IV. Environmental Impact Analysis

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A. Air Quality

1. Introduction

This section evaluates the Project's potential impacts on air quality. This section estimates the air pollutant emissions generated by demolition of the existing building and whether Project emissions 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 in 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 information included in the Air Quality Calculation Worksheets provided in Appendix B of this Draft EIR.[1]

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.[2] 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

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[1] *Eyestone Environmental, Air Quality and Greenhouse Gas Emissions Technical Appendix, August 2022.*

[2] *United States Environmental Protection Agency, NAAQS Table, www.epa.gov/criteria-air-pollutants/naaqs-table, accessed August 24, 2021.*

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.[3] The NAAQS and CAAQS are listed in Table IV.A-1 on page IV.A-3.

At the regional level, the South Coast Air Quality Management District (SCAQMD) is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange County, Riverside, and San Bernardino Counties, including the Coachella Valley.[4] The City of Los Angeles is located within the South Coast Air Basin (Air Basin) which is a distinct geographic subarea within the SCAQMD's jurisdiction. The SCAQMD, together with the Southern California Association of Governments (SCAG), has the responsibility for ensuring that national and state ambient air quality standards are achieved and maintained for the Air Basin. Failure to comply with these standards puts state and local agencies at risk for penalties in the form of lawsuits, fines, a federal takeover of state implementation plans, and a loss of funds from federal agencies, such as the Federal Highway Administration and Federal Transit Administration.

To meet the air quality standards, regional plans are developed, including the SCAQMD'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 level function to identify and limit exposure of air pollutants and toxic air contaminants (TACs).

(2) Local Air Quality and Air Pollution Sources

As mentioned above, the City of Los Angeles is located within the South Coast Air Basin, which is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and San Diego County to the south. The Air Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the Coachella Valley area in Riverside County. The regional climate within the

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

[4] *SCAQMD, Map of Jurisdiction.*

Table IV.A-1
Ambient Air Quality Standards

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

Pollutant	Averaging Period	California Standard[a,b]	Federal Standard[a,b]	SCAQMD Attainment Status[c]	
				California Standard[d]	Federal Standard[d]
expressed as a concentration that is not to be equaled or exceeded.					
[b] *Ambient Air Quality Standards based on the 2016 AQMP.*					
[c] *"Attainment" means that the regulatory agency has determined based on established criteria, that the Air Basin meets the identified standard. "Non-attainment" means that the regulatory agency has determined that the Air Basin does not meet the standard. "Unclassified" means there is insufficient data to designate an area, or designations have yet to be made.*					
[d] *California and Federal standard attainment status based on SCAQMD's 2016 AQMP.*					
[e] *An attainment re-designation request is pending.*					
Source: Eyestone Environmental, 2022.					

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 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 VOCs and nitrogen oxides (NO_X)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O_3 irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and 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 the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike 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)

Nitrogen dioxide is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. Of the seven types of NO_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, such as 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}. Nitrogen oxides irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_X is as a precursor to the formation of 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 leads to higher rates of respiratory illness.

(vi) Lead (Pb)

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

(b) Additional Criteria Pollutants (California Only)

In addition to the national standards, the State of California regulates state-identified criteria pollutants, including sulfates, hydrogen sulfide, 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., hydrogen sulfide (nuisance odor) and vinyl chloride), or otherwise account for these pollutants (i.e., sulfates and visibility reducing particles) through other criteria pollutants. For example, sulfates 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-})

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain

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

(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.[5] 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.[6] 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.[7]

(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,

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[5] *California Air Resources Board, Hydrogen Sulfide & Health, ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health, accessed August 24, 2021.*

[6] *California Air Resources Board, Hydrogen Sulfide & Health, ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health, accessed August 24, 2021.*

[7] *California Air Resources Board, Hydrogen Sulfide & Health, ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health, accessed August 24, 2021.*

color, and visual range.[8] Exposure to some haze-causing pollutants have been linked to adverse health impacts similar to PM_{10} and $PM_{2.5,}$ as discussed above.[9]

(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.[10] 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.[11] Most health data on vinyl chloride relate to carcinogenicity; thus, the people most at risk are those who have long-term exposure to elevated levels, which is more likely to occur in occupational or industrial settings; however, control methodologies applied to industrial facilities generally prevent emissions to the ambient air.[12]

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

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

(i) Volatile Organic Compounds (VOCs)

VOCs are organic chemical compounds of carbon and are not "criteria" pollutants themselves; however, VOCs are a prime component (along with NO_X) of the photochemical

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[8] *California Air Resources Board, Visibility-Reducing Particles and Health, www.arb.ca.gov/research/aaqs/common-pollutants/vrp/vrp.htm, accessed August 24, 2021.*

[9] *California Air Resources Board, Visibility-Reducing Particles and Health, www.arb.ca.gov/research/aaqs/common-pollutants/vrp/vrp.htm, accessed August 24, 2021.*

[10] *California Air Resources Board, Vinyl Chloride & Health, ww2.arb.ca.gov/resources/vinyl-chloride-and-health, accessed August 24, 2021.*

[11] *California Air Resources Board, Vinyl Chloride & Health, ww2.arb.ca.gov/resources/vinyl-chloride-and-health, accessed August 24, 2021.*

[12] *California Air Resources Board, Vinyl Chloride & Health, ww2.arb.ca.gov/resources/vinyl-chloride-and-health, accessed August 24, 2021.*

processes by which such criteria pollutants as O_3, nitrogen dioxide, and certain fine particles are formed. They are therefore regulated as "precursors" to formation of these criteria pollutants. Some are also identified as TACs and have adverse health effects. VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids, internal combustion associated with motor vehicle usage, and consumer products (e.g., architectural coatings, etc.).

(ii) Toxic Air Contaminants (TACs)

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

b. Regulatory Framework

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

- Federal Clean Air Act (CCA)
  - National Ambient Air Quality Standards (NAAQS)
- California Clean Air Act (CCAA)
  - California Ambient Air Quality Standards (CAAQS)
- California Code of Regulations (CCR)
- 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.[13] The CAA is the comprehensive federal law that regulates air emissions in order to protect public health and welfare.[14] The USEPA is responsible for the implementation and enforcement of the CAA, which establishes the NAAQS, specifies future dates for achieving compliance, and requires the USEPA to designate areas as attainment, nonattainment, or maintenance. The CAA also mandates that each state submit and implement a State Implementation Plan (SIP) for each criteria pollutant for which the state has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met. The sections of the CAA most applicable to land use development projects include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).[15]

Title I requirements are implemented for the purpose of attaining NAAQS for criteria air pollutants. Table IV.A-1 on page IV.A-3 shows the NAAQS currently in effect for each criteria pollutant. 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.

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[13] *42 United States Code §7401 et seq. (1970).*

[14] *United States Environmental Protection Agency, Summary of the Clean Air Act, www.epa.gov/laws-regulations/summary-clean-air-act, accessed August 24, 2021.*

[15] *United States Environmental Protection Agency, Clean Air Act Overview, Clean Air Act Table of Contents by Title, Last Updated January 3, 2017, www.epa.gov/clean-air-act-overview/clean-air-act-text, accessed August 24, 2021. As shown therein, Title I addresses nonattainment areas and Title II addresses mobile sources.*

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

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

(2) State

(a) California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practicable date. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, CARB conducts research, sets 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.A-1 on page IV.A-3 includes the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the state. As shown in Table IV.A-1, the CAAQS include more stringent standards than the NAAQS. The Air Basin fails to meet state standards for O_3, PM_{10}, and $PM_{2.5}$ and, therefore, is considered a state "non-attainment" 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 the state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location. In addition, Section 93115 in Title 17 of the CCR states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

(c) 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 AB 2588 Air Toxics "Hot Spots" program and 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, the ARB 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.

(b) Air Quality Management Plan and RTP/SCS

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of AQMPs, which serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the area into attainment with the standards in a timely manner. The 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines for 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[16] 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.[17,18]

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 AQMP is composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile source strategies, and reductions from federal sources, which include aircraft, locomotives and ocean-going vessels. These strategies are to be implemented in partnership with the CARB and USEPA.

The AQMP also incorporates the transportation strategy and transportation control measures from SCAG's 2016–2040 RTP/SCS (2016–2040 RTP/SCS) Plan.[19] SCAG is the

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

[17] *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).*

[18] *SCAQMD, Final 2016 AQMP, 2017, p. ES-2. www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp, accessed August 24, 2021.*

[19] *SCAG, Final 2016–2040 RTP/SCP, 2016.*

regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements. Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. The RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP. The SCAQMD combines its portion of the AQMP with those prepared by SCAG.[20] The RTP/SCS and Transportation Control Measures, included as Appendix IV-C of the 2016 AQMP for the Air Basin, are based on SCAG's 2016–2040 RTP/SCS.

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

On September 3, 2020, SCAG's Regional Council adopted the 2020–2045 RTP/SCS. The 2020–2045 RTP/SCS was determined to conform to the federally mandated SIP, for the attainment and maintenance of NAAQS standards. On October 30, 2020, CARB also accepted SCAG's determination that the SCS met the applicable state greenhouse gas emissions targets. The 2020–2045 RTP/SCS will be incorporated into the forthcoming 2022 AQMP.

(i) SCAQMD Air Quality Guidance Documents

The SCAQMD published the *CEQA Air Quality Handbook* (approved by the AQMD Governing Board in 1993) to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.[22] The *CEQA Air Quality Handbook* provides

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[20] *SCAQMD, Final 2016 AQMP, 2017, p. ES-2. www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp, accessed August 24, 2021.*

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

[22] *South Coast Air Quality Management District, CEQA Air Quality Handbook 1993, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993), accessed August 24, 2021.*

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.[23]

The SCAQMD has also adopted land use planning guidelines in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, which considers impacts to sensitive receptors from facilities that emit TAC emissions.[24] SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). The SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

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

(ii) SCAQMD Rules and Regulations

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

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[23] *SCAQMD, Air Quality Analysis Guidance, www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook#, accessed August 24, 2021.*

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

[25] *South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, 2008, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds, accessed August 24, 2021.*

[26] *South Coast Air Quality Management District, Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM2.5 Significance Thresholds, 2006.*

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 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). Mitigation 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.

- **Rule 1186—PM_{10} Emissions from Paved and Unpaved Roads, and Livestock Operations:** This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM_{10} emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Regulation XIII—New Source Review (NSR): Regulation XIII sets requirements for preconstruction review required under both federal and state statutes for new and modified sources located in areas that do not meet the CAA standards ("non-attainment" areas). NSR applies to both individual permits and entire facilities. Any permit that has a net increase in emissions is required to apply Best Available Control Technology (BACT). Facilities with a net increase in emissions are required to offset the emission increase by use of Emission Reduction Credits (ERCs). The regulation provides for the application, eligibility, registration, use and transfer of ERCs. For low emitting facilities, the SCAQMD maintains an internal bank that can be used to provide the required offsets. In addition, certain facilities are subject to provisions that require public notice and modeling analysis to determine the downwind impact prior to permit issuance.

