Contaminants

The primary sources of potential air toxics associated with operation of the Project include DPM from delivery trucks associated with the Project's commercial component (e.g., truck traffic on local streets and idling on adjacent streets). The Project total truck deliveries including both diesel and non-diesel would be approximately 16 truck deliveries daily under Option A and approximately 21 truck deliveries daily under Option B.[106] 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.

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[104] *Linscott Law & Greenspan, Transportation Assessment for the Paseo Marina Project, July 2021.*

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

[106] *National Cooperative Highway Research Program, Synthesis 298, Truck Trip Generation Data, 2001.*

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

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

(2) Mitigation Measures

Mitigation measures related to Threshold (b) would be applicable to Threshold (c).

(3) Level of Significance After Mitigation

(a) Construction

Implementation of the mitigation measures described above would reduce construction emissions for pollutant emissions. Table IV.B-11 on page IV.B-78 provides the peak daily mitigated localized emissions by construction year. As presented in Table IV.B-11, with full implementation of Mitigation Measures AIR-MM-1 (use of off-road diesel-powered construction equipment meeting Tier 4 Final standards) peak daily localized emissions would be reduced further and would remain below the SCAQMD LST thresholds. **As such, Project construction would result in a less-than-significant Project-level and cumulative localized impacts with incorporation of feasible mitigation measures.**

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 Recirculated Draft EIR, and in the Initial Study prepared for the Project, which is included as Appendix A of this Recirculated Draft EIR, the Project would not create objectionable odors impacting a substantial number of people. **Thus, the Project would have a less than significant impact with respect to Threshold (d). No impacts from objectionable odors would occur and no further analysis is required.**

Table IV.B-11
Estimate of Localized Project Construction (Mitigated) Emissions
(pounds per day)

Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$
Option A (Winter)				
2023	46	109	7	1
2024	46	109	7	1
2025	40	111	3	1
2026	40	111	3	1
Maximum Daily Localized Emissions	**46**	**111**	**7**	**1**
SCAQMD Localized Significance Thresholds[a]	**221**	**1,531**	**13**	**6**
Over/(Under)	**(182175**	**(1,420)**	**(6)**	**(5)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option A (Summer)				
2023	29	76	7	1
2024	59	144	8	2
2025	28	74	3	1
2026	26	74	2	<1
Maximum Daily Localized Emissions	**59**	**144**	**8**	**2**
SCAQMD Localized Significance Thresholds[a]	**221**	**1,531**	**13**	**6**
Over/(Under)	**(162)**	**(1,387)**	**(5)**	**(4)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option B (Winter)				
2023	46	117	7	1
2024	46	117	6	1
2025	39	110	3	<1
2026	39	110	3	<1
Maximum Daily Localized Emissions	**46**	**117**	**7**	**1**
SCAQMD Localized Significance Thresholds[a]	**221**	**1,531**	**13**	**6**
Over/(Under)	**(175)**	**(1,414)**	**(6)**	**(5)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Option B (Summer)				
2023	30	84	8	1
2024	57	155	8	1
2025	27	74	3	<1
2026	25	73	2	<1
Maximum Daily Localized Emissions	**57**	**155**	**8**	**1**
SCAQMD Localized Significance Thresholds[a]	**221**	**1,531**	**13**	**6**
Over/(Under)	**(164)**	**(1,376)**	**(5)**	**(5)**
Exceed Threshold?	**No**	**No**	**No**	**No**

Table IV.B-11 (Continued)
Estimate of Localized Project Construction (Mitigated) Emissions
(pounds per day)

Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$

Numbers may not add up exactly due to rounding.

[a] *Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 2. Maximum active construction activities would occur on approximately 5 acres at a distance of approximately 25 meters from sensitive land uses (the shortest distance available for LSTs). It is noted that while the Project is anticipated to be completed in 2027, this analysis maintains a buildout of 2026 to provide a conservative analysis.*

Source: Eyestone Environmental, 2023.

e. Cumulative Impacts

(1) Impact Analysis

(a) Construction

Based on SCAQMD guidance, individual construction projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. [107] As discussed above under Thresholds (b) and (c), the Project's construction-related regional air quality emissions, localized emissions, and emissions of TACs would be less than significant with incorporation of mitigation measures. Therefore, the Project's contribution to cumulative air quality impacts would not be cumulatively considerable.

(b) Operation

According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. Operational emissions from the Project would not exceed any of the SCAQMD's regional or localized significance thresholds at Project buildout. Therefore, the emissions of non-attainment pollutants and precursors generated by Project operation would not be cumulatively considerable.

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

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

In conclusion, construction and operational emissions would not result in cumulative impacts to air quality as the Project's contributions to regional, localized, and TAC emissions would not be cumulatively considerable.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Cumulative impacts related to air quality 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.