IV. Environmental Impact Analysis

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 construction and operation of the Project 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 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. Air quality calculations are provided in **Appendix B** to this Draft EIR.

2. Environmental Setting

a) Air Quality Background

(1) Air Quality and Public Health

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of an overall endeavor to prevent further deterioration and to facilitate improvement in air quality. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety, and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.[1] As the scientific methods for the study of air pollution health effects have progressed over the past decades, adverse effects have been shown to occur at lower levels of exposure. For some pollutants, no clear thresholds for effects have been 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

[1] USEPA, NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed August 23, 2022.

to be an important part of setting and informing revisions to federal and state air quality standards.[2] The NAAQS and CAAQS are listed in **Table IV.A-1, Ambient Air Quality Standards** below.

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

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

The Air Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the

[2] SCAQMD, Final 2022 AQMP, December 2022. Appendix I, page I-1.

[3] SCAQMD, Map of Jurisdiction. https://www.aqmd.gov/docs/default-source/default-document-library/scaqmd_zipcode_map.pdf?sfvrsn=2. Accessed August 23, 2022.

lower layer. This phenomenon is observed in mid to late afternoons on hot summer days. Winter inversions frequently break by midmorning.

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

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

(3) Air Pollutant Types

(a) Criteria Pollutants

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

(i) Ozone (O_3)

O_3 is a gas that is formed when volatile organic compounds (VOCs) and NO_X - both byproducts of internal combustion engine exhaust - undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O_3 irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise.

Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

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

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

NO_2 is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. Of the seven types of NO_X compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic areas, particularly in urban areas such as 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}. NOx 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 air are usually found near Pb smelters. The major sources of Pb emissions to the air are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. 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 (SO_4^2), hydrogen sulfide (H_2S), visibility-reducing particles, and vinyl chloride. With respect to the State-identified criteria pollutants, most land use development projects either do not emit them (i.e., H_2S [nuisance odor] and vinyl chloride), or otherwise account for these pollutants (i.e., sulfates and visibility reducing particles) through other criteria pollutants. For example, SO_4^2 are associated with SO_X emissions, and visibility-reducing particles are associated with particulate matter emissions. A description of the health effects of the State-identified criteria air pollutants is provided below.

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

$SO_4^2$are the fully oxidized ionic form of sulfur. SO_4^2occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion

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

(ii) Hydrogen Sulfide (H_2S)

H_2S is a colorless gas with the odor of rotten eggs. The most common sources of H_2S emissions are oil and natural gas extraction and processing, and natural emissions from geothermal fields. Industrial sources of H_2S include petrochemical plants and kraft paper mills. H_2S is also formed during bacterial decomposition of human and animal wastes, and is present in emissions from sewage treatment facilities and landfills.[4] Exposure to H_2S can induce tearing of the eyes and symptoms related to overstimulation of the sense of smell, including headache, nausea, or vomiting; additional health effects of eye irritation have only been reported with exposures greater than 50 parts per million (ppm), which is considerably higher than the odor threshold.[5] H_2S is regulated as a nuisance based on its odor detection level; if the standard were based on adverse health effects, it would be set at a much higher level.[6]

(iii) Visibility-Reducing Particles

Visibility-reducing particles come from a variety of natural and manmade sources and can vary greatly in shape, size and chemical composition. Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles are directly emitted to the air, such as windblown dust and soot, while others are formed in the atmosphere through chemical transformations of gaseous pollutants (e.g., SO_4^2, nitrates, organic carbon particles) which are the major constituents of particulate matter. As the number of visibility-reducing particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range.[7] Exposure to some haze-causing pollutants have been linked to adverse health impacts similar to PM_{10} and $PM_{2.5,}$ as discussed above.[8]

(iv) Vinyl Chloride

Vinyl chloride is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products and is generally emitted from industrial

4 California Air Resources Board, Hydrogen Sulfide & Health, https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health. Accessed August 23, 2022.
5 California Air Resources Board, Hydrogen Sulfide & Health.
6 California Air Resources Board, Hydrogen Sulfide & Health.
7 California Air Resources Board, Visibility-Reducing Particles and Health, last reviewed October 11, 2016, https://www.arb.ca.gov/research/aaqs/common-pollutants/vrp/vrp.htm. Accessed August 23, 2022.
8 California Air Resources Board, Visibility-Reducing Particles and Health.

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

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

Although the SCAQMD's primary mandate is attaining the NAAQS and the CAAQS for criteria pollutants within the district, SCAQMD also has a general responsibility to control emissions of air contaminants and prevent endangerment to public health. As a result, the SCAQMD has regulated pollutants other than criteria pollutants such as VOCs, TACs, greenhouse gases (GHGs), and stratospheric O_3-depleting compounds.

(i) VOCs

VOCs are organic chemical compounds of carbon and are not "criteria" pollutants themselves; however, VOCs are a prime component (along with NO_X) of the photochemical processes by which such criteria pollutants as O_3, NO_2, and certain fine particles are formed. They are therefore regulated as "precursors" to 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

[9] California Air Resources Board, Vinyl Chloride & Health, https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed August 23, 2022.
[10] California Air Resources Board, Vinyl Chloride & Health.
[11] California Air Resources Board, Vinyl Chloride & Health.

particulate matter (DPM) emissions associated with heavy-duty equipment. During long-term operations, sources of DPM may include heavy duty diesel-fueled delivery trucks and stationary emergency generators. The effects of TACs can be diverse and their health impacts tend to be local rather than regional; consequently, ambient air quality standards for these pollutants have not been established, and analysis of health effects is instead based on cancer risk and exposure levels.

b) Regulatory Framework

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

- Federal Clean Air Act
    - National Ambient Air Quality Standards
- California Clean Air Act
    - California Ambient Air Quality Standards
- California Code of Regulations
- State Programs for Toxic Air Contaminants
- Diesel Risk Reduction Program
- South Coast Air Quality Management District
    - Air Quality Management Plan and Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
    - Air Quality Guidance Documents
    - Rules and Regulations
- City of Los Angeles Air Quality Element
- City of Los Angeles Plan for a Healthy LA.

(1) Federal

(a) Federal Clean Air Act

The Federal Clean Air Act (CAA) was enacted in 1970 and has been amended numerous times in subsequent years, with the latest amendments occurring in 1990.[12] The CAA is the

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

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

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

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

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

[13] United States Environmental Protection Agency, Summary of the Clean Air Act, https://www.epa.gov/laws-regulations/summary-clean-air-act. Accessed August 23, 2022.

[14] United States Environmental Protection Agency, Clean Air Act Overview, Clean Air Act Table of Contents by Title, Last Updated January 3, 2017, https://www.epa.gov/clean-air-act-overview/clean-air-act-text. Accessed August 23, 2022. As shown therein, Title I addresses nonattainment areas and Title II addresses mobile sources.

Table IV.A-1
Ambient Air Quality Standards

Pollutant	Averaging Period	Federal Standard[a,b]	California Standard[a,b]	South Coast Air Basin Attainment Status[c]	
				Federal Standard[d]	California Standard[d]
Ozone (O_3)	1-hour	—	0.09 ppm (180 µg/m^3)	—	Non-Attainment
	8-hour	0.070 ppm (137 µg/m^3)	0.07 ppm (137 µg/m^3)	Non-Attainment (Extreme)	Non-Attainment
Respirable Particulate Matter (PM_{10})	24-hour	150 µg/m^3	50 µg/m^3	Attainment	Non-Attainment
	Annual	—	20 µg/m^3		
Fine Particulate Matter ($PM_{2.5}$)	24-hour	35 µg/m^3	—	Non-Attainment (Serious)	Non-Attainment
	Annual	12 µg/m^3	12 µg/m^3		
Carbon Monoxide (CO)	1-hour	35 ppm (40 mg/m^3)	20 ppm (23 mg/m^3)	Attainment	Attainment
	8-hour	9 ppm (10 mg/m^3)	9.0 ppm (10 mg/m^3)		
Nitrogen Dioxide (NO_2)	1-hour	0.10 ppm (188 µg/m^3)	0.18 ppm (339 µg/m^3)	Unclassified/ Attainment	Attainment
	Annual	0.053 ppm (100 µg/m^3)	0.030 ppm (57 µg/m^3)		
Sulfur Dioxide (SO_2)	1-hour	0.075 ppm (196 µg/m^3)	0.25 ppm (655 µg/m^3)	Unclassified/ Attainment	Attainment
	3-hour	0.5 ppm (1,300 µg/m^3)	—		
	24-hour	0.14 ppm (365 µg/m^3)	0.04 ppm (105 µg/m^3)		
	Annual	0.03 ppm (80 µg/m^3)	—		
Lead (Pb)	30-day average	—	1.5 µg/m^3	Partial Non-Attainment[e]	Attainment
	Rolling 3-month average	0.15 µg/m^3	—		
Sulfates	24-hour	—	25 µg/m^3	—	Attainment
Hydrogen Sulfide (H2S)	1-hour	—	0.03 ppm (42 µg/m^3)	—	Unclassified