Regulation XIV—Toxics and Other Non-Criteria Pollutants: Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units which emit 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 I Sustainability Plan 2019 (Green New Deal) contain policies and programs for the protection of the environment and health through improved air quality. These serve to provide additional critical guidance for the betterment of public health for the region and the City.

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

c. Existing Conditions

(1) Regional Air Quality

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

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

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

SCAQMD has the responsibility for ensuring that all national and state ambient air quality standards are achieved and maintained throughout the Air Basin. To meet the standards, SCAQMD has adopted a series of AQMPs. The 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines are met and that public health is protected to the maximum extent feasible. The most significant air quality challenge in the Air Basin is to reduce NO_X emissions[27] sufficiently to meet the upcoming O_3 standard deadlines. The 2016 AQMP provides a baseline year 2012 inventory of 512 tons per day (tpd) of NO_X and modeling results show that NO_X emissions are projected to be 214 tpd in the 8-hour ozone attainment year of 2031, due to continued implementation of already adopted regulatory actions ("baseline emissions"). The 2016 AQMP suggests that total Air Basin emissions of NO_X must be reduced to 96 tpd in 2031 to attain the 8-hour ozone standard. Although the existing air regulations and programs will continue to lower NO_X emissions in the region, an additional 55 percent reduction by the year 2031 is necessary to attain the 8- hour O_3standard.[28,29]

The overall control strategy is an integral approach relying on fair-share emission reductions from federal, state and local levels. The 2016 AQMP is composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile source strategies and reductions from federal sources, which include aircraft, locomotives and ocean-going vessels. These strategies are to be implemented in partnership with CARB and USEPA. The 2016 AQMP also includes transportation programs, measures, and strategies from SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)[30] that are generally designed to reduce VMT.

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

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

[28] *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).*

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

[30] *SCAG, Final 2016–2040 RTP/SCS.*

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 AQMP/ State Implementation Plan (SIP) for the Basin, are based on SCAG's 2016–2040 RTP/SCS.

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

Despite past regional growth, air quality within the Basin has improved substantially over the years, primarily due to the impacts of air quality control programs at the local, state and federal levels. Figure IV.A-1 on page IV.A-23 shows the percent change in air quality along with demographic data for the four-county region from the 2016 AQMP. In particular, the graphic illustrates the trends since 1990 of the 8-hour O_3 levels, the 1-hour O_3 levels, and annual average $PM_{2.5}$ concentrations (since 1999), compared to the regional gross domestic product, total employment and population. Human activity in the region has an impact on achieving reductions in emissions. However, the O_3 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.[31]

SCAQMD has released the Multiple Air Toxics Exposure study (MATES-IV).[32] The MATES-IV Study was aimed at estimating the cancer risk from toxic air emissions throughout the Air Basin by conducting a comprehensive monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to fully characterize health risks for those living in the Air Basin. The MATES-IV Study concluded that the average carcinogenic risk from air pollution in the Air Basin is approximately 897 in one million over a 70-year duration. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 68 percent of the risk is attributed to diesel particulate emissions, approximately 21 percent to other toxics associated with mobile sources (including benzene, butadiene, and carbonyls), and approximately 11 percent of all carcinogenic risk is attributed to stationary sources (which include large industrial operations, such as refineries and metal processing facilities, as well as smaller businesses, such as gas stations and chrome plating).[33]

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[31] *SCAQMD, Final 2016 AQMP, 2017 (p. 1-6).*

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

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

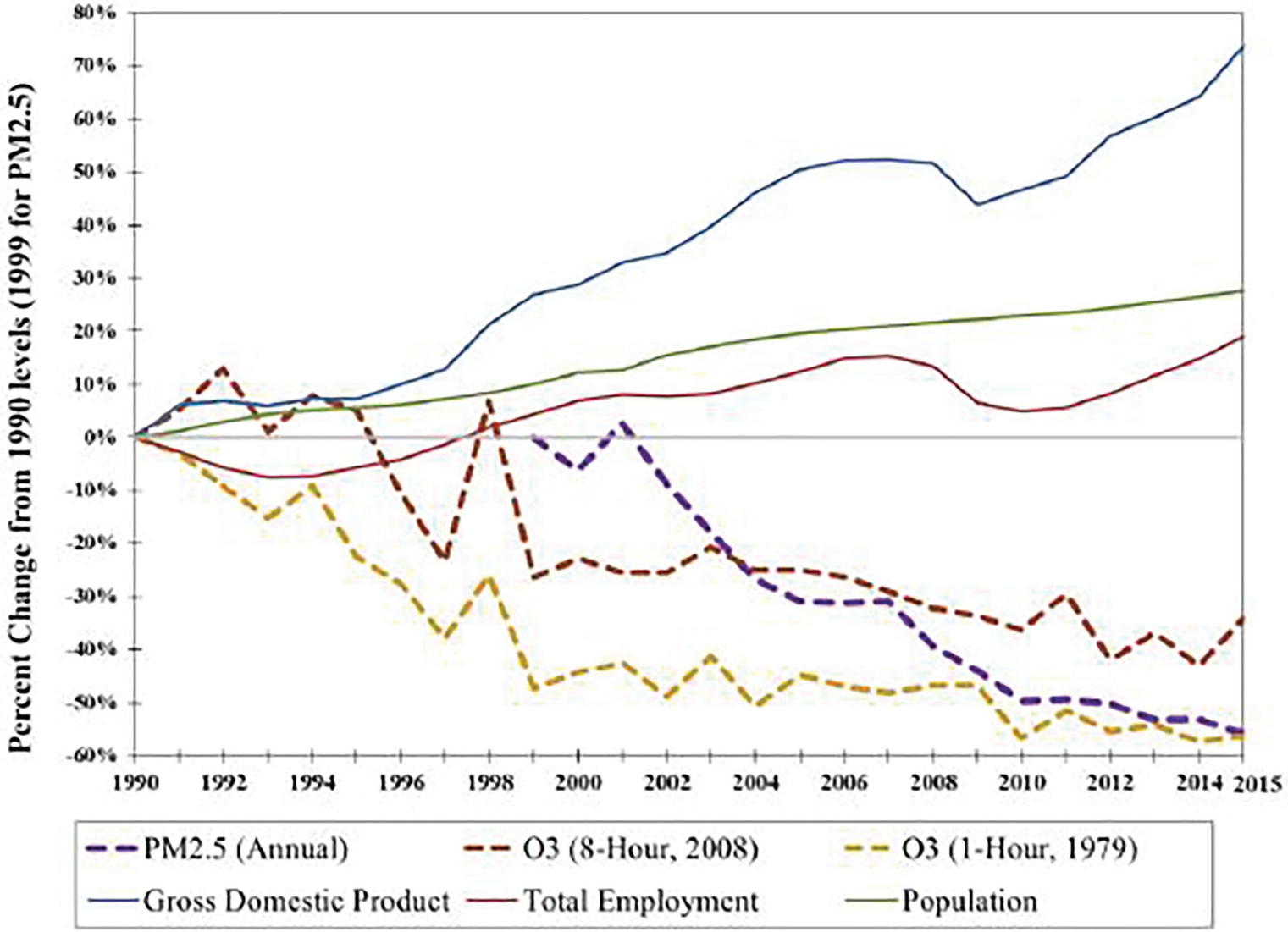

Figure IV.A-1
Ozone Trends

Source: SCAQMD, 2016.

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

(2) Local Air Quality

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

(a) Existing Pollutant Levels at Nearby Monitoring Stations

SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin and has divided the Air Basin into 38 source receptor areas (SRAs) in which 31 monitoring stations operate. Figure IV.A-2 on page IV.A-25 shows the locations of the SRAs located in Los Angeles County. The Project Site is located within SRA 1, which covers the Central Los Angeles area. The monitoring station most representative of the Project Site is the North Main Street Station, located at 1630 North Main Street in the City of Los Angeles, approximately 2.5 miles north of the Project Site. Criteria pollutants monitored at this station include PM_{10}, $PM_{2.5}$, O_3, CO, NO_2, lead, and sulfate. Table IV.A-2 on page IV.A-26 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at this station through the period of 2018–2020.

(b) Existing Health Risk in the Surrounding Area

As shown in Figure IV.A-3 on page IV.A-28, based on the MATES-IV model, the calculated cancer risk in the Project area is approximately 1,411 in one million.[35] The cancer risk in this area is predominately related to nearby sources of diesel particulates

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

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

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

21865 Copley Drive, Diamond Bar, CA 91765-4182
Information: 1-800-CUT-SMOG (1-800-288-7664)
Internet: http://www.aqmd.gov

Air Quality Reporting

Since 1977, the South Coast Air Quality Management District has served as the local government agency responsible for measuring, reporting and taking steps to improve air quality.

To inform the AQMD's 15 million residents about air quality conditions, the AQMD issues an air quality forecast each day and reports current air quality conditions for each numbered Monitoring Area and General Forecast Area depicted here.

This air quality information is transmitted to the public through newspapers, television, radio and pager services, through faxes to schools, through recorded messages on the AQMD's toll-free Smog Update telephone line, 1-800-CUT–SMOG, and on the AQMD's Internet Website http://www.aqmd.gov.

Newspapers, television and radio stations typically will report air quality information using the General Forecast Areas, shown in color below, which are larger groupings of the more specific Air Monitoring Areas.

The 1-800-CUT-SMOG (1–800-288-7664) line also provides smog forecast and current smog level information by ZIP code.

The AQMD's Internet Website provides both forecasts as well as smog levels for that day and the previous day. Forecasts for the next day normally are posted by noon.

General Forecast Areas & Air Monitoring Areas

Coastal
- Northwest Los Angeles County Coastal 2
- Southwest Los Angeles County Coastal 3
- South Los Angeles County Coastal 4
- North Orange County Coastal 18
- Central Orange County Coastal 20

Metropolitan
- Central Los Angeles County 1
- Southeast Los Angeles County 5
- South Central Los Angeles County 12
- North Orange County 16

San Fernando Valley
- West San Fernando Valley 6
- East San Fernando Valley 7
- Santa Clarita Valley 13

San Gabriel Valley
- West San Gabriel Valley 8
- East San Gabriel Valley 9
- Pomona/Walnut Valley 10
- South San Gabriel Valley 11

Inland Orange County
- Central Orange County 17
- Saddleback Valley 19
- Capistrano Valley 21

Riverside Valley
- Corona/Norco Area 22
- Metropolitan Riverside 23

San Bernardino Valley
- Northwest San Bernardino Valley 32
- Southwest San Bernardino Valley 33
- Central San Bernardino Valley 34
- East San Bernardino Valley 35

Hemet/Elsinore Area
- Perris Valley 24
- Lake Elsinore 25
- Hemet/San Jacinto Valley 28

Temecula/Anza Area
- Temecula Valley 26
- Anza Area 27

San Gabriel Mountains 15

San Bernardino Mountains
- West San Bernardino Mountains 36
- Central San Bernardino Mountains 37

Big Bear Lake 38

Banning Pass Area 29

Coachella/Low Desert
- Coachella Valley 30
- East Riverside County 31

ANTELOPE VALLEY APCD* 14

MOJAVE DESERT AQMD*
- Victor Valley 39
- Northern Mojave Desert 40
- Central Mojave Desert 41

*These agencies contract with the South Coast AQMD for forecasting services. Also, the Antelope Valley APCD contracts with the Mojave Desert AQMD for other services. For more air quality information in these areas, please call the Mojave Desert AQMD at (760) 245-1661, extension 5067.