Table IV.A-1
Ambient Air Quality Standards

Pollutant	Averaging Period	Federal Standard[a,b]	California Standard[a,b]	South Coast Air Basin Attainment Status[c]	
				Federal Standard[d]	California Standard[d]

ppm = parts per million by volume
µg/m³ = micrograms per cubic meter

[a] *An ambient air quality standard is a concentration level expressed in either ppm or µg/m³ and averaged over a specific time period (e.g., 1 hour). The different averaging times and concentrations are meant to protect against different exposure effects. Some ambient air quality standards are expressed as a concentration that is not to be exceeded. Others are expressed as a concentration that is not to be equaled or exceeded.*
[b] *Ambient Air Quality Standards based on the 2022 AQMP.*
[c] *"Attainment" means that the regulatory agency has determined based on established criteria, that the Air Basin meets the identified standard. "Non-attainment" means that the regulatory agency has determined that the Air Basin does not meet the standard. "Unclassified" means there is insufficient data to designate an area, or designations have yet to be made.*
[d] *California and Federal standard attainment status based on SCAQMD 2022 AQMP.*
[e] *An attainment re-designation request is pending.*

Sources: United States Environmental Protection Agency, NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed August 23, 2022.
CARB, Ambient Air Quality Standards May 4, 2016, https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed August 23, 2022.

(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, Ambient Air Quality Standards** 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 "non-attainment" for these pollutants.

(b) California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over

10,000 pounds) during construction shall be limited to five minutes at any location. In addition, Section 93115 in Title 17 of the CCR states that operations of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emissions standards.

(c) State Programs for Toxic Air Contaminants

The California Air Toxics Program is an established two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and OEHHA determine if a substance should be formally identified, or "listed," as a TAC in California. In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of Airborne Toxic Control Measures (ATCMs), both for stationary and mobile sources, including On-Road and Off-Road Vehicle Rules. These ATCMs include measures such as limits on heavy-duty diesel motor vehicle idling and emission standards for off-road diesel construction equipment in order to reduce public exposure to DPM and other TACs. These actions are also supplemented by the Assembly Bill (AB) 2588 Air Toxics "Hot Spots" program and Senate Bill (SB) 1731, which require facilities to report their air toxics emissions, assess health risks, notify nearby residents and workers of significant risks if present, and reduce their risk through implementation of a risk management plan. SCAQMD has further adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

(d) Diesel Risk Reduction Program

CARB identified particulate emissions from diesel-fueled engines as TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which moved the State 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 South Coast Air Quality Management District (SCAQMD) is primarily responsible for planning, implementing, and enforcing air quality standards for the South Coast Air Basin. The Air Basin is a subregion within the western portion of the SCAQMD jurisdiction, as the SCAQMD also regulates portions of the Salton Sea Air Basin and Mojave Desert Air Basin within Riverside County.

(i) Air Quality Management Plan and Regional Transportation Plan/Sustainable Communities Strategy (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 2022 AQMP is focused on attaining the 2015 8-hour O_3 standard of 70 parts per billion. The 2022 AQMP builds upon measures already in place from previous AQMPs and includes a variety of additional strategies such as regulation, accelerated development of available clean technologies, incentives and other CAA measures to achieve this standard.The most significant air quality challenge in the Air Basin is to reduce NO_X emissions[15] sufficiently to meet the 2015 O_3 standard which should lead to sufficient NO_X emission reductions. Since NO_X emissions also lead to the formation of $PM_{2.5}$, the NO_X reductions needed to meet the O_3 standards will likewise lead to improvement of $PM_{2.5}$ levels and attainment of $PM_{2.5}$ standards.[16]

SCAQMD's strategy to meet the NAAQS and CAAQS distributes the responsibility for emission reductions across federal, state, and local levels and industries. The 2022 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 2022 AQMP also incorporates the transportation strategy and transportation control measures from SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Plan.[17] SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements. Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving

[15] NOx emissions are a precursor to the formation of both O_3 and secondary $PM_{2.5}$.
[16] Estimates are based on the inventory and modeling results and are relative to the baseline emission levels for each attainment year (see Final 2016 AQMP for detailed discussion).
[17] SCAG, 2022 AQMP, December 2022.

the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. The RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP. The SCAQMD combines its portion of the AQMP with those prepared by SCAG. The RTP/SCS and Transportation Control Measures, included as Appendix IV-C of the 2022 AQMP, are based on SCAG's 2020-2045RTP/SCS.

The 2022 AQMP forecasts the 2037 emissions inventories ''with growth'' based on SCAG's 2020-2045 RTP/SCS. The region is projected to see a 12 percent growth in population, 17 percent growth in housing units, 11 percent growth in employment, and 5 percent growth in VMT between 2018 and 2037. Despite regional growth in the past, air quality has improved substantially over the years, primarily due to the effects of air quality control programs at the local, State and federal levels.[18]

(ii) SCAQMD Air Quality Guidance Documents

The SCAQMD published the *CEQA Air Quality Handbook* (approved by the SCAQMD's Governing Board in 1993) to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.[19] The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses. However, the SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*. While this process is underway, the SCAQMD has provided supplemental guidance on the SCAQMD website.[20]

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.[21] 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. SCAQMDs guidelines are voluntary initiatives recommended for consideration by local planning agencies.

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18 SCAQMD, Figure 1-4 of the Final 2022 AQMP.

19 South Coast Air Quality Management District, CEQA Air Quality Handbook 1993, https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). Accessed August 23, 2022.

20 SCAQMD, Air Quality Analysis Guidance, http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed August 23, 2022.

21 South Coast Air Quality Management District, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, 2005, http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4. Accessed August 23, 2022.

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.[22] 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*.[23] The latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and *Final Localized Significance Threshold Methodology*.

(iii) SCAQMD Rules and Regulations

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

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

- **Rule 401 – Visible Emissions:** This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.

- **Rule 402 – Nuisance:** This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

- **Rule 403 – Fugitive Dust:** This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive 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

[22] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, 2008, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf. Accessed August 23, 2022.

[23] South Coast Air Quality Management District, Final Methodology to Calculate Particulate Matter (PM)2.5 and PM2.5 Significance Thresholds, 2006, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/final_pm2_5methodology.pdf?sfvrsn=2. Accessed August 23, 2022.

tables within the rule). Best available control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by the USEPA.

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

- **Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

- **Rule 1138 – Control of Emissions from Restaurant Operations:** This rule specifies PM and VOC emissions and odor control requirements for commercial cooking operations that use chain-driven charbroilers to cook meat.

- **Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters:** This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO_X emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

- **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 Clean Air Act 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 (Sustainability pLAn 2019) contain policies and programs for the protection of the environment and health through improved air quality. These serve to provide additional critical guidance for the betterment of public health for the region and City.

The most directly-related of those plans, the City's General Plan Air Quality Element, was adopted on November 24, 1992, and sets forth the goals, objectives, and policies which guide the City in its implementation of its air quality improvement programs and strategies. A number of these goals, objectives, and policies are relevant to land use development, and relate to traffic mobility, minimizing particulate emissions from construction activities, discouraging single-occupancy vehicle trips, managing traffic congestion during peak hours, and increasing energy efficiency in City facilities and private developments.

The Air Quality Element establishes six goals:

1. Good air quality in an environment of continued population growth and healthy economic structure;

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

3. Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques;

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

5. Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting; and

6. 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

Ambient air quality is determined primarily by the type and amount of pollutants emitted into the atmosphere, as well as the size, topography, and meteorological conditions of a geographic area. The Basin has low mixing heights and light winds, which help to accumulate air pollutants. Exhaust emissions from mobile sources generate the majority of ROG, CO, NO_x, and SO_x both in the Basin generally and specifically the Los Angeles County portion of the Basin. Area-wide sources generate the most airborne particulates (i.e., PM_{10} and $PM_{2.5}$) in both the Basin and Los

Angeles County. Measurements of ambient concentrations of the criteria pollutants are used by the U.S. EPA and the CARB to assess and classify the air quality of each air basin, county, or, in some cases, a specific urbanized area. The classification is determined by comparing actual monitoring data with national and state standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in "attainment." If the pollutant exceeds the standard, the area is classified as a "non-attainment" area. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

The U.S. EPA and the CARB use different standards for determining whether the Basin is in attainment. Federal and state standards are summarized in **Table IV.A-1, Ambient Air Quality Standards**. The attainment status for the Los Angeles County portion of the Basin with regard to the national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS) are also shown in **Table IV.A-1**.

SCAQMD has released the Multiple Air Toxics Exposure Study (MATES-V).[24] The MATES-V study was aimed at estimating the cancer risk from toxic air emissions throughout the Air Basin by conducting a comprehensive monitoring program, an updated emissions inventory of TACs, and a modeling effort to fully characterize health risks for those living in the Air Basin. The MATES-V study concluded that the average carcinogenic risk from air pollution in the Air Basin is approximately 424 in one million over a 70-year duration. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 50 percent of the risk is attributed to diesel particulate emissions, approximately 25 percent to other toxics associated with mobile sources (including benzene, butadiene, and carbonyls), and approximately 25 percent of all carcinogenic risk is attributed to stationary sources (which include large industrial operations, such as refineries and metal processing facilities, as well as smaller businesses, such as gas stations and chrome plating).[25]

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

[24] SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES V) Final Report, August 2021. http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v. Accessed January 10, 2023.

[25] SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES V) Final Report, August 2021. http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v. Accessed January 10, 2023.

to over 1,200 cancers per million over a 70-year duration.[26] Generally, the risk from air toxics is lower near the coastline and higher risks are concentrated near large diesel sources (e.g., freeways, airports, and ports).

(2) Local Air Quality

The SCAQMD has the responsibility for ensuring that all national and State ambient air quality standards are achieved and maintained throughout the Air Basin. To meet the standards, SCAQMD has adopted a series of AQMPs. The 2022 AQMP includes strategies to ensure that rapidly approaching attainment deadlines are met and that public health is protected to the maximum extent feasible. The most significant air quality challenge in the Air Basin is to reduce NO_X emissions[26] sufficiently to meet the upcoming O_3 standard deadlines. The 2022 AQMP provides a baseline year 2018 inventory of 351 tons per day (tpd) of NO_X and modeling results show that NO_X emissions are projected to be 184 tpd in the 8-hour ozone attainment year of 2037, due to continued implementation of already adopted regulatory actions ("baseline emissions"). The 2022 AQMP suggests that total Air Basin emissions of NO_X must be reduced to 124 tpd by 2037 to attain the 8-hour O_3 standard. Although the existing air regulations and programs will continue to lower NO_X emissions in the region, an additional 67 percent in the year 2037 are necessary to attain the 8- hour O_3 standard.[27,28]

The overall control strategy is an integral approach relying on fair-share emission reductions from federal, State and local levels. The 2022 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. In addition, SCAG's 2020-2045 RTP/SCS[29] includes transportation programs, measures, and strategies generally designed to reduce VMT, which are contained in the AQMP.

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

The 2022 AQMP forecasts the 2037 emissions inventories ''with growth'' based on SCAG's 2020–2045 RTP/SCS. The region is projected to see a 12 percent growth in population, 17 percent

[26] SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V), MATES Interactive Data Display, 2021. https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-Page/?views=Click-tabs-for-other-data%2CCancer-Risk. Accessed January 10, 2023.

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

[28] SCAQMD, Final 2022 AQMP, 2022 (page 4-1).

[29] SCAG, Final 2020–2045 RTP/SCS, 2020.

growth in housing units, 11 percent growth in employment, and 5 percent growth in vehicle miles traveled between 2018 and 2037.

The SCAQMD divides the Basin into 38 source receptor areas (SRAs), wherein 38 monitoring stations operate to monitor the various concentrations of air pollutants in the region. The Project Site is located within SRA 1 covering Central Los Angeles. The monitoring station located at 1630 N Main St, Los Angeles is the station closest to the site that collects data within SRA 1. This station monitors emission levels of O_3, CO, NO_2, SO_2, Sulfates, lead, PM_{10}, and $PM_{2.5}$. **Table IV.A-2, Summary of Ambient Air Quality in the Project Vicinity,** identifies the federal and state ambient air quality standards for the relevant air pollutants, along with the ambient pollutant concentrations that were measured in SRA 1 between 2020 and 2022.[30]

According to the air quality data shown in **Table IV.A-3**, the state 1-hour ozone standard was exceeded on 16 days during that time period. The national 8-hour ozone standard was exceeded on 30 days from 2020 to 2022 and the state 8-hour ozone standard was exceeded on 24 days during that time period. The national 24-hour PM_{10} standard was not exceeded from 2020 to 2022 and the state 24-hour PM_{10} standard was exceeded on 31 days during that time period. For $PM_{2.5}$, the national 24-hour standard was exceeded on 14 days from 2020 to 2022. No national or state standards for CO, NO_2, SO_2, sulfates, or lead were exceeded from 2020 to 2022.

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

Air Pollutants Monitored Within SRA 1 (Central Los Angeles Area)	Year		
	2020	2021	2022
Ozone (O_3)			
Maximum 1-hour concentration measured	0.185 ppm	0.099 ppm	0.138
Number of days exceeding state 0.09 ppm 1-hour standard	14	1	1
Maximum 8-hour concentration measured	0.118 ppm	0.085 ppm	0.090
Number of days exceeding national 0.07 ppm 8-hour standard	22	2	6
Number of days exceeding state 0.07 ppm 8-hour standard	22	1	1
Suspended Particulates (PM_{10})			
Maximum 24-hour concentration measured	77 µg/m^3	64 µg/m^3	60 µg/m^3
Number of days exceeding national 150 µg/m^3 24-hour standard	0	0	0
Number of days exceeding state 50 µg/m^3 24-hour standard	24	3	4
Annual Arithmetic Mean (AAM)	23.0 µg/m^3	25.5 µg/m^3	28.9 µg/m^3
Does measured AAM exceed national 150 µg/m^3 AAM standard?	No	No	No
Does measured AAM exceed state 20 µg/m^3 AAM standard?	Yes	Yes	Yes
Fine Particulates ($PM_{2.5}$)			
Maximum 24-hour concentration measured	47.3 µg/m^3	61.0 µg/m^3	33.7 µg/m^3
Number of days exceeding national 35.0 µg/m^3 24-hour standard	2	12	0
Annual Arithmetic Mean (AAM)	12.31 µg/m^3	12.77 µg/m^3	10.94 µg/m^3
Does measured AAM exceed national 35 µg/m^3 AAM standard?	No	No	No
Does measured AAM exceed state 12 µg/m^3 AAM standard?	Yes	Yes	No
Carbon Monoxide (CO)			
Maximum 1-hour concentration measured in ppm	1.9	2.0	1.7
Days exceeding national 35.0 ppm 1-hour standard	0	0	0
Days exceeding state 20.0 ppm 1-hour standard	0	0	0

[30] Most current air quality data available.

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

Air Pollutants Monitored Within SRA 1 (Central Los Angeles Area)	Year		
	2020	2021	2022
Maximum 8-hour concentration measured in ppm	1.5	1.6	1.5
Number of days exceeding national 9.0 ppm 8-hour standard	0	0	0
Number of days exceeding state 9.0 ppm 8-hour standard	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration measured	0.062 ppm	0.078 ppm	0.075 ppm
Number of days exceeding state 0.18 ppm 1-hour standard	0	0	0

ppm = parts by volume per million of air
ppb = parts by volume per billion of air
µg/m^3=micrograms per cubic meter
n/a = data not available or not collected by the District
**Means there was insufficient data available to determine value.*
Source: SCAQMD, Central LA Station. http://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year.

(3) Existing Project Site Emissions

The Project Site is currently developed with three vacant, single-story, industrial warehouses that occupy approximately 35,445 square feet of floor area and an associated surface parking lot. The average daily emissions that were generated by the existing buildings at the Project Site have been estimated utilizing CalEEMod 2022.1.1.20 recommended by the SCAQMD and are summarized below in **Table IV.A-3, Existing Daily Operational Emissions at Project Site**. Operational emissions associated with the existing use would be comprised of mobile source emissions, energy demand, and other area source emissions. Mobile source emissions are generated by the motor vehicle trips to and from the existing use. Area source emissions are generated by natural gas consumption for space and water heating, landscape maintenance equipment, and consumer products. However, for the purposes of the air quality analysis, no credit is taken for the operational emissions associated with the existing use. The *Traffic Impact Assessment for the 1100 East 5th Street Project* (Traffic Study), incorporated as **Appendix L.1** of this Draft EIR, found that the existing industrial use that is to be demolished generated 158 net total trips per day, with a trip generation rate of 4.46 trips per thousand square foot per day (with incorporation of the 10 percent transit reduction).