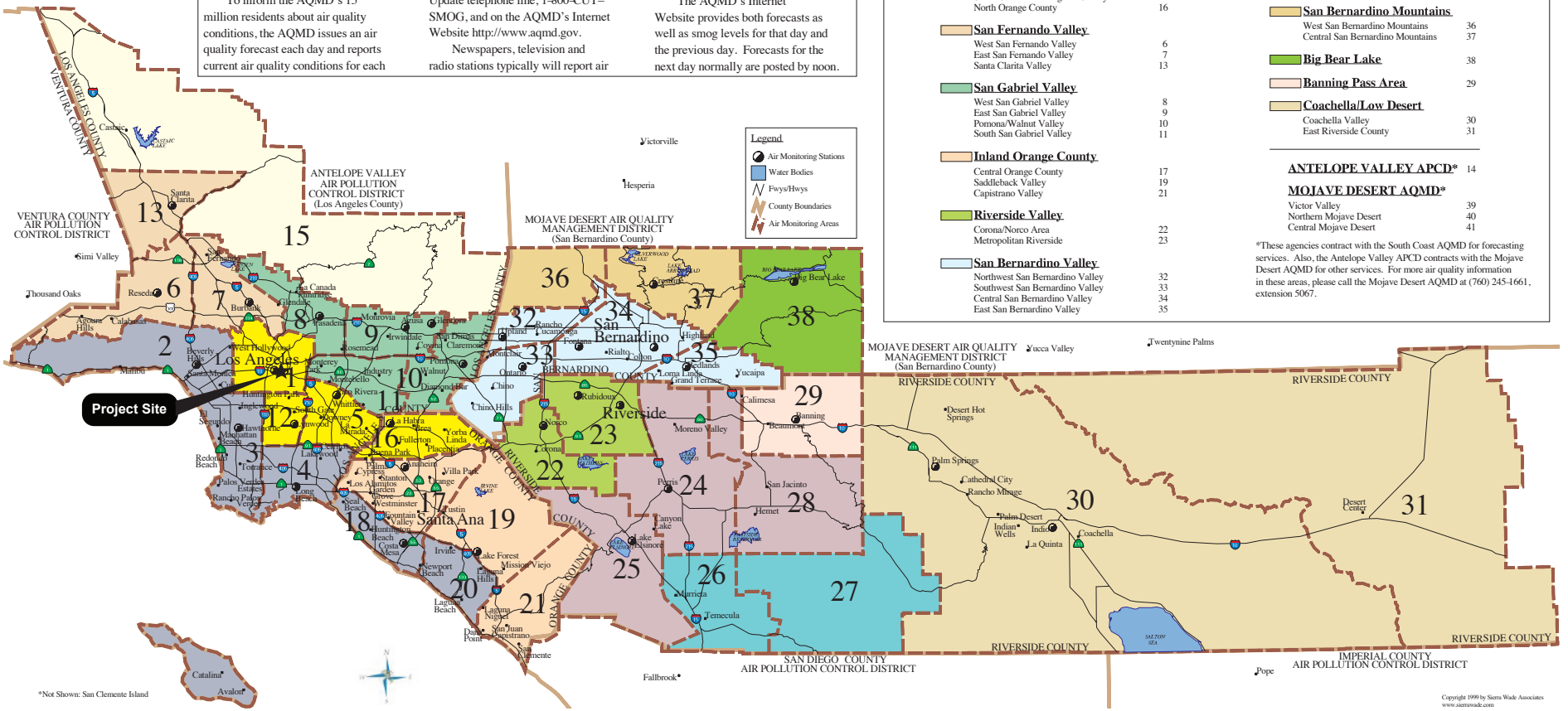

Figure IV.A-2
SCAQMD SRA Map

Source: Sierra Wade Associates, 1999.

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

Pollutant	Year		
	2018	2019	2020
Ozone (O_3)			
Maximum 1-hour Concentration (ppm)	0.10	0.09	0.19
Days exceeding CAAQS (0.09 ppm)	2	0	14
Maximum 8-hour Concentration (ppm)	0.07	0.08	0.12
Days exceeding NAAQS (0.070 ppm)	4	2	22
Days exceeding CAAQS (0.07 ppm)	4	2	22
Respirable Particulate Matter (PM_{10})			
Maximum 24-hour Concentration (µg/m^3)	81	62	77
Days exceeding NAAQS (150 µg/m^3)	0	0	0
Days exceeding CAAQS (50 µg/m^3)	31	3	24
Annual Arithmetic Mean (µg/m3)	34	26	23
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	44	47
Days exceeding NAAQS (35 µg/m^3)	3	1	2
Annual Arithmetic Mean (µg/m^3)	13	11	12
Does measured AAM exceed NAAQS (12 µg/m^3)?	**Yes**	No	**Yes**
Does measured AAM exceed CAAQS (12 µg/m^3)?	**Yes**	No	**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	0.07	0.06
Days exceeding CAAQS (0.18 ppm)	0	0	0
Annual Arithmetic Mean (ppm)	0.02	0.02	0.02
Does measured AAM exceed NAAQS (0.0534 ppm)?	No	No	No
Does measured AAM exceed CAAQS (0.03 ppm)?	No	No	No
Sulfur Dioxide (SO_2)			
Maximum 1-hour Concentration (ppm)	0.02	0.01	0.004
Days exceeding CAAQS (0.25 ppm)	0	0	0
Maximum 24-hour concentration (ppm)	N/A	N/A	N/A
Days exceeding CAAQS (0.04 ppm)	0	0	0
Days exceeding NAAQS (0.14 ppm)	0	0	0
Annual Arithmetic Mean (ppm)	N/A	N/A	N/A
Does measured AAM exceed NAAQS (0.030 ppm)?	N/A	0	0

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

Pollutant	Year		
	2018	2019	2020
Lead[a]			
Maximum 30-day Average Concentration (µg/m^3)	0.01	0.012	0.013
Does measured concentration exceed NAAQS (1.5 µg/m^3)	No	No	No
Maximum Calendar Quarter Concentration (µg/m^3)	0.01	0.01	0.01
Does measured concentration exceed CAAQS (1.5 µg/m^3)	No	No	No
Sulfate			
Maximum 24-hour Concentration (µg/m^3)	5	5.1	3.3
Does measured concentration exceed CAAQS (25 µg/m^3)	No	No	No

µg/m^3 = micrograms per cubic meter

AAM = annual arithmetic mean

N/A = not applicable

ppm = parts per million by volume

[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 (2017–2019), www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed October 4, 2021.

(e.g., US-101). In general, the risk at the Project Site is comparable with other urbanized areas in Los Angeles, which have a similar calculated cancer risk as the Project area.

Potential sources of TACs within the Project Site vicinity were identified using SCAQMD's Facility Information Database (FIND) search and site reconnaissance to identify potential non-permitted air toxic emitting sources (e.g., freeways, diesel trucks idling at warehouse distribution facilities in excess of 100 trucks per day).[36] Based on the FIND search conducted, no major sources of TACs are located within a 0.25 mile of the Project Site. Minor emissions sources such as boilers or emergency generators are located within the Project vicinity, but no substantial permitted stationary sources (e.g., gasoline stations, dry cleaners, chrome plating operations) of TAC emissions within the Project Site vicinity (within 0.25 mile) were identified.

[36] *SCAQMD, Facility Information Detail (F.I.N.D.), www.aqmd.gov/nav/FIND, accessed October 4, 2021.*

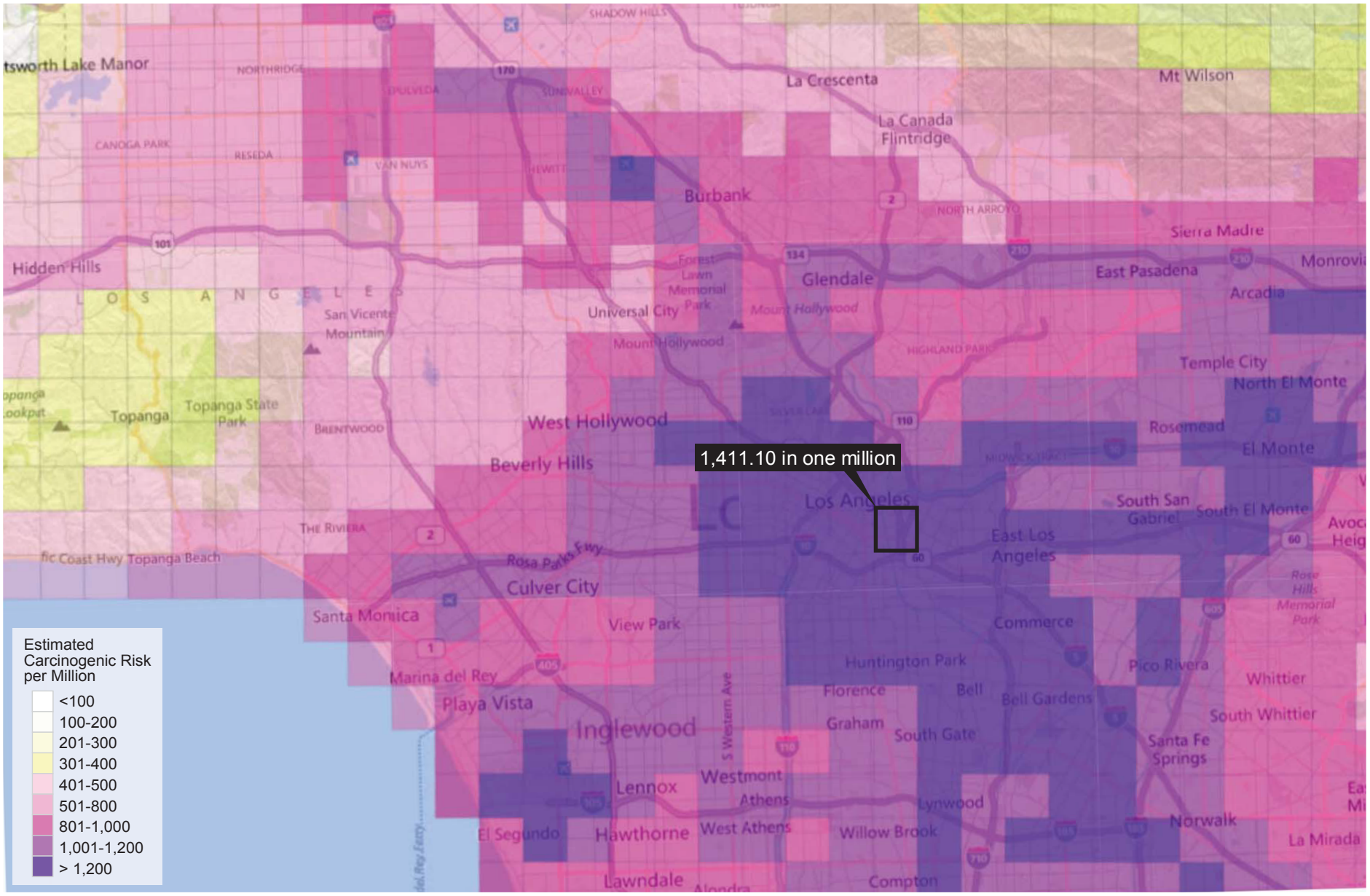

Figure IV.A-3
MATES Cancer Risk

Source: South Coast AQMD, 2016.

(c) Surrounding Uses

As shown in Figure IV.A-4 on page IV.A-30, the land uses surrounding the Project Site include a mix of light industrial, commercial, and residential uses. Light industrial, warehousing and office uses are located north and south of the site. An Amtrak train servicing facility and Burlington Northern Santa Fe (BNSF) rail line is located east of the Project Site. The Los Angeles River is located east of the BNSF rail line. Light industrial and warehousing uses are located west of the site. In addition, one related project with sensitive receptors (see subsection below for definition) is located in the immediate Project vicinity, including: (1) Related Project No. 39, the 2110 Bay Street Development, a residential, office and shopping center development that has been approved but not yet developed immediately west of the Project Site along Bay Street.

(d) Sensitive Uses

Some population groups including residents, children, the elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to air pollution than others due either to the potential for long-term exposure (i.e., residents) and/or their physical condition/attributes (i.e., children, the elderly, ill persons, etc.). Sensitive land uses in the Project vicinity include Related Project No. 39 discussed in the "Surrounding Uses" subsection above. All other air quality sensitive receptors are located at greater distances from the Project Site and would be less impacted by Project emissions. Therefore, the Project's local (ambient) impacts are quantified only for this related project that is identified as a sensitive receptor in Figure IV.A-4.

(e) Existing Project Site Emissions

The Project Site is currently developed with three buildings that comprise 39,328 square feet of office and light industrial uses. Area source emissions are generated by maintenance equipment, landscape equipment, and use of products that contain solvents. Energy source emissions are typically associated with building natural gas usage. Mobile source emissions are generated by motor vehicle trips to and from the Project Site. Table IV.A-3 on page IV.A-31 presents an estimate of the existing emissions within the Project Site.

Figure IV.A-4
Air Quality Sensitive Receptor Locations

Source: Apple Maps, 2020; Eyestone Environmental, 2020.

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

Emission Source	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Winter						
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	1	10	<1	2	<1
Total Existing Emissions[a]	**2**	**2**	**10**	**<1**	**2**	**<1**
Summer						
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	<1	1	10	<1	2	<1
Total Existing Emissions[a]	**2**	**2**	**10**	**<1**	**2**	**<1**

Numbers may not add up exactly due to rounding.

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

Source: Eyestone Environmental, 2022.

3. Project Impacts

a. Thresholds of Significance

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

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

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

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

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

For this analysis, the Appendix G Thresholds listed above are relied upon. The analysis utilizes factors and considerations identified in the City's *L.A. CEQA Thresholds Guide*, as appropriate, to assist in answering the Appendix G Threshold questions.

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

(1) Construction

(a) Combustion Emissions from Construction Equipment

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

(b) Fugitive Dust—Grading, Excavation and Hauling

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

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

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

(d) Other Mobile Source Emissions

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

(2) Operation

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

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

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

(3) Toxic Air Contaminants

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

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

(4) SCAQMD's CEQA Air Quality Handbook

To assist in answering the Appendix G Threshold questions and factors identified in the City's *L.A. CEQA Thresholds Guide* for purposes of this analysis, the City of Los Angeles utilizes the thresholds of significance in SCAQMD's *CEQA Air Quality Handbook*, as identified below, to assess the significance of the Project's estimated air quality impacts. Specifically, Table IV.A-4 on page IV.A-34 shows SCAQMD's currently recommended

Table IV.A-4
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds[a]		
Pollutant	**Construction[b]**	**Operation**
NO_X	100 lbs/day	55 lbs/day
VOC[c]	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead[d]	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants[e]		
NO_2 1-hour average Annual Arithmetic Mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average Annual Average	10.4 μg/m3 (construction)[f] & 2.5 μg/m3 (operation) 1.0 μg/m3	
$PM_{2.5}$ 24-hour average	10.4 μg/m3 (construction) & 2.5 μg/m3 (operation)	
SO_2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal—99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 μg/m3 (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day average Rolling 3-month average	1.5 μg/m3 (state) 0.15 μg/m3 (federal)	

lbs/day = pounds per day

[a] *SCAQMD CEQA Handbook (SCAQMD, 1993), Pages 6-2 and 6-3.*

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

[c] *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.*

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

Table IV.A-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 Draft EIR.

[e] *Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.*

[f] *Ambient air quality threshold based on South Coast AQMD Rule 403.*

Source: South Coast Air Quality Management District, 2019.

significance thresholds, which provide numerical thresholds for evaluating the significance of a project's estimated air quality emissions.

(a) Construction

Based on the criteria set forth in SCAQMD's *CEQA Air Quality Handbook*,[37] the Project would have a significant impact if the Project's estimated construction emissions would cause any of the following to occur:

- Emissions from the Project's direct and indirect sources would exceed any of the SCAQMD significance threshold levels identified in Table IV.A-4 on page IV.A-34.

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

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

[37] *SCAQMD, CEQA Air Quality Handbook.*

(b) Operation

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

- Emissions from the Project's direct and indirect sources would exceed any of the SCAQMD significance threshold levels identified in Table IV.A-4 on page IV.A-34.

- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an 8-hour period) and 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).[39]

- Maximum on-site localized operational PM_{10} and $PM_{2.5}$ emissions exceed the incremental 24-hr threshold of 2.5 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.[40]

- The Project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively; or

- The Project creates an odor nuisance pursuant to SCAQMD Rule 402 (i.e., objectionable odor at the nearest sensitive receptor).

(c) Toxic Air Contaminants

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

- The Project emits carcinogenic or toxic air contaminants that exceed the maximum incremental chronic and acute cancer risk as provided in Table IV.A-4 on page IV.A-34.

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[38] *SCAQMD, CEQA Air Quality Handbook.*

[39] *SCAQMD, LST Methodology.*

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

[41] *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 Threshold (c) as the threshold 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:[42]

- 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.[43] 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 SCAQMD's *CEQA Air Quality Handbook*,[44] the following criteria are used to evaluate the Project's consistency with SCAQMD's AQMP:

- Criterion 1: Will the Project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations;
  - Cause or contribute to new air quality violations; or
  - 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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[42] *SCAQMD, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a project) and Chapter 10 (Assessing Toxic Air Pollutants), April 1993.*

[43] *SCAQMD, Air Quality Significance Thresholds. March 2015.*

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

- 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 SCAQMD's AQMP. 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.[45] 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.*[46]

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

b. Methodology

This analysis focuses on the potential change in 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.

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

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

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Air Basin, such as the Project. Instead, SCAQMD published the *CEQA Air Quality Handbook* in November 1993 to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects proposed in the Air Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*.[47]

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

(1) Construction

Construction of the Project has the potential to generate temporary pollutant emissions through the use of heavy-duty construction equipment, such as excavators and cranes, and through vehicle trips generated from workers and haul and delivery trucks traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NOX, would result from the use of construction equipment. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

[47] *SCAQMD, Air Quality Analysis Handbook, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed October 4, 2021.*

(a) Regional Emissions

The Project's "regional" emissions refer to emissions that will be evaluated based on regional significance thresholds established by SCAQMD, as discussed above. Daily regional emissions during construction are estimated by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying mobile source and fugitive dust emissions factors. The emissions are estimated using CalEEMod (Version 2020.4.0) software, an emissions inventory software program recommended by SCAQMD. The CalEEMod model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with SCAQMD and received input from other California air districts, and is currently used by numerous lead agencies in the Los Angeles area and within the state for quantifying the emissions associated with development projects undergoing environmental review, including by the City of Los Angeles.

CalEEMod is based on outputs from Off-road Emissions Inventory Program model[48] (OFFROAD) and EMission FACtor model[49] (EMFAC), which are emissions estimation models developed by CARB, and used to calculate emissions from construction activities, including off- and on-road vehicles, respectively. CalEEMod also relies upon known emissions data associated with certain activities or equipment (often referred to as "default" data, values or factors) that can be used if site-specific information is not available. CalEEMod contains default values to use in each specific local air district region. Appropriate statewide default values can be used, if regional default values are not defined. The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Construction tasks were aggregated to reflect overlapping tasks and identify the reasonably expected maximum construction emissions occurring over the course of Project construction. To be conservative, this analysis evaluates the Project's air quality impacts during construction based on reasonably expected maximum construction emissions even though such emissions would not occur throughout the entire construction phase. Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix B of this Draft EIR.

[48] *CARB, 2017 Off-road Diesel Emission Factors.*

[49] *CARB, EMFAC 2017.*

(b) Localized Emissions

The localized effects from the on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to SCAQMD's LST methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling, where appropriate, to assess whether the Project's local emissions would exceed SCAQMD's significance thresholds, as described above.[50] SCAQMD provides LSTs applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$.[51] 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 this pollutant. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. SCAQMD developed mass rate look-up tables for each source receptor area and to determine whether or not a project may generate significant adverse localized air quality impacts. SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to 5 acres.[52]

(2) Operation

(a) Regional Emissions

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

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

[51] *SCAQMD, LST Methodology, p. 1-4.*

[52] *As discussed below, the LSTs were derived for the 1.7-acre Project Site.*

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

Similar to construction, SCAQMD's CalEEMod model was used to estimate Project emissions during operation. Mobile-source emissions were calculated using CalEEMod. The CalEEMod default for VMT was bypassed to account for the Project-related VMT provided in the Transportation Assessment for the Project, included in Appendix M to this Draft EIR, which was conducted consistent with Los Angeles Department of Transportation's (LADOT's) *Transportation Assessment Guidelines*.[53] Consistent with these guidelines, the City and LADOT developed a "VMT Calculator" to comply with SB 743, which requires lead agencies to adopt VMT criteria to determine transportation related impacts. CalEEMod calculates mobile-source emissions using the Project's VMT, trip generation, and emission factors based on EMFAC2017.[54] Area source emissions are based on natural gas (building heating and water heaters), landscaping equipment, and consumer product usage (including paints) rates provided in CalEEMod. Natural gas usage factors in CalEEMod are based on the California Energy Commission California Commercial End Use Survey data set, which provides energy demand by building type and climate zone. Emissions associated with use of emergency generators were calculated using CalEEMod, in which emission factors are based on Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel Engines) from EPA's AP-42: Compilation of Air Pollutant Emission Factors. The emissions are based on the horsepower rating of the diesel generator and the number of hours operated per year for testing purposes.

To determine if a significant air quality impact would occur, the net increase in regional operational emissions generated by the Project was compared against SCAQMD's significance thresholds.[55] To be conservative, this analysis evaluates the Project's air

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[53] *Transportation Assessment for the 2159 Bay Street Project, The Mobility Group, July 2020 2020. Included in Appendix M of this Draft EIR.*

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

[55] *SCAQMD, SCAQMD Air Quality Significance Thresholds, revised March 2015. SCAQMD based these thresholds, in part, on the federal Clean Air Act and, to enable defining "significant" for CEQA purposes,*

(Footnote continued on next page)

quality impacts during operations based on reasonably expected maximum operational emissions even though such emissions would not occur throughout the entire operational phase. Refer to Appendix B of this Draft EIR for additional information regarding methodology.