Table IV.A-3
Existing Daily Operational Emissions at Project Site

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Summertime (Smog Season) Emissions						
Area Sources	0.79	<0.01	<0.1	0.00	<0.01	<0.01
Energy Demand	0.02	0.17	0.15	<0.01	0.01	0.01
Mobile (Motor Vehicles)	0.41	2.01	6.26	0.02	1.51	0.42
Total Existing Emissions	**1.22**	**2.18**	**6.41**	**0.02**	**1.52**	**0.43**
Wintertime (Non-Smog Season) Emissions						
Area Sources	0.79	<0.01	<0.1	0.00	<0.01	<0.01
Energy Demand	0.02	0.17	0.15	<0.01	0.01	0.01
Mobile (Motor Vehicles)	0.40	2.08	5.90	0.02	1.51	0.42
Total Existing Emissions	**1.21**	**2.25**	**6.05**	**0.02**	**1.52**	**0.43**

*Calculation data provided in **Appendix B** to this Draft EIR. Column totals may not add due to rounding from the model results.*

(4) Sensitive Receptors and Locations

Certain population groups, such as children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to the potential effects of air pollution than others. As a result, certain land uses that are occupied by these population groups, such as residences, hospitals, and schools, are considered to be air quality-sensitive land uses. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities.[31] In addition, CARB has identified the following typical groups who are most likely to be affected by air pollution: children under 14 years of age; the elderly over 65 years of age; athletes; and people with cardiovascular and chronic respiratory diseases. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function. The nearest sensitive receptors to the Project Site include the following:

1. Multi-family live/work units (1131 E. 5th Street) located to the north, across 5th Street (55 feet);

2. The Arts District Park (501 S. Hewitt Street) located to the east (365 feet); and

[31] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, Revised, 2008.

3. Barker Bloc Lofts and Condominiums (510 S. Hewitt Street) located to the east of the Project Site (590 feet).[32]

In addition, there are currently proposed land uses that could become sensitive receptors should they be approved for construction and occupied prior to construction of the Project, including:

4. Residential uses in a 310-unit, 12-story, mixed-use building (527 S. Colyton Street and 1147 E. Palmetto Street) proposed for the parking area immediately adjacent to the south of the Project Site (20 feet); and

5. Residential uses in a 129-unit, 12-story, mixed-use building (1101-1129 E. 5th Street and 445 S. Colyton Street) proposed for a site located to the north across 5th Street (55 feet).

In the event that construction of proposed Sensitive Receptor Location No. 5 is approved, it would replace Sensitive Receptor No. 1. Sensitive Receptors 1, 4, and 5 are the closest sensitive receptors to the Project Site. The other air quality sensitive land uses are located farther from the Project Site (365 to 590 feet) and would therefore experience lower impacts.

3. Project Impacts

a) Thresholds of Significance

In accordance with the *State CEQA Guidelines* Appendix G (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; or***

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

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

[32] Ganddini, 1100 East 5th Street Project, Air Quality and Global Climate Change Impact Analysis, May 1, 2020, page 3.

(1) Construction

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following factors for consideration on a case-by-case basis to evaluate air quality impacts:

- 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.

- 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.

- Fugitive Dust: Heavy-Duty Equipment Travel on Unpaved Roads
  - Length and type of road;
  - Type, number of pieces, weight and usage of equipment; and
  - Type of soil.

- Other Mobile Source Emissions
  - Number and average length of construction worker trips to project site, per day; and
  - Duration of construction activities.

(2) Operational

The Thresholds Guide identifies the following factors for consideration on a case-by-case basis to evaluate a project's operational air quality impacts:

- Operational emissions exceed 10 tons per year of volatile organic gases or any of the Operational emissions exceed 10 tons per year of volatile organic gases or any of the daily thresholds presented below (as reprinted from the SCAQMD CEQA Air Quality Handbook):
  - 55 pounds per day of VOC;[33]
  - 55 pounds per day of NO_X;

[33] The Thresholds Guide uses the term "ROG" or "reactive organic gases" interchangeably with the term "VOC." Additionally, 10 tons per year is equivalent to 55 pounds per day.

- 550 pounds per day for CO;
- 150 pounds per day for SO_X; and
- 150 pounds per day for PM_{10}.

- 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 Thresholds Guide states that the determination of the significance of a project's impacts related toxic air contaminants shall be made on a case-by-case basis, considering the following factors:

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

(4) SCAQMD CEQA Air Quality Handbook

To further assist in determining significance under the Appendix G Thresholds, the City has determined to utilize the numeric indicators of significance, below in **Table IV.A-4**, **SCAQMD Air Quality Significance Thresholds**, taken from the SCAQMD's CEQA Air Quality Handbook. As stated above, the SCAQMD has stated that these indicators are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.[34]

[34] South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993, page 6-2.

Table IV.A-4
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds[a]		
Pollutant	**Construction**	**Operation**
NO_x	100 pounds/day	55 pounds/day
VOC[b]	75 pounds/day	55 pounds/day
PM_{10}	150 pounds/day	150 pounds/day
$PM_{2.5}$	55 pounds/day	55 pounds/day
SO_x	150 pounds/day	150 pounds/day
CO	550 pounds/day	550 pounds/day
Lead	3 pounds/day	3 pounds/day
Toxic Air Contaminants and Odor Thresholds		
Toxic Air Contaminants (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) Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO2eq for industrial facilities	
Ambient Air Quality for Criteria Pollutants [c]		
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: 0.10 ppm (federal)[d] 0.03 ppm (state)	
PM_{10} 24-hour average Annual average	10.4 µg/m^3 (construction)[e] & 2.5 µg/m^3 (operation) 1.0 µg/m^3	
$PM_{2.5}$ 24-hour average	10.4 µg/m^3 (construction)[e] & 2.5 µg/m^3 (operation)	
Sulfate 24-hour average	25 µg/m^3 (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 25 ppm (federal) 9.0 ppm (state/federal)	

Notes: ppm = parts per million by volume; µg/m^3 = micrograms per cubic meter

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

[b] *The definition of VOC includes ROG compounds and additional organic compounds not included in the definition of ROG. However, for the purposes of this evaluation, VOC and ROG will be considered synonymous.*

[c] *Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, table A-2 unless otherwise stated.*

[d] *In January 2010, the U.S. EPA proposed a new 1-hour national air quality standard of 0.10 ppm for NO_2, which is more stringent than the state's current 1-hour threshold of 0.18 ppm. For the purposes of conducting a conservative analysis, the more stringent national one-hour standard for NO_2 is used as a threshold in the evaluation of the project's air quality impacts.*

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

Source: SCAQMD CEQA Handbook (SCAQMD, 1993), SCAQMD Air Quality Significance Thresholds.

Construction Emissions: Based on the most recently adopted indicators in the SCAQMD *CEQA Air Quality Handbook,* the Project would potentially cause or contribute to an exceedance of an air quality standard if the following would occur:

Project construction regional criteria pollutant emissions from both direct and indirect sources

would exceed any of the following SCAQMD-prescribed daily emissions thresholds:[35]

- 75 pounds a day for VOC;
- 100 pounds per day for NOX;
- 550 pounds per day for CO;
- 150 pounds per day for SO2;
- 150 pounds per day for PM_{10}; or
- 55 pounds per day for $PM_{2.5}$.

SCAQMD recommends that emissions from individual development projects that exceed the project-specific mass daily emissions thresholds be considered cumulatively considerable.[36] Accordingly, for purposes of the analysis presented in this Draft EIR, construction emissions that exceed an applicable SCAQMD threshold(s) are assessed to be cumulatively considerable.

In addition, according to the SCAQMD's methodology discussed above for assessing the potential for localized construction emissions to cause an exceedance of applicable ambient air quality standards or ambient concentration limits, impacts would be considered significant if the following would occur:

- Maximum daily localized emissions of NOx and/or CO during construction would be greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for NO_2 and/or CO.[37]

- Maximum daily localized emissions of PM_{10} and/or $PM_{2.5}$ during construction would be greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed 10.4 µg/m3 over 24 hours (SCAQMD Rule 403 control requirement).[38]

As discussed previously, the SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without Project-specific dispersion modeling. This analysis uses these screening criteria to evaluate potential impacts from the Project's

35 South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, (March 2015).
36 White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions, SCAQMD Board Meeting, September 5, 2003, Agenda No. 29, Appendix D, p. D-3.
37 South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, (2008).
38 South Coast Air Quality Management District, Air Quality Significance Thresholds.

localized construction emissions. If the Project exceeds the screening criteria, then SCAQMD recommends that project-specific air quality dispersion modeling be performed.

Operational Emissions: The numeric indicators of significance, below, are the most recently adopted indicators in the SCAQMD *Air Quality Handbook* for determining the significance of operational emissions. The SCAQMD has established numerical indicators as significance thresholds based, in part, on Section 182(e) of the CAA, which sets 10 tons per year of VOC as a significance level for stationary source emissions in extreme non-attainment areas for ozone.[39] As shown in **Table IV.A-1**, the Basin is designated as extreme non-attainment for ozone. The SCAQMD converted this significance level to pounds per day for ozone precursor emissions (10 tons per year × 2,000 pounds per ton ÷ 365 days per year = 55 pounds per day). The numeric indicators for other pollutants are also based on federal stationary source significance levels. SCAQMD's numeric emission indicators are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.[40] Based on the indicators in the SCAQMD *CEQA Air Quality Handbook,* the Project would potentially cause or contribute to an exceedance of an air quality standard if the following would occur:

Project operational criteria pollutant emissions exceed any of the following SCAQMD prescribed daily regional numeric indicators:[41]

- 55 pounds a day for VOC;
- 55 pounds per day for NOX;
- 550 pounds per day for CO;
- 150 pounds per day for SO2;
- 150 pounds per day for PM_{10}; or
- 55 pounds per day for $PM_{2.5}$.

As noted above, SCAQMD recommends that emissions from individual development projects that exceed the project-specific mass daily emissions thresholds be considered cumulatively considerable. Accordingly, for purposes of the analysis presented in this Draft EIR, operational emissions that exceed an applicable SCAQMD threshold(s) are assessed to be cumulatively considerable.

In addition, according to the SCAQMD's methodology discussed above for assessing the potential for a project's localized operational emissions to cause an exceedance of applicable ambient air quality standards, impacts would be considered significant if the following would occur:

[39] South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993, page 6-1.
[40] South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993, page 6-2.
[41] South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, (March 2015). The L.A. CEQA Thresholds Guide also includes a threshold of 10 tons per year of VOCs; however, this is equivalent to the SCAQMD daily threshold of 55 pounds per day.

- Maximum daily localized emissions of NO_X and/or CO during operation would be greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for NO_2 and/or CO.[42]

- Maximum daily localized emissions of PM_{10} and/or $PM_{2.5}$ during operation would be greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed 2.5 µg/m3 over 24 hours (SCAQMD Rule 1303 allowable change in concentration).

As discussed previously, the SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without Project-specific dispersion modeling. This analysis used the screening criteria to evaluate impacts from the Project's localized operational emissions.

With respect to CO hotspots, impacts would be considered significant if the following would occur:

- The Project would cause or contribute to an exceedance of the CAAQS one-hour or eight-hour CO standards of 20 or 9.0 parts per million (ppm), respectively within one-quarter mile of a sensitive receptor.[43]

To determine if the Project could cause emission levels in excess of the CO standards discussed above, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

The analysis prepared for CO attainment in the Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the Basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the 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 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: South Long Beach Boulevard and Imperial Highway (Lynwood);

42 SCAQMD, Final Localized Significance Threshold Methodology, (2008).

43 The CAAQS are more conservative than the NAAQS (35 ppm for one-hour CO and 9.0 ppm for eight-hour CO).

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.[44] The Los Angeles County Metropolitan Transportation Authority evaluated the Level of Service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level of Service E during the morning peak hour and Level of Service F during the afternoon peak hour.

Toxic Air Contaminants (TACs): 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:[45]

- The Project would expose sensitive receptors to substantial concentrations of TACs if it emits carcinogenic materials or TACs that exceed the maximum incremental cancer risk of 10 in one million or a cancer burden greater than 0.5 excess cancer cases (in areas greater than or equal to one in one million) or an acute or chronic hazard index of 1.0.

Consistency with Applicable Air Quality Plans: Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with the SCAQMD's CEQA Air Quality Handbook, the following criteria were used to evaluate the Project's consistency with the SCAQMD's 2022 AQMP and the City's General Plan Air Quality Element:

- Criterion 1: Will 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: 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;

[44] SCAQMD, 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations, August 2003, pp. V-4 through V-24.

[45] SCAQMD, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a Project) and Chapter 10 (Assessing Toxic Air Pollutants), (1993); SCAQMD Air Quality Significance Thresholds, (March 2015).

- Does the Project include air quality mitigation measures; or

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

The Project's potential impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's 2022 AQMP and applicable City General Plan Air Quality Element plans and policies.

Cumulative Impacts: Based on SCAQMD guidance, individual construction projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As discussed in the SCAQMD's White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution (August 2003):

> *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 significance threshold.

b) Methodology

Although the 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, the SCAQMD published the CEQA Air Quality Handbook in November 1993 to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects proposed in the Air Basin. The CEQA Air Quality Handbook provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. The SCAQMD is currently in the process of replacing the CEQA Air Quality Handbook with the Air Quality Analysis Guidance Handbook.[47]

[46] White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. Appendix D, South Coast Air Quality Management District, August 2003.

[47] SCAQMD, Air Quality Analysis Handbook, https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed August 23, 2022.

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

This analysis focuses on the nature and magnitude of the change in the air quality environment due to implementation of the Project. Air pollutant emissions associated with the Project would result from Project operations and traffic volumes. Construction activities would also generate air pollutant emissions at the Project Site and on roadways resulting from construction traffic. The increase in Project Site emissions generated by these activities and other secondary sources have been quantitatively estimated and compared to thresholds of significance recommended by SCAQMD.

As shown below, emissions were calculated for both the Project and the Flexibility Option. Under the Flexibility Option, the commercial square footage provided would be increased from 46,548 to 64,313 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 200 units. Overall, the design, configuration, and operation of the Flexibility Option would be comparable to the Project. Both the Project and the Flexibility Option would be compliant with the Los Angeles Green Building Code and California Energy/Title 24 requirements. The Project and the Flexibility Option would include, but not be limited to, the following energy-saving compliance features that would reduce emissions:

- Ten (10) percent of the proposed parking spaces will have chargers for electric vehicles and thirty (30) percent of the provided parking spaces will be pre-plumbed for future electric vehicle charging;
- Low-water use plumbing fixtures;
- Energy-efficient elevator;
- Energy-efficient glazing and window frames;
- Energy-efficient mechanical systems and appliances;
- Energy-efficient lighting; and
- Low-water use landscaping and irrigation.

Moreover, the construction schedule would remain the same under the Flexibility Option. A detailed description of the calculations used in this analysis is provided in the air quality calculations provided in **Appendix B** of this Draft EIR.

(1) Construction Emissions

(a) Regional Emissions

The regional construction emissions associated with the Project were calculated using CalEEMod 2022.1.1.5 recommended by SCAQMD. CalEEMod was developed in collaboration with the air districts of California as a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects.

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The input values used in this analysis were adjusted to be project-specific for the construction schedule and the equipment used was based on CalEEMod defaults. The CalEEMod program uses the EMission FACtor model[48](EMFAC) computer program to calculate the emission rates specific for Los Angeles County for construction-related employee vehicle trips and the Off-road Emissions Inventory Program model[49] (OFFROAD) computer program to calculate emission rates for heavy truck operations. EMFAC and OFFROAD are computer programs generated by CARB that calculate composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Daily truck trips and CalEEMod default trip length data were used to assess roadway emissions from truck exhaust. The maximum daily emissions are estimated values for the worst-case day and do not represent the emissions that would occur for every day of project construction. The maximum daily emissions are compared to the SCAQMD daily regional numeric indicators. Detailed construction equipment lists, construction scheduling, and emission calculations are available in the CalEEMod Output provided in the Air Quality and Greenhouse Gas technical report available in **Appendix B** of this Draft EIR.

Construction activities associated with demolition, grading/excavation, building construction, and application of architectural coatings would generate pollutant emissions. Specifically, these construction activities would temporarily create emissions of dusts, fumes, equipment exhaust,

[48] California Air Resources Board, EMFAC 2021, https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-modeling-tools, Accessed August 22, 2022.

[49] California Air Resources Board, 2017 Off-road Diesel Emission Factors, https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msei-documentation-road, Accessed August 22, 2022.

and other air contaminants. These construction emissions were compared to the regional thresholds established by the SCAQMD.

(b) Local Emissions

In addition to the SCAQMD's regional significance thresholds, the SCAQMD has established localized significance criteria in the form of ambient air quality standards for criteria pollutants. To minimize the need for detailed air quality modeling to assess localized impacts, SCAQMD developed mass-based localized significance thresholds (LSTs) that are the pounds of emissions per day that can be generated by a project that would cause or contribute to adverse localized air quality impacts.

These localized thresholds, which are found in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by SCAQMD, apply to daily construction areas that are less than or equal to five acres in size and are only applicable to the following criteria pollutants: NO_x, CO, PM_{10}, and $PM_{2.5}$. 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 standards and are developed based on the ambient concentrations of that pollutant for each Source Receptor Area (SRA).

In terms of NO_x emissions, the two principal species of NO_x are nitric oxide (NO) and NO_2, with the vast majority (95 percent) of the NO_x emissions being comprised of NO. However, because adverse health effects are associated with NO_2, the analysis of localized air quality impacts associated with NO_x emissions is focused on NO_2 levels. NO is converted to NO_2 by several processes, the two most important of which are (1) the reaction of NO with ozone and (2) the photochemical reaction of NO with hydrocarbons. When modeling NO_2 emissions from combustion sources, SCAQMD assumes that the conversion of NO to NO_2 is complete at a distance of 5,000 meters from the source.

For PM_{10} LSTs, the thresholds were derived based on requirements in SCAQMD Rule 403 — Fugitive Dust. For $PM_{2.5}$ LSTs, the thresholds were derived based on a general ratio of $PM_{2.5}$ to PM_{10} for both fugitive dust and combustion emissions. As described in more detail below, the resulting on-site construction emissions generated for each construction phase were analyzed against the applicable LST for each phase.

According to SCAQMD, the LSTs for PM_{10} and $PM_{2.5}$, which are based on a 24-hour averaging period, would be appropriate to evaluate the localized air quality impacts of a project on nearby sensitive receptors. Additionally, since nearby sensitive receptors are considered to remain close to the Project Site for 24 hours (i.e., residents adjacent to the Project Site), LSTs based on shorter averaging times, such as the one-hour NO_2 or the one-hour and eight-hour CO ambient air quality standards, would also apply when evaluating localized air quality impacts on sensitive receptors.

(2) Operational Emissions

Emissions associated with Project operation were also calculated using CalEEMod 2022.1.1.5 and based on the information provided in the Traffic Study attached as **Appendix L.1** of this Draft EIR. Operational emissions associated with the Project would be comprised of mobile source emissions, energy demand, other area source emissions, and stationary source emissions. Mobile source emissions are generated by the increase in motor vehicle trips to and from the Project Site associated with operation of the Project. Area source emissions are generated by natural gas consumption for space and water heating, landscape maintenance equipment, and consumer products. Stationary source emissions are generated from proposed emergency generators during routine maintenance/testing. To determine if a regional air quality impact would occur, the increase in emissions is compared with SCAQMD's recommended regional thresholds for operational emissions. The CalEEMod model analyzes operational emissions from area sources, energy usage, stationary sources, and mobile sources, which are discussed below.

(a) Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the Project. The vehicle trips associated with the Project have been analyzed by inputting the Project-generated vehicular trips from the Traffic Study (**Appendix L.1** to this Draft EIR) into the CalEEMod Model program. The Traffic Study[50] found that the Project would generate 3,163 total trips (includes reductions for transit, internal capture, and pass-by and 2,978 net total trips with the additional reduction of existing uses[51]. With the application of trip reduction measures, the Project would generate 2,750 daily vehicle trips. The Traffic Study found that the Flexibility Option would generate 3,218 total trips (includes reductions for transit, internal capture, and pass-by and 3,033 net total trips with the additional reduction of existing uses. With the application of trip reduction measures, the Project would generate 2,797 daily vehicle trips.

The CalEEMod program then applies the emission factors for each trip which is provided by the EMFAC2021 model to determine the vehicular traffic pollutant emissions.

(b) Area Sources

Per the California Air Pollution Control Officers Association (CAPCOA) Appendix A Calculation Details for CalEEMod, area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment. Architectural coatings are subject to SCAQMD Rule

[50] Linscott Law & Greenspan, Transportation Assessment Report, 1100 East 5th Street Project, Development for APNs 5163-024-009 and 5163-024-014, 1100 E 5th Street, Los Angeles, California, 90013, September 10, 2020.

[51] The CalEEMod output sheets for the mobile source calculations are contained in **Appendix B.**

1113 which limits the VOC content to 50g/L for paints applied to buildings so defaults were adjusted accordingly. No other changes were made to the default area source parameters.

(c) Stationary Sources

Stationary sources include operation of proposed emergency generators during routine maintenance/testing. Emissions associated with use of emergency generators were calculated using CalEEMod. The emissions are based on the horsepower factor of the diesel generator and the number of hours operated per year for testing purposes (see Appendix B for details).

(d) Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. No changes were made to the default energy usage parameters. No woodburning fireplaces/stoves will be allowed or constructed on-site.

To determine if a significant air quality impact would occur, the net increase in regional operational emissions generated by the Project was compared against the SCAQMD's significance thresholds.[52] To be conservative, this analysis evaluates the Project's air quality impacts during operations based on reasonably expected maximum operational emissions even though such emissions would not occur throughout the entire operational phase. Assumptions and parameters used in the air quality calculations are provided Report in **Appendix B** to this Draft EIR.

(3) Local Operational Emissions

As discussed above, the SCAQMD has developed LSTs that are based on the pounds of emissions per day that can be generated by a project that would cause or contribute to adverse localized air quality impacts. Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, on-site usage of natural gas appliances, occasional emissions from the testing and running of an emergency back-up generator, as well as the operation of vehicles on-site may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin.

The local air quality emissions from on-site operations were analyzed according to the methodology described in *Localized Significance Threshold Methodology*, prepared by SCAQMD, revised July 2008. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. Per SCAQMD staff, the Look-up Tables, can

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

be used as a conservative screening analysis for on-site operational emissions to determine whether more-detailed dispersion modeling would be necessary.

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

The SCAQMD has also adopted land use planning guidelines in the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, which considers impacts to sensitive receptors from facilities that emit TAC emissions.[53] SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity of freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). The SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

Potential TAC impacts are evaluated by conducting a qualitative analysis consistent with 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

Construction and operation of the Project would be implemented in accordance with applicable regulatory and code requirements related to air quality impacts. Further, see PDF TR-1 outlined in **Section IV.K., Transportation,** of this Draft EIR which would reduce air quality impacts by developing a Construction Staging and Traffic Management Plan. The Construction Staging and Traffic Management Plan would reduce impacts to sensitive receptors by ensuring haul trucks follow a specified haul route, and do not travel through residential neighborhoods. The Construction Staging and Traffic Management Plan would also include coordination with nearby projects that have potential overlapping construction timeframes. While this PDF would be beneficial, this air quality analysis does not account for quantitative reductions of air quality emissions which discloses a worst-case scenario.

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

d) Analysis of Project Impacts

As compared to the Project, the Flexibility Option would change the use of the second floor from residential to commercial, and would not otherwise change the Project's land uses or size. The overall commercial square footage provided would be increased from 17,765 square feet to 64,313 square feet and, in turn, there would be a reduction in the number of live/work units from 220 to 200 units. The overall building parameters would remain unchanged and the design, configuration, and operation of the Flexibility Option would be comparable to the Project. In the analysis of Project impacts presented below, where similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option would be essentially the same, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option. For those thresholds where numerical differences exist because of the differences in project parameters between the Project and Flexibility Option, the analysis is presented separately. Further, for certain thresholds, the impacts of the Project were addressed in the Initial Study (see **Appendix A.2** of this Draft EIR) and were determined to be less than significant, with no further analysis required. However, since the Flexibility Option was not specifically addressed in the Initial Study, the analysis of the Flexibility Option is presented in this section for those thresholds.

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

Numerical differences exist for this threshold because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

(1) Impact Analysis

(a) Project

(i) SCAQMD CEQA Air Quality Handbook Policy Analysis

The discussion below addresses the Project's consistency with applicable SCAQMD and SCAG policies, including the SCAQMD's 2022 AQMP and growth projections within the SCAG 2020-2045 RTP/SCS. In accordance with the procedures established in the 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 land use policies?

The Project's potential impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's 2022 AQMP and applicable City General Plan Air Quality Element plans and policies. Both of these criteria are evaluated in the following sections.

a. Criteria 1 – Increase in the Frequency or Severity of Violations

The Project is an infill mixed-use building within an existing urbanized area that would concentrate new residential units and commercial uses in an area well served by transit. The Project would advance regional goals to reduce VMT through infill development near transit services that has the co-benefit of reducing air emissions compared to the average regional project. As shown below, the Project would not exceed any SCAQMD localized significance threshold for air quality emissions. As an infill development located in an area extensively served by transit, the Project advances goals of the AQMP and RTP/SCS to reduce VMT and related vehicle emissions. The Project would be located in an area well-served by public transit provided by Metro, as well as is in proximity to several transit investment projects in planning and construction phases, including the Regional Connector and Little Tokyo/Arts District Metro Station relocation, expansion of the West Santa Ana line into the Arts District, and recently added DASH stops by LADOT to improve service in the Arts District. The Project would include short-term and long-term bicycle facilities and create a pedestrian-friendly environment by providing commercial uses along 5th Street and Seaton Street.

As shown in **Table IV.A-6 below**, emissions resulting from short-term construction impacts will not exceed the SCAQMD regional and local thresholds of significance which were developed to determine the emission levels at which significant contributions to air quality violations could occur. As shown in **Table IV.A-7 below,** emissions resulting from long-term operations impacts will also not exceed the regional thresholds of significance.

Therefore, as Project emissions would not exceed the SCAQMD thresholds, the Project would not contribute to the exceedance of any air pollutant concentration standards, 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. Therefore, the Project is found to be consistent with the AQMP for the first criterion**.**

b. Criteria 2 – Exceed Assumptions in the AQMP?

To determine consistency with the 2022 AQMP growth assumptions, the projections in the 2022 AQMP for achieving air quality goals are based on assumptions in SCAG's 2020-2045 RTP/SCS regarding population, housing, and growth trends. The emphasis of this criterion is to ensure that

the analyses conducted for the Project are based on the same forecasts as the AQMP. The 2020-2045 RTP/SCS includes chapters on: the challenges in a changing region, creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this Project, the City of Los Angeles Land Use Plan defines the assumptions that are represented in the AQMP.

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

A Project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2022 AQMP, two sources of data form the basis for projections of air pollutant emissions: the City's General Plan and SCAG's 2020-2045 RTP/SCS.

As discussed in detail in **Section IV.I., Population and Housing,** of this Draft EIR, the Project would include 220 dwelling units, resulting in approximately 530 new residents. The new residents at the Project Site would account for approximately 0.3 percent of SCAG's estimated population growth in the City by 2020, and less than 0.1 percent of SCAG's estimated population growth in the City by 2045. As such, the direct Project-related population growth in the City would not be substantial and would be within SCAG's planning projections.

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

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

As shown in **Table IV.I-3** in **Section IV.I., Population and Housing,** of this Draft EIR, the Project would result in an increase of 157 employees. Accordingly, the Project would account for 0.2 percent of SCAG's estimated increase of 65,996 jobs between 2018 and 2025, and less than 0.1 percent of SCAG's estimate increase of 267,686 jobs between 2018 and 2040. As such, the

direct Project-related employment growth in the City would not be substantial and would be within SCAG's planning projections.

The Project would comply with all SCAQMD rules and regulations that are in effect at the time of development; the Applicant is not requesting any exemptions from the currently adopted or proposed SCAQMD rules. Because the Project would not exceed SCAQMD thresholds for construction or operational emissions, no mitigation measures are required.

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the AQMP with those prepared by SCAG. Appendix IV-C to the 2022 AQMP for the Air Basin includes the regional land use and transportation strategies and the transportation control measures contained in SCAG's 2020–2045 RTP/SCS. For land use developments such as the Project, the AQMP's land use control measures (i.e., goals and policies) focus on the reduction of vehicle trips and VMT.

Therefore, the Project would be consistent population and employment growth projections upon which AQMP forecasted emission levels are based and is consistent with AQMP land use policies. Therefore, the Project is found to be consistent with the AQMP for the consistency criterion**.**

Based on the above, the Project will not result in an inconsistency with the SCAQMD AQMP. **Thus, the Project would not conflict with the 2022 AQMP and, as such, the Project would not conflict with or obstruct implementation of applicable air quality plans, and, therefore, the Project's impact on the AQMP would be less than significant.**

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

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

  With regard to land use developments, such as the Project, the AQMP's 2020-2045 RTP/SCS land use control measures (i.e., goals and policies) focus on the reduction of vehicle trips and VMT. CARB adopted a target reduction for the SCAG region of 19 percent for 2035 from passenger vehicle use. The Project would introduce a complementary mix of land uses contributing to the development of the Arts District as a major center for employment and retail services. 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). The increase in transit accessibility and the bicycle parking spaces provided on-site would further reduce vehicle trips and VMT by encouraging walking and non-automotive forms of

transportation. The Project's design would create a pedestrian-oriented streetscape, including new street trees, landscaping, and sidewalk paving elements. The Project's building frontage would allow for a variety of commercial uses along 5th Street and Seaton Street. In addition, two publicly accessible pedestrian paseos would provide connectivity between the building's frontages. The two paseos would provide access to the commercial uses and overall the Project would enhance pedestrian activity along 5th Street and Seaton Street.

The Project trip-generation estimates as calculated by the LADOT VMT model account for Project TDM measures including reduced parking supply and bicycle parking. Accounting for these TDM measures would result in a 13.6 percent reduction in Project-related transportation VMT and emissions in comparison to the standard rates within the LADOT VMT model for a project within the City. This reduction in VMT would support the goals of the 2020-2045 RTP/SCS with an estimated19-percent reduction in per capita GHG emissions from passenger vehicles by 2035 and 21-percent reduction in per capita GHG emissions from passenger vehicles by 2045. **Accordingly, the Project would support AQMP and RTP/SCS objectives of reducing VMT and the related vehicular air emissions.**

In conclusion, analysis of Threshold (a) is based on the Project's consistency with the AQMP as well as the City of Los Angeles' Air Quality Element goals, objectives, and policies that are relevant to the Project. 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 2022 AQMP, the Project would be consistent with the emissions forecasts in the AQMP. Furthermore, compliance with the regulatory requirements identified above and in Section IV.D, Greenhouse Gas Emissions, of this Draft EIR, no significant air quality impacts would occur and as such, the no air quality mitigation measures are necessary for the Project to meet this AQMP consistency criterion. Additionally, as the Project would support the City's and SCAQMD's objectives of reducing VMT and the related vehicular air emissions, the Project would be consistent with AQMP control measures.

(ii) City of Los Angeles General Plan Air Quality Element

The Air Quality Element of the City's General Plan sets forth goals, objectives, and policies that would guide the City in the implementation of its air quality improvement programs and strategies. A detailed analysis of the consistency of the Project with relevant policies in the Air Quality Element is presented in **Table IV.A-5, Project Consistency with Applicable Policies of the General Plan Air Quality Element**.

Table IV.A-5
Project Consistency with Applicable Policies of the General Plan Air Quality Element

Policy	Consistency Analysis
Goal 1: Good air quality and mobility in an environment of continued population growth and healthy economic structure.	**No Conflict.** The Project would provide residential uses and employment opportunities in close proximity to existing job centers in the downtown Los Angeles area where people can live/work and have access to modes of transportation that reduce reliance on automobiles and minimize associated air pollutant emissions. The Project would meet the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code. The Project would also reduce VMT as a result of its urban center location, with access to public transportation within a quarter-mile of the Project Site, and its proximity to job centers, retail, recreational amenities and entertainment and as such, does not exceed any SCAQMD thresholds. As a result, the Project would support objectives to achieve good air quality, mobility and a healthy economic structure.
Objective 1.1: It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan, increase traffic mobility, and sustain economic growth citywide.	**No Conflict.** The Project's land use characteristics and compliance with regulatory requirements would reduce emissions associated with energy and transportation. As discussed under Threshold a), the Project would be consistent with the SCAG growth projections that are used in preparing the AQMP. The Project would occupy a location that is highly accessible by regional and local bus lines and Metro rail. As such, the Project would be supportive of the Transportation Control Measures in the AQMP related to reducing vehicle trips for employees, visitors and residents. The Project would provide residential uses within an Urban Center, which would allow people to live near work and recreational amenities.
Objective 1.3: It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.	**No Conflict.** The Project would incorporate measures that would reduce particulate air pollutants from unpaved areas, parking lots, and construction sites. The Project would implement required control measures for construction-related fugitive dust pursuant to SCAQMD Rule 403. The Project would also comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks reducing exhaust DPM emissions. Project construction would 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. Project construction would also hat comply with the applicable provisions of the CARB Truck and Bus regulation

Table IV.A-5
Project Consistency with Applicable Policies of the General Plan Air Quality Element

Policy	Consistency Analysis
	to reduce PM and NO_X emissions from existing diesel trucks. The Project would also incorporate landscaped open spaces and trees.
Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.	**No Conflict.** The Project's land use characteristics (refer to the Project Description in this DEIR) would reduce trips and VMT due to its Urban Center location, with nearby access to public transportation within a quarter-mile of the Project site and location in an area with access to multiple other destinations, including job centers, and retail uses.
Objective 2.1: It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.	**No Conflict.** The Project includes residential apartments, retail and restaurant uses located in close proximity to transit. The Project Site is situated at the eastern edge of downtown Los Angeles and is within a Transit Priority Area. The Project Site is served by multiple Metro, LADOT, and Montebello Bus Line (MBL) bus lines. Local and rapid Metro bus lines also run in the Project vicinity on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line, the nearest stop of which is located at 4th Place and Hewitt Street, approximately 1,100 feet to the north of the Project Site. Additionally, the Little Tokyo/Arts District Metro L Line (formerly Gold Line) Light Rail Station is located approximately 0.6 mile to the north of the Project Site. The proximity of the Project Site to these transit stops would provide employees and residents easy access to the new development on the Project Site. Bicycle parking would be provided on the ground floor of the building and would accommodate 149 long-term and 31 short-term spaces.
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 VMT as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.	**No Conflict.** The Project includes residential apartments, retail and restaurant uses located in close proximity to transit. The Project Site is served by multiple Metro, LADOT, and MBL bus lines. Local and rapid Metro bus lines also run in the Project vicinity on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line, the nearest stop of which is located at 4th Place and Hewitt Street, approximately 1,100 feet to the north of the Project Site. Additionally, the Little Tokyo/Arts District Metro L Line (formerly Gold Line) Light Rail Station is located approximately 0.6 mile to the north of the Project Site. The proximity of the Project Site to these transit stops would provide employees and residents easy access to the new development on the Project Site. In addition, the Project would

Table IV.A-5
Project Consistency with Applicable Policies of the General Plan Air Quality Element

Policy	Consistency Analysis
	provide on-site short-term and long-term bicycle parking spaces. In addition, the Project will have 30 percent of the provided parking spaces be electric-vehicle ready and 10 percent of the provided parking spaces would have chargers for electric vehicles within the parking structure.
Objective 2.2: It is the objective of the City of Los Angeles to increase vehicle occupancy for non-work trips by creating disincentives for single-passenger vehicles, and incentives for high occupancy vehicles.	**No Conflict.** The Project's location would encourage nonautomotive transportation to and from the Project Site. As discussed previously, the Project would be located within a quarter-mile of public transportation. The Project would provide bicycle parking and pedestrian pathways for building residents, employees, and visitors. The Project would also include reduced parking supply to discourage automobile use in general. All of these factors would work to reduce single passenger vehicle trips.
Goal 4: Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.	**No Conflict.** The Project's characteristics would reduce VMT due to its Urban Center location, access to public transportation within a quarter-mile of the Project Site, close proximity to multiple other destinations including job centers and retail uses, its mix of residential, retail, and restaurant uses, and is pedestrian and bicycle-friendly.
Objective 4.1: It is the objective of the City of Los Angeles to include the regional attainment of ambient air quality standards as a primary consideration in land use planning	**No Conflict.** The Project analysis of potential air quality impacts relies upon the numeric indicators of significance adopted by the SCAQMD, which considers attainment of the ambient air quality standards. The Project impacts would be less than significant and would not cause or contribute to an exceedance of the ambient air quality standards.
Policy 4.1.2: Ensure that project level review and approval of land use development remain at the local level.	**No Conflict.** The Project environmental review would occur at the local level.
Objective 4.2: It is the objective of the City of Los Angeles to reduce vehicle trips and VMT associated with land use patterns.	**No Conflict.** The Project's location and land use characteristics would reduce trips and VMT due to its urban center location, access to public transportation within a quarter-mile of the Project site, and proximity to existing employment and commercial destinations, as would its mix of residential, retail, and restaurant uses on-site, and pedestrian- and bicycle-friendly features.
Policy 4.2.2: Improve accessibility for the City's residents to places of employment, shopping centers, and other establishments.	**No Conflict.** The Project includes the redevelopment of a site in the Central City North community and would provide a wide variety of compatible and complementary land uses. The Project Site is situated at the eastern edge of downtown Los Angeles and is within a Transit Priority Area. The Project Site is served by multiple Metro, LADOT, and MBL bus lines. Local and rapid

Table IV.A-5
Project Consistency with Applicable Policies of the General Plan Air Quality Element

Policy	Consistency Analysis
	Metro bus lines also run in the Project vicinity on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line, the nearest stop of which is located at 4th Place and Hewitt Street, approximately 1,100 feet to the north of the Project Site. Additionally, the Little Tokyo/Arts District Metro L Line (formerly Gold Line) Light Rail Station is located approximately 0.6 mile to the north of the Project Site. The proximity of the Project Site to these transit stops would provide employees and residents easy access to the new development on the Project Site.
Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	**No Conflict.** The Project proposes a mixed-use development that would include live-work apartments, office, and retail/restaurant land uses. The Project would enhance the pedestrian access along 5th Street and Seaton Street with sidewalk bump-outs, new and additional landscape features such as street trees and provide two landscaped paseos. The paseos would provide access to ground floor terraces, commercial uses, and amenities. The Project Site is served by multiple Metro, LADOT, and MBL bus lines. Local and rapid Metro bus lines also run in the Project vicinity on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line, the nearest stop of which is located at Place and Hewitt Street, approximately 1,100 feet to the north of the Project Site. Additionally, the Little Tokyo/Arts District Metro L Line (formerly Gold Line) Light Rail Station is located approximately 0.6 mile to the north of the Project Site. The proximity of the Project Site to these transit stops would provide employees and residents easy access to the new development on the Project Site. In addition, the Project would provide on-site short-term and long-term bicycle parking 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.	**No Conflict.** The air quality analysis conducted for the Project in this EIR serves to identify potential air quality impacts. The analysis in this EIR will be used by the City's decision makers in the review and approval process for the Project.
Policy 4.2.5 Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	**No Conflict.** The Project would provide a wide variety of compatible and complementary land uses. The Project Site is situated at the eastern edge of downtown Los Angeles and is within a Transit Priority Area. The Project Site is served by

Table IV.A-5
Project Consistency with Applicable Policies of the General Plan Air Quality Element

Policy	Consistency Analysis
	multiple Metro, LADOT, and MBL bus lines. Local and rapid Metro bus lines also run in the Project vicinity on Central Avenue, Alameda Street, and Palmetto Street. LADOT provides a DASH Downtown A line. Additionally, the Little Tokyo/Arts District Metro L Line (formerly Gold Line) Light Rail Station is located approximately 0.6 mile to the north of the Project Site. The proximity of the Project Site to these transit systems would work to reduce automobile trips and promote alternative modes of travel.
Objective 5.1: It is the objective of the City of Los Angeles to increase energy-efficiency of City facilities and private developments.	**No Conflict.** As noted above, the Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code, and the City of Los Angeles Green Building Code.
Policy 5.1.2: Effect a reduction in energy consumption and shift to nonpolluting sources of energy in its buildings and operations.	**No Conflict.** As noted above, the Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code, and the City of Los Angeles Green Building Code. 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 5.1.4: Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.	**No Conflict.** The Project would implement a construction waste management plan to divert all mixed construction and demolition debris to City certified construction and demolition waste processors, consistent with the Los Angeles City Council approved Council File 09-3029. Municipal solid waste would be collected by haulers that comply with City and state waste diversion (specifically AB 1327 and AB 341) requirements, which may include mixed waste processing that yields diversion results comparable to source separation.
Objective 5.3: It is the objective of the City of Los Angeles to reduce the use of polluting fuels in stationary sources.	**No Conflict.** As noted above, the Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code.
Policy 5.3.1: Support the development and use of equipment powered by electric or low-emitting fuels.	**No Conflict.** As noted above, the Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code, and the City of Los Angeles Green Building Code. The Project would also comply with City requirements for providing electric vehicle charging capabilities and electric

Table IV.A-5
Project Consistency with Applicable Policies of the General Plan Air Quality Element

Policy	Consistency Analysis
	vehicle charging stations within the proposed parking areas.
Source: City of Los Angeles, General Plan Air Quality Element, adopted November 1992.	

The Project would be consistent with the goals, objectives, and policies set forth in the City's General Plan Air Quality Element, as it would be generally consistent with the applicable air quality policies discussed above. **Therefore, Project would not conflict with the 2022 AQMP or the City of Los Angeles General Plan Air Quality Element and, as such, the Project would not conflict with or obstruct implementation of applicable air quality plans, and this impact would be less than significant.**

(b) Flexibility Option

Similar to the Project, the Flexibility Option would not conflict with the 2022 AQMP. As shown in **Table IV.A-8**, emissions resulting from short-term construction activities will not exceed the SCAQMD regional and local thresholds of significance which were developed to determine the emission levels at which significant contributions to air quality violations could occur. As shown in **Table IV.A-9** emissions resulting from long-term operations will also not exceed the regional thresholds of significance.

Therefore, as emissions from the Flexibility Option would not exceed the SCAQMD thresholds, the Flexibility Option would not contribute to the exceedance of any air pollutant concentration standards, 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, and is found to be consistent with the AQMP for the first criterion.

As discussed in detail in **Section IV.I., Population and Housing,** of this Draft EIR, the Flexibility Option would generate approximately 482 new residents at the Project Site, which would account for approximately 0.3 percent of SCAG's estimated population growth in the City by 2025, and less than 0.1 percent of SCAG's estimated population growth in the City by 2040. As such, the direct Flexibility Option-related population growth in the City would not be substantial and would be within SCAG's planning projections.

The Flexibility Option would result in an increase of 203 employees. Accordingly, the Flexibility Option would account for 0.3 percent of SCAG's estimated increase of 65,996 jobs between 2018 and 2025 and less than 0.1 percent of SCAG's estimated increase of 267,686 jobs between 2018 and 2040. As such, the direct Flexibility Option-related increase in employment would