(b) Localized Emissions

(i) On-Site Emissions

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

(ii) Off-Site Emissions

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

It has been recognized that CO exceedances are caused by vehicular emissions,[56] primarily when idling at intersections.[57,58] Accordingly, vehicle emissions standards have become increasingly more stringent. Before the first vehicle emission regulations, cars in the 1950s were typically emitting about 87 grams of CO per mile.[59] Currently, the CO standard in California is a maximum of 3.4 grams/mile for passenger cars (with provisions for certain cars to emit even less).[60] With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the Air Basin have steadily declined.

The analysis prepared for CO attainment in the Air Basin by SCAQMD can be used to assist in evaluating the potential for CO exceedances in the Air Basin.

defined the setting as the South Coast Air Basin. (See SCAQMD, CEQA Air Quality Handbook, April 1993, pp. 6-1–6-2.).

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

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

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

[59] *USEPA, Timeline of Major Accomplishments in Transportation, Air Pollution, and Climate Change, www.epa.gov/air-pollution-transportation/timeline-major-accomplishments-transportation-air-pollution-and-climate, accessed October 4, 2021.*

[60] *CARB, California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-duty Trucks, and Medium-duty Vehicles, amended September 27, 2010.*

CO attainment was thoroughly analyzed as part of SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).[61] 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 Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which had a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.[62] The AQMP CO hotspots modeling also took into account worst-case meteorological conditions and background CO concentrations. The Los Angeles County Metropolitan Transportation Authority (Metro) evaluated the level of service (LOS) in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level E at peak morning traffic and Level F at peak afternoon traffic.[63,64] As an initial screening step, if a project intersection does not exceed 400,000 vehicles per day, then the project does not need to prepare a detailed CO hot spot analysis. If a project would potentially result in a CO hotspot based on the initial screening, detailed modeling may be performed using California LINE Source Dispersion Model, version 4 (CALINE4), which is a model used to 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

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[61] *SCAQMD, 1997. Revisions to Chapter 5 of the 1992 Federal Attainment Plan for Carbon Monoxide.*

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

[63] *Metro measured traffic volumes and calculated the LOS for the intersection Wilshire Blvd./Sepulveda Blvd., which is a block west along Wilshire Blvd., still east of Interstate 405.*

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

considers impacts to sensitive receptors from facilities that emit TAC emissions.[65] 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 initially evaluated by conducting a qualitative analysis consistent with SCAQMD guidance and the CARB Handbook. The qualitative analysis consists of reviewing the Project to identify any new or modified TAC emissions sources and evaluating the potential for such sources to cause significant TAC impacts. If the qualitative evaluation determines the potential for significant impacts from a new TAC source, or modification of an existing TAC emissions source, a more detailed dispersion analysis is conducted to evaluate estimated Project TAC emissions against the applicable SCAQMD significance thresholds based on downwind sensitive receptor locations.

c. Project Design Features

The following project design feature is proposed with regard to air quality.

Project Design Feature AQ-PDF-1: Electricity to serve the Projects non-emergency operational needs will be supplied to the Project Site by LADWP and will be obtained from LADWP power poles and electrical lines rather than from temporary gasoline or diesel powered generators.

In addition, the Project would incorporate project design features to support and promote environmental sustainability as discussed under Section IV.E, Greenhouse Gas Emissions, of this 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

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

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

(1) SCAQMD CEQA Air Quality Handbook Policy Analysis

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

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

(a) Criterion 1

With respect to the first criterion, as discussed under the analysis for **Threshold (c)**, below, localized concentrations of NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ have been analyzed for the Project. SO_2 emissions would be negligible during construction and long-term operations and, therefore, would not have the potential to cause or affect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

As shown in Table IV.A-6 on page IV.A-59 in the analysis below, the increases in PM_{10} and $PM_{2.5}$ emissions during construction would not exceed the SCAQMD-recommended significance thresholds at sensitive receptors in proximity to the Project Site. Additionally, the Project's maximum potential NO_X and CO daily emissions during construction were analyzed to ascertain potential effects on localized concentrations and to determine if there is a potential for such emissions to cause or affect a violation of an

applicable ambient air quality standard. As shown in Table IV.A-8 on page IV.A-62 in the analysis below, and detailed in Appendix B (under CalEEMod Construction Output file) of this Draft EIR, NO_X and CO would not exceed the SCAQMD-recommended localized significance thresholds. **Therefore, Project construction would not result in a significant impact with regard to localized air quality.**

Because the Project would not introduce any substantial stationary sources of emissions (e.g., gasoline stations, dry cleaners, chrome plating operations), CO is the preferred benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.[66] 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, the Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.**

An analysis of potential localized operational impacts from on-site activities was also conducted. As shown in Table IV.A-9 on page IV.A-63 in the analysis below, localized NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ operational impacts would be less than significant. **Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants and would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.**

(b) Criterion 2

With respect to the second criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016–2040 RTP/SCS regarding population, housing, and growth trends[67]. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) Project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

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

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

[67] *While SCAG has recently adopted the 2020–2045 RTP/SCS, SCAG's 2016–2040 RTP/SCS is used for assessing AQMP consistency because the AQMP was based on the assumptions in the 2016–2040 RTP/SCS.*

A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2016 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's 2016–2040 RTP/SCS. .

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

The Project Site is located within the Central City North Community Plan area, which encourages the development of new uses which contribute job opportunities for residents living in the Community Plan area.[68]

The 2016–2040 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. Economic assumptions including employment rates and migration due to jobs are also included as part of the RTP/SCS forecast projections.

According to the 2016–2040 RTP/SCS, the employment forecast for the City of Los Angeles Subregion in 2019 was approximately 1,848,300 employees.[69] In 2025, the projected occupancy year of the Project, the City of Los Angeles Subregion is anticipated to have approximately 1,937,555 employees.[70] Thus, the Project's estimated net increase of 779 employees would constitute approximately 0.87 percent of the employment growth forecasted between 2019 and 2025.[71,72] It should be noted that the Project would develop

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[68] *A detailed list of the goals, objectives, and policies of the Community Plan applicable to the Project Site is included in Table 3 of Appendix I of this Draft EIR.*

[69] *The 2019 interpolated value is calculated using SCAG's 2016 and 2045 values to find the average employment increase between years and then applying that annual increase from 2016 to 2019: [(2,135,900 – 1,848,300) ÷ 29] × 3 + 1,848,300 = 1,878,052 jobs (~1.88 million).*

[70] *The 2025 interpolated value is calculated using SCAG's 2016 and 2045 values to find the average households increase between years and then applying that annual increase from 2016 to 2025: [(2,135,900 – 1,848,300) ÷ 29] × 9 + 1,848,300 = 1,937,555 jobs (~1.94 million).*

[71] *Based on City of Los Angeles VMT Calculator Documentation (Version 1.3), May 2020, Table 1: Land Use and Trip Generation Base Assumptions. The employee generation rate of 0.004 employee per square foot for "General Office" land use is applied to the 23,106 square feet of existing offices. The employee generation rate of 0.001 employee per square foot for "Light Industrial" land use is applied to the 16,222 square feet of existing light industrial uses. As such, the existing uses generate approximately*

(Footnote continued on next page)

222,189 square feet of office, retail and restaurant uses, but does not propose any residential uses.

As discussed previously, the AQMP is based on the 2016–2040 RTP/SCS, which incorporates data from General Plans as well as local land use data, such as the Community Plan. While the Project would require a Vesting Zone and Height District Change, the Project-related population and employment growth would be well within the Citywide growth projection.

As similar employment projections form the basis of the 2016 AQMP, the Project would be consistent with the projections in the AQMP.

- Does the project implement feasible air quality mitigation measures?

The Project would comply with all applicable regulatory standards (e.g., SCAQMD Rule 403, etc.) as required by SCAQMD, as summarized above. The Project also would incorporate project design features to support and promote environmental sustainability as discussed in Section IV.E, Greenhouse Gas Emissions, of this Draft EIR. While these features are designed primarily to reduce GHG emissions, they would also serve to reduce the criteria air pollutants discussed herein. Furthermore, and as analyzed in detail below under Threshold (b), with compliance with the regulatory requirements identified above and in Section IV.E, Greenhouse Gas Emissions, of this Draft EIR, no significant air quality impacts would occur. Therefore, the Project is not required to implement air quality mitigation measures. **As such, the Project meets this AQMP consistency criterion.**

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

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines

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110 employees. With regard to proposed uses, the employee generation rate of 0.004 employee per square foot for "General Office" land use is applied to the 217,189 square feet of proposed creative offices. The employee generation rate of 0.004 employee per square foot for "High-Turnover Sit-Down Restaurant" land use is applied to 2,500 square feet of proposed restaurant uses. The employee generation rate of 0.004 employee per square foot for "Quality Restaurant" land use is applied to 2,500 square feet of proposed restaurant uses. As documented in Appendix A, VMT Analysis LADOT Calculator Worksheets, of the Project's Transportation Assessment (in Appendix M of this Draft EIR), the Project would generate approximately 889 employees. Therefore, the Project would result in a net generation of 889–110 = 779 employees.

[72] *Project's net increase in employees (779) ÷ Increase in employment in City of LA subregion from 2019 to 2025 (89,255) = 0.87 percent*

its portion of the Plan with those prepared by SCAG. The RTP/SCS and TCMs, included as Appendix IV-C of the 2016 AQMP/SIP for the Basin, are based on SCAG's 2016–2040 RTP/SCS.With regard to land use developments, such as the Project, the 2016–2040 RTP/SCS land use control measures (i.e., goals and policies) focus on locating future growth within High Quality Transit Areas (HQTAs) and the reducing vehicle trips and VMT. The Project represents an infill development within an existing urbanized area that would concentrate new office uses within an HQTA.[73,74] Therefore, the Project would be consistent with SCAG's 2016–2040 RTP/SCS, as it is located within an HQTA. The Project would also be designed and constructed with sustainability and transit orientation as guiding principles. Public transit service in the vicinity of the Project Site is currently provided by multiple local and regional bus lines, several of which provide connections to Downtown subway stations, including the Los Angeles County Metropolitan Transit Authority (Metro) Red and Purple Lines Pershing Square Station and the Metro Red, Purple, Blue, and Expo Lines 7th Street/Metro Center Station. In particular, Metro provides a bus stop for Metro Local Line 60 located at the corner of South Santa Fe Avenue and Violet Street, approximately 580 feet northwest of the Project Site. Two other bus lines, local lines Metro 18, and Metro 62 have stops within a quarter mile of the Project Site. Metro Local Line 66 and Metro Rapid Line 720 currently serve the Project Site via stops located within approximately a half mile along Alameda Street/7th Street, and Olympic Boulevard. Additionally, the Greyhound Bus Terminal is located northwest of the Project Site on 7th Street, which provides inter-city bus service to various locations outside of the Los Angeles area. Future rail transit service in the area would also include the West Santa Ana Branch corridor, which is currently under environmental review by Metro, including potential alignments along Alameda Street with potential station locations in the Arts District.[75] Also under environmental review, Metro is considering the potential extension of the Red and Purple Lines' (now called the B and D lines under NextGen) revenue service to the east and south from Union Station to the Arts District, with potential stations at 3rd Street and 6th Street.[76] The Project Site is also located approximately 1.5 miles from the Metro Gold Line (now called the G Line under NextGen) Little Tokyo/Arts District Station.

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

[74] *SCAG, High Quality Transit Areas (HQTA) 2016—SCAG Region, http://gisdata-scag.opendata.arcgis.com/datasets/1f6204210fa9420b87bb2e6c147e85c3_0?geometry=-118.958%2C33.943%2C-117.817%2C34.142, accessed October 4, 2021.*

[75] *LA Metro, Next stop: new rail to Southeast LA County - West Santa Ana Branch Transit Corridor (WSAB), https://storymaps.arcgis.com/stories/8fba510751ad4b148235c9148afa1c0d/print, accessed June 23, 2022.*

[76] *LA Metro, Arts District—6th Street Station website, www.metro.net/projects/arts-dist-6th-station/, accessed June 23, 2022.*

The Project would also provide required short- and long-term bicycle parking spaces in compliance with the requirements of the Los Angeles Municipal Code (LAMC).

As further discussed in Section IV.E, Greenhouse Gas Emissions, of this Draft EIR, the Project design includes characteristics that would reduce trips and VMT as compared to a standard project within the air basin as measured by the air quality model (CalEEMod).[77] While these Project characteristics primarily reduce GHG emissions, they would also reduce criteria air pollutants discussed herein. These relative reductions in vehicle trips and VMT from a standard project within the air basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project in any infill, HQTA area that promotes alternative modes of transportation. Specifically, the Project would introduce a mix of office, retail, and restaurant uses on the Project Site in proximity to other existing off-site residential, office, retail, restaurant, and industrial uses, which would reduce VMT by encouraging walking and non-automotive forms of transportation; introduce new jobs in close proximity to densely populated areas including Downtown Los Angeles; and increase transit accessibility by located new jobs within 0.25 mile of existing bus routes and approximately 1.5 miles from the Metro Gold Line Little Tokyo/Arts District station.

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.[78] The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project features such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. As shown in Appendix B, incorporation of USEPA MXD VMT reduction features applicable to the Project results in a 17-percent reduction in overall VMT and resultant pollutant emissions compared to the baseline ITE trip generation rates. Furthermore, with

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

[78] *Environmental Protection Agency, Mixed-Use Trip Generation Model. www.epa.gov/smartgrowth/mixed-use-trip-generation-model, accessed on October 4, 2021.*

implementation of Mitigation Measure TR-MM-1, implementation of a TDM program, the Project would result in a 28-percent reduction in overall VMT and associated emissions.[79]

As mentioned above, the Project would promote the use of alternative modes of transportation, including convenient access to public transit, opportunities for walking and biking, thereby facilitating a reduction in VMT. The Project is consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near transit options. The Project also includes primary entrances for pedestrians and bicyclists that would be safe, easily accessible, and a short distance from transit stops. Implementation of these sustainability features would contribute to a reduction in air quality emissions via a reduction in VMT. **Accordingly, as the Project would support SCAG's and SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project is consistent with the 2016–2040 RTP/SCS (i.e., control measures of the AQMP).**

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of the Project on air quality in the Air Basin. The Project represents an infill development near transit within an existing urbanized area that would concentrate new office and commercial 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, PM_{10}, and $PM_{2.5}$. The Project would also be consistent with the goals and policies of the AQMP for the control of fugitive dust. As discussed above, the Project would be consistent with the goals and policies of the AQMP.

(2) City of Los Angeles Policies

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

The Project would promote the City of Los Angeles General Plan Air Quality Element goals, objectives and policies noted above. Specifically, the Project includes 78 bicycle parking spaces consisting of 28 short-term spaces and 50 long-term spaces. The Project would provide opportunities for the use of alternative modes of transportation, including access to public transit and opportunities for walking and biking, thereby

[79] *Please refer to Page B.3-2 of Appendix B.3 of this Draft EIR*

facilitating a reduction in VMT. In addition, the Project would be consistent with the developing land use pattern in the vicinity that features greater concentration of urban density along major arterials and near transit options. The Project also includes primary entrances for pedestrians and bicyclists that would be safe, easily accessible, and within 0.5 mile of major transit stops. Additionally, as discussed in Section IV.E, Greenhouse Gas Emissions, of this Draft EIR, the Project will comply with City EV charging requirements which includes the provision of at least 30 percent of total parking spaces provided on the Project Site that are capable of supporting future electric vehicle supply equipment (EVSE) and a minimum of 10 percent of the total parking spaces on the Project Site to be equipped with EV charging stations. Provisions of the EVSE and EV parking spaces would help to facilitate and encourage use of alternative fueled vehicles.

A more detailed analysis of the Project's consistency with the City's General Plan is presented in Table IV.A-5 on page IV.A-54, which identifies specific goals and polices of the City's General Plan Air Quality Element and demonstrates the Project's consistency with these goals.

Based on the above, the Project is consistent with applicable policies of the City of Los Angeles Air Quality Element. Refer to Section IV.H, Land Use, of this Draft EIR, for an analysis of the Project's potential conflicts with the City's General Plan.

(3) Conclusion

In conclusion, analysis of Threshold (a) was based on the Project's consistency with the AQMP as well as the City of Los Angeles plans and policies. The determination of AQMP consistency is primarily concerned with the long-term influence of the Project on air quality in the Air Basin. As discussed above, the Project would not increase the frequency or severity of an existing air quality violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. In addition, because the Project is consistent with growth projections that form the basis of the 2016 AQMP, the Project would be consistent with the emissions forecasts in the AQMP. Furthermore, while the Project does not implement any air quality mitigation measures, the Project would comply with all applicable regulatory standards and would incorporate the project design features identified in Section IV.E, Greenhouse Gas Emissions, of this Draft EIR, that would serve to reduce the criteria air pollutants discussed herein. Additionally, as the Project would support the City of Los Angeles and SCAQMD's objectives of reducing VMT and the related vehicular

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

Recommendation	Analysis of Project Consistency
Air Quality Element	
Goal 1: Good air quality and mobility in an environment of continued population growth and healthy economic structure.	**Consistent.** The Project would introduce a complementary mix of land uses contributing to the development of the Arts District area as a center for residential, employment, and retail services. The Project's mix of employment and retail uses would allow for nearby residents to travel to the site for work and shopping, resulting in a reduction in VMT. The Project would also provide required short- and long-term bicycle parking spaces in compliance with the requirements of the LAMC. Transit accessibility and the bicycle parking spaces provided on-site would further reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation.
Objective 1.1.1: It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.	**Consistent.** The Project is in an infill location with convenient access to public transit and opportunities for walking and biking, which would promote an improved quality of life by facilitating a reduction of vehicle trips, VMT, and air pollution. Specifically, the Project Site is located in a transit-rich neighborhood near three Metro local bus routes, two Metro Rapid bus lines and would be located 1.5 miles from the Metro Gold Line Little Tokyo/Arts District station. The Project Site's proximity to transit would reduce VMT and associated air pollution. As discussed under Threshold (a), the Project would introduce new office and restaurant uses and be consistent with the relevant SCAG growth projections in the SCAG 2016–2040 RTP/SCS that were used in preparing the 2016 AQMP. The Project would reduce air pollutants through a reduction in VMT and increase traffic mobility while also sustaining economic growth. Therefore, the Project would be consistent with Objective 1.1 of the City's General Plan Air Quality Element.
Objective 1.1.3: It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.	**Consistent.** The Project would comply with SCAQMD Rule 403, which requires dust control measures during construction activities. The Project would 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 DPM 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 remove existing surface parking uses. Parking areas would be maintained with good housekeeping practices. The Project would reduce PM_{10} and $PM_{2.5}$ emissions from unpaved areas and during construction by complying with SCAQMD Rule 403. Therefore, the Project would be consistent with Objective 1.3 of the City's General Plan Air

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

Recommendation	Analysis of Project Consistency
	Quality Element.
Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.	**Consistent.** The Project Site is located in an area in proximity to mass transit, encouraging alternative modes of transit thereby reducing the distance traveled for future employees. Future employees on the Project Site would have access to three Metro local bus routes, two Metro Rapid bus lines and would be located 1.5 miles from the Metro Gold Line Little Tokyo/Arts District station. The Project's mix of uses, proximity to amenities and housing, 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.	**Consistent.** The Project would be located within two miles from Union Station and is served by five bus lines and would be located within 1.5 miles from the Metro Gold Line Little Tokyo/Arts District Station. The accessibility to mass transit would encourage employees to utilize alternative modes of transportation. which would reduce work trips.
Policy 2.1.1: Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce Vehicle Trips and/or Vehicle Miles Traveled (VMT) as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.	**Consistent.** The Project would be located within 1.5 miles from the Metro Gold Line Little Tokyo/Arts District Station and is served by five bus lines. The Project would incorporate pedestrian pathways that would connect to the existing sidewalk network. In addition, the Project would provide 78 bicycle parking spaces, including 28 short-term and 50 long-term spaces.
Goal 4: Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.	**Consistent.** The Project would reduce VMT due to its infill location, development of office uses near major population areas, and access to public transportation within 0.25 mile of the Project Site.
Objective 4.1: It is the objective of the City of Los Angeles to include the regional attainment of ambient air quality standards as a primary consideration in land use planning.	**Consistent.** The Project analysis of potential air quality impacts relied upon the numeric indicators established by the SCAQMD, which considers attainment of the ambient air quality standards. The Project also incorporates land use characteristics such as high-density and mixed-use development as well as proximity to mass transit that would reduce land use planning-related air pollutant emissions.
Policy 4.1.2: Ensure that project level review and approval of land use development remain at the local level.	**Consistent.** The Project environmental review and approval would occur at the local level. This project-level EIR is being conducted by the City pursuant to CEQA requirements
Objective 4.2: It is the objective of the City of Los Angeles to reduce vehicle trips and VMT associated with land use patterns.	**Consistent.** The Project would reduce VMT due to its infill location, development of office uses near major population areas and job centers in Downtown Los Angeles, and access to public transportation within 0.25 mile of the

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

Recommendation	Analysis of Project Consistency
	Project Site.
Policy 4.2.2: Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.	**Consistent.** The Project would reduce VMT due to its infill location, development of office uses near major population areas and places of employment, and access to public transportation within 0.25 mile of the Project Site.
Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	**Consistent.** The Project would incorporate internal pedestrian pathways that would connect to the existing sidewalk network. In addition, the Project would provide 78 bicycle parking spaces, including 25 short-term and 50 long-term spaces. The Project would also comply with City requirements for providing electric vehicle charging capabilities and electric vehicle charging stations within the proposed parking areas.
Policy 4.2.4: Require that air quality impacts be a consideration in the review and approval of all discretionary projects.	**Consistent.** The environmental review conducted for the Project would include an analysis of air quality impacts; and the decision-maker(s) for the discretionary actions would be responsible for determining that the environmental review was conducted in compliance with CEQA.
Policy 4.2.5: Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	**Consistent.** The Project would occupy an infill location within 0.25 mile of existing public transportation, which would help to promote transit usage and in turn reduce the number of vehicle trips to and from the Project Site. In addition, the Project would provide 78 bicycle parking spaces, including 25 short-term and 50 long-term spaces. Furthermore, as required by Mitigation Measure TR-MM-1, the Project would develop and implement a Transportation Demand Management (TDM) program to promote non-auto travel and reduce the use of single-occupant vehicle trips for office employees.

Source: City of Los Angeles General Plan Air Quality Element, 1992; Eyestone Environmental, 2021.

air emissions, the Project would be consistent with AQMP control measures. **Thus, the Project would not conflict with or obstruct implementation of the AQMP. With regard to the City of Los Angeles policies, as discussed above, the Project would serve to implement applicable policies of the City of Los Angeles pertaining to air quality. Based on the above, impacts to Threshold (a) would be less than significant.**

(4) Mitigation Measures

Project impacts with regard to implementation of the applicable air quality plan would be less than significant during construction and over the long-term operating life of the Project. Therefore, no mitigation measures are required.

(5) Level of Significance After Mitigation

Project impacts related to Threshold (a) during both construction and operation of the Project were determined to be less than significant without mitigation. Therefore, no mitigation measures were required, and the impact level remains less than significant.

Threshold (b): 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) Regional Emissions

(a) Construction

Project construction would occur in sequential phases (e.g., demolition, then grading, then building construction), with buildout expected to be completed in in 2025. Construction of the Project would commence with demolition of the existing industrial structures and offices. This phase would be followed by grading and excavation for the subterranean parking garage. Building foundations would then be laid, followed by building construction, paving/concrete installation, and landscape installation. The Project may require excavation up to 42 feet below ground surface. Approximately 140,000 cubic yards of export material (e.g., concrete and asphalt surfaces) and soil would be hauled from the Project Site during excavation.

Construction of the Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from haul trucks and construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment, such as dozers, loaders, and cranes. During the finishing phase of the Project, paving and the application of architectural coatings (e.g., paints) would potentially release VOCs. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Construction assumptions, including construction schedule, heavy-duty construction equipment mix, and the number of employee and delivery and haul truck trips, are included in Appendix B (under CalEEMod Construction Output file).

The emissions levels in Table IV.A-6 on page IV.A-59 represent the highest daily emissions projected to occur during each year of construction. As presented in Table IV.A-6, construction-related daily maximum regional construction emissions (i.e., combined on-site and off-site emissions) without mitigation would not exceed the SCAQMD daily significance thresholds for VOC, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.

Therefore, regional construction emissions resulting from the Project would result in a less-than-significant impact.

(b) 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 Draft EIR. While these features are designed primarily to reduce GHG emissions relative to a standard default project as analyzed by CalEEMod within the air basin, the features would also serve to reduce relative criteria air pollutants discussed herein.

Table IV.A-7 on page IV.A-60 provides the Project's net increase in operational emissions. As discussed in Section II, Project Description, of this Draft EIR, all existing buildings on-site would be removed. Existing credit (vehicle trips and emissions) was taken for the buildings to be demolished. As shown in Table IV.A-7, regional emissions resulting from operation of the Project would not exceed any of SCAQMD's daily regional operational thresholds.

Therefore, regional operational emissions resulting from the Project would result in a less-than-significant impact.

(2) Localized Emissions

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

(a) Construction

Project-related localized construction impacts are evaluated based on SCAQMD LST methodology which takes into account ambient pollutant concentrations. Based on SCAQMD methodology, localized emissions which exceed LSTs would also cause an exceedance of ambient air quality standards. As analyzed in Threshold (c) below,

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

Construction Year	VOC[b]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Regional Construction Emissions Winter						
Year 2023	4	57	40	<1	7	3
Year 2024	19	42	57	<1	8	3
Year 2025	19	43	61	<1	8	3
Maximum Unmitigated Construction	19	57	61	<1	8	3
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(56)**	**(43)**	**(489)**	**(150)**	**(142)**	**(52)**
Maximum Unmitigated Construction	**No**	**No**	**No**	**No**	**No**	**No**
Regional Construction Emissions Summer						
Year 2023	4	56	40	<1	7	3
Year 2024	19	41	58	<1	8	3
Year 2025	19	42	63	<1	8	3
Maximum Unmitigated Construction	19	56	63	<1	8	3
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**(56)**	**(44)**	**(487)**	**(150)**	**(142)**	**(52)**
Maximum Unmitigated Construction	**No**	**No**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

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

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

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

Source: Eyestone Environmental, 2022.

Project-related construction emissions would not exceed localized thresholds. Thus, localized construction emissions resulting from the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. **Therefore, localized construction emissions resulting from the Project would result in a less-than-significant air quality impact.**

(b) Operation

Project-related operational emissions were also evaluated based on SCAQMD LST methodology from on-site sources (e.g., water heaters, cooking appliances, HVAC). The potential to cause or contribute to CO hotspots (potential exceedances of ambient air quality standards) from post-construction motor vehicle operations was also evaluated. As

Table IV.A-7
Estimate of Net Increase in Maximum Regional Project Daily Operational Emissions—At Project Buildout (2025)[a]

Emission Source	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Winter						
Area	<1	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile	<1	1	7	<1	2	<1
Stationary	<1	<1	<1	<1	<1	<1
Total Existing	2	1	7	<1	2	<1
Project Winter						
Area	5	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile	6	6	52	<1	12	3
Stationary	<1	1	1	<1	<1	<1
Total Project	11	8	54	<1	12	3
Project less Existing Winter						
Area	4	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile [b]	5	5	45	<1	11	3
Stationary	<1	1	1	<1	<1	<1
Total Proposed Uses Emissions	**10**	**7**	**47**	**<1**	**11**	**3**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(45)**	**(48)**	**(503)**	**(150)**	**(139)**	**(52)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Existing Summer						
Area	<1	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile	<1	1	7	<1	2	<1
Stationary	<1	<1	<1	<1	<1	<1
Total Existing	2	1	7	<1	2	<1
Project Summer						
Area	5	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile	6	5	51	<1	12	3
Stationary	<1	1	1	<1	<1	<1
Total Project	11	8	54	<1	12	3
Project less Existing Summer						
Area	4	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile b	5	5	44	<1	11	3
Stationary	<1	1	1	<1	<1	<1
Total Proposed Uses Emissions	**10**	**7**	**47**	**<1**	**11**	**3**

Table IV.A-7 (Continued)
Estimate of Net Increase in Maximum Regional Project Daily Operational Emissions—At Project Buildout (2025)

Emission Source	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Over/(Under)	**(45)**	**(48)**	**(503)**	**(150)**	**(139)**	**(52)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

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

[b] *With implementation of Mitigation Measure TR-MM-1 (TDM Program), operational emissions would be reduced by an additional 0.3 lb/day of VOC, 1.6 lbs/day of NO_X, 4.2 lbs/day of CO, 1.6 lbs/day of PM_{10}, and 0.4 lb/day of $PM_{2.5}$.*

Source: Eyestone Environmental, 2022.

analyzed in Threshold (c) below, Project-related operational emissions from on-site and off-site sources would not exceed localized thresholds. Thus, localized operational emissions resulting from the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. **Therefore, localized operational emissions resulting from the Project would result in a less-than-significant air quality impact.**

(3) Conclusion

According to SCAQMD guidance, individual projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would have a cumulatively considerable contribution to emissions for those pollutants for which the Air Basin is in non-attainment. As shown in Table IV.A-6 and Table IV.A-7 on pages IV.A-59 and IV.A-60, Project construction and operational daily emissions at the Project Site would not exceed any of SCAQMD's regional thresholds, respectively. Therefore, the Project's contribution to cumulative construction-related and operation-related regional emissions would not be cumulatively considerable and, therefore, would be less than significant. In addition, construction and operational emissions from the Project would not exceed any of SCAQMD's localized significance thresholds at Project buildout as shown in Table IV.A-8 and Table IV.A-9 on pages IV.A-62 and IV.A-63, respectively. Thus, construction and operation of the Project would have less-than-significant impacts with regard to localized emissions as well. **Therefore, the Project's contribution to localized cumulative air quality impacts also would not be cumulatively considerable and, thus, would be less than significant.**

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

Construction Year	NO_X	CO	PM_{10}	$PM_{2.5}$
Winter				
Year 2023	30	33	2	1
Year 2024	36	47	2	1
Year 2025	33	47	1	1
Maximum Unmitigated Daily Localized Emissions	36	47	2	1
SCAQMD Localized Significance Thresholds[c]	**61**	**916**	**7**	**4**
Over/(Under)	**(25)**	**(869)**	**(5)**	**(3)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Winter				
Year 2023	30	33	2	1
Year 2024	36	47	2	1
Year 2025	33	46	1	1
Maximum Unmitigated Daily Localized Emissions	36	47	2	1
SCAQMD Localized Significance Thresholds[c]	**61**	**916**	**7**	**4**
Over/(Under)	**(25)**	**(869)**	**(5)**	**(3)**
Exceed Threshold?	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

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

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

[c] *Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1 for a 1.7 acre site which is interpolated between the 1-acre and 2-acre thresholds. The closest existing sensitive receptor is a future residential use adjacent to the west of the Project Site. The localized threshold is based on a 25 meter receptor distance which is the closest receptor distance on the SCAQMD mass rate LST look-up table.*

Source: Eyestone Environmental, 2021.

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

(4) Mitigation Measures

Project impacts with respect to criteria air pollutants would not be cumulatively considerable. Therefore, no mitigation measures are required.

Table IV.A-9
Estimate of Maximum Localized Project Daily Operational Emissions—At Project Buildout (2025)[a]
(pounds per day)

Emission Source	Pollutant Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Existing Winter				
Area	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary (Emergency Generators)	<1	<1	<1	<1
Total Existing	<1	<1	<1	<1
Project Winter				
Area	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary (Emergency Generators)	1	1	<1	<1
Total Project	2	2	<1	<1
Project less Existing Winter				
Area	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary (Emergency Generators)	1	1	<1	<1
On-Site Total	**2**	**2**	**<1**	**<1**
SCAQMD Significance Threshold[b,c]	**61**	**916**	**2**	**1**
Over/(Under)	**(59)**	**(914)**	**(2)**	**(1)**
Exceed Threshold?	**No**	**No**	**No**	**No**
Existing Winter				
Area	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary (Emergency Generators)	<1	<1	<1	<1
Total Existing	<1	<1	<1	<1
Project Winter				
Area	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary (Emergency Generators)	1	1	<1	<1
Total Project	2	2	<1	<1
Project less Existing Winter				
Area	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1
Stationary (Emergency Generators)	1	1	<1	<1
On-Site Total	**2**	**2**	<1	<1
SCAQMD Significance Threshold[b,c]	**61**	**916**	**2**	**1**
Over/(Under)	**(59)**	**(914)**	**(2)**	**(1)**
Exceed Threshold?	**No**	**No**	**No**	**No**

Table IV.A-9 (Continued)
Estimate of Maximum Localized Project Daily Operational Emissions—At Project Buildout (2025)[a]
(pounds per day)

Emission Source	Pollutant Emissions (pounds per day)			
	NO_X	CO	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 (under CalEEMod Output) of this Draft EIR.*

[b] *Potential localized construction impacts were evaluated using SCAQMD's LSTs for Source Receptor Area 1 for a 1.7 acre site which is interpolated between the 1-acre and 2-acre thresholds. The closest sensitive receptor is a future residential use adjacent to the west of the Project Site. The localized threshold is based on a 25-meter receptor distance which is the closest receptor distance on the SCAQMD mass rate LST look-up table.*

[c] *Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. In addition, SCAQMD does not provide an LST for SO_2 since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant.*

Source: Eyestone Environmental, 2022.

(5) Level of Significance After Mitigation

Project impacts with respect to criteria air pollutants would not be cumulatively considerable without mitigation.

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

(1) Construction

(a) 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 SCAQMD. Look-up tables provided by SCAQMD were used to determine localized construction emissions thresholds for the Project.[80]

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are based on the most recent background ambient air quality monitoring data (2017–2019) for the Project area as presented in Table IV.A-8 on

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

page IV.A-62. Although the trend shown in Table IV.A-8 demonstrates that ambient air quality is improving in the area, the localized construction emissions analysis conservatively did not apply a reduction in background pollutant concentrations for subsequent years of construction (i.e., 2023–2025). By doing so, the allowable pollutant increment to not exceed an ambient air quality standard is more stringent. The analysis and LSTs have been adapted to take into account n existing background ambient air quality monitoring data (2017–2019). Calculations of the LSTs are provided in Appendix B of this Draft EIR.

Maximum on-site daily construction emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for SRA 1 based on a 1.7-acre site. Potential impacts were evaluated at the closest off-site sensitive receptor, which are future residential uses located to the west, adjacent to the Project Site. Ambient air quality standards for NOx and CO have averaging times of 1-hour and 8-hour respectively. The closest receptor distance on the SCAQMD mass rate LST look-up tables is 25 meters. Based on SCAQMD LST methodology, projects with boundaries located closer than 25 meters to the nearest receptor (such as the Project) should use the LSTs for receptors located at 25 meters.[81]

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

(b) Off-Site Construction Activities (CO "Hot Spots" Analysis)

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

The highest average daily trips at an intersection under the Existing Condition would be approximately 32,300 vehicles per day at the 7th Street and Santa Fe Street intersection.[82] Project construction would result in a maximum of 750 worker trips and up to 260 haul trips (130 round trips) trips per day during building construction. Please refer to Appendix B for detailed construction assumptions.

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

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

Conservatively assuming that all of the Project construction would drive through this intersection, it would result in approximately 32,600 vehicles per day, which is significantly below the daily traffic volumes of 400,000 vehicles per day that would be expected to generate CO exceedances as evaluated in the 2003 AQMP.[83] This daily trip estimate is based on the peak hour conditions of the intersection. **The Project off-site construction activities, including the highest daily trips, would not expose sensitive receptors to substantial CO concentrations**. **As a result, impacts related to localized construction mobile-source CO emissions are considered less than significant.**

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

The greatest potential for TAC emissions during construction would be from diesel particulate emissions associated with heavy equipment operations. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person continuously exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. Given the short-term construction schedule of approximately four years, the Project would not result in a long-term (i.e., 70-year) source of TAC emissions. Additionally, SCAQMD's CEQA guidance does not require a health risk assessment (HRA) for short-term construction emissions. It is, therefore, not necessary to quantitatively evaluate long-term cancer impacts from construction activities, which occur over a relatively short duration. **The Project construction activities, including generation of TACs, would not expose sensitive receptors to substantial pollutant concentrations**. **Project-related TAC impacts during construction would be less than significant.**

(2) Operation

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

Operation of the Project would not introduce any major new sources of air pollution within the Project Site. Emissions estimates for criteria air pollutants from on-site sources are presented in Table IV.A-9 on page IV.A-63. The SCAQMD LST mass rate look-up tables were used to evaluate potential localized impacts. As shown in Table IV.A-9, on-site operational emissions would not exceed any of the LSTs. **The Project on-site operational activities, including generation of criteria pollutants, would not expose sensitive receptors to substantial pollutant concentrations. Therefore, localized**

[83] *Values are presented as passenger car equivalents (PCE). Trucks are assumed to be equivalent to 2.5 passenger cars. Daily trips calculated based on Caltrans K factors for the nearest freeway monitoring station. Details are provided in Appendix B, Page B-2.71 of this Draft EIR.*

operational emissions resulting from the Project would result in a less-than-significant air quality impact.

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

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

At buildout of the Project, the highest average daily trips at an intersection would be approximately 32,600 vehicles per day at the 7th Street and Santa Fe,[84] which is below the daily traffic volumes of 400,000 vehicles per day that would be expected to generate CO exceedances as evaluated in the 2003 AQMP.[85] 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 7th Street and Santa Fe intersection would exceed the 1-hour CO standard if modeled in detail, based on the studies undertaken for the 2003 AQMP. In addition, CO background concentrations within the vicinity of the modeled intersection have substantially decreased since preparation of the 2003 AQMP primarily due to ongoing fleet turn over of older on-road light duty vehicles and use of cleaner fuels.[86] In 2003, the 1-hour background CO concentration was 5 ppm and has decreased to 2 ppm in 2018.[87] Therefore, the Project does not trigger the need for a detailed CO hotspots model and would not cause any new or exacerbate any existing CO hotspots. The supporting data for this analysis is included in Appendix B of this Draft EIR. **The Project off-site operational activities, including the highest average daily trips, would not expose sensitive receptors to substantial CO concentrations**. **As a result, impacts related to localized mobile-source CO emissions are considered less than significant.**

(c) Toxic Air Contaminants

(i) On-Site Sources

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs.

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

[85] *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.*

[86] *SCAQMD, Carbon Monoxide Redesignation Request and Maintenance Plan, February 2005.*

[87] *SCAQMD, 2018 Air Quality Data Table.*

CARB has published and adopted the *Air Quality and Land Use Handbook: A Community Health Perspective*, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).[88] SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*.[89] Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to TAC sources and the addition of new TAC sources in proximity to existing sensitive land uses.

The primary sources of potential air toxics associated with Project operations include DPM from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets) and to a lesser extent facility operations (e.g., natural gas fired boilers). However, these activities, and the land uses associated with the Project, are not considered land uses that generate substantial TAC emissions based on review of the air toxic sources listed in SCAQMD's and CARB's guidelines.

The Project would only result in minimal emissions of air toxics from the use of consumer products and landscape maintenance activities, among other things. As a result, toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the proposed Project.

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

As the Project would not contain substantial TAC sources and is consistent with the CARB and SCAQMD guidelines, the Project would 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.

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

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

(ii) Off-Site Sources

As discussed above, the CARB Land Use Handbook recommends buffer distances between sensitive uses and certain sources of TACs. Although the Project would not contain any uses which are considered sensitive (residential, school, hospital), an initial search was performed using the SCAQMD FIND database which contains public information about SCAQMD-regulated facilities required to have an air permit. A FIND search was conducted in the vicinity of the Project site which indicated that no major sources of TACs are located within 0.25 mile of the Project site. Minor emissions sources such as boilers or emergency generators are located within the Project vicinity, but the CARB Land Use Handbook does not identify these as major sources of TACs.

The CARB Land Use Handbook also identifies a buffer distance of 1 mile between sensitive uses and major rail yards. The Union Pacific Los Angeles Transportation Center (LATC) rail yard is located approximately 1.7 miles northeast of the Project site, greater than the 1 mile buffer distance recommended by CARB. Sources of TAC emissions at the LATC rail yard include diesel exhaust from locomotives and heavy duty trucks transporting cargo to and from the site. A Metro rail yard (Division 20) is located approximately 0.6 mile north of the Project Site. This rail yard is currently used for maintenance of the Metro Red/Purple lines, which are subway trains powered by electricity. Sources of TAC emissions from the Metro rail yard would be minimal as trains at this yard are powered by electric propulsion and would not generate emissions on-site.[90] Therefore, emissions and other TACs from this rail yard are not expected to affect future on-site employees and visitors.

As discussed previously, a search of the SCAQMD FIND database did not show any permitted sources of TACs in the Project vicinity. Also, a site survey was performed to identify non-permitted sources of TACs. The site survey did not identify any sources of TACs in the Project vicinity.

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

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

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[90] *Los Angeles County Metropolitan Transportation Authority. Division 20 Portal Widening and Turnback Facility Project Final Environmental Impact Report. September 2018.*

(3) Mitigation Measures

Project impacts to sensitive receptors would be less than significant. Therefore, no mitigation measures are required.

(4) Level of Significance After Mitigation

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

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

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

e. Cumulative Impacts

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

As identified in Section III, Environmental Setting, of this Draft EIR, a total of 73 related projects are located in the vicinity of the Project Site. A map of the related project locations is provided in Figure III-1 in Section III, Environmental Setting, of this Draft EIR.

(1) Impact Analysis

(a) Construction

As discussed under Threshold (b) above, the Project's construction-related air quality emissions and cumulative impacts would be less than significant. The Project would comply with regulatory requirements, including the SCAQMD Rule 403 requirements listed above. Based on SCAQMD guidance, individual construction projects that exceed

the recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As shown above, construction-related daily emissions at the Project Site would not exceed any of SCAQMD's regional or localized significance thresholds including NO_X, CO, PM_{10} and $PM_{2.5}$. **Therefore, the Project's contribution to cumulative air quality impacts due to localized emissions would not be cumulatively considerable and, therefore, would be less than significant.**

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

(b) Operation

As discussed above, the Project's regional operational air quality emissions, localized emissions and TACs would be less than significant. According to SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants.[91] As operational emissions did not exceed any of SCAQMD's regional or localized significance thresholds, the emissions of non-attainment pollutants and precursors generated by project operation would not be cumulatively considerable.

With respect to TAC emissions, neither the Project nor any of the 73 related projects (which are largely residential, retail/commercial, and office in nature), would represent a substantial source of TAC emissions, which are typically associated with large-scale industrial, manufacturing, and transportation hub facilities. A few related projects include

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

industrial uses such as an industrial park and a solid waste facility. However, these facilities would be subject to SCAQMD permitting and best available control technology (BACT) requirements to limit pollutant emissions. 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 related projects could generate minimal TAC emissions related to the use of consumer products and landscape maintenance activities, among other things. Pursuant to AB 1807, which directs CARB to identify substances as TACs and adopt airborne toxic control measures to control such substances, SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Basin-wide TAC emissions reductions. As such, cumulative TAC emissions during long-term operations would be less than significant. In addition, as discussed above, the Project would not result in any substantial sources of TACs that have been identified by the CARB's Land Use Guidelines and thus, would not contribute to a cumulative impact.

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

(2) Mitigation Measures

Cumulative impacts with regard to air quality would be less than significant, during construction and over the long-term operating life of the Project. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts with regard to air quality during both construction and operation would be less than significant without mitigation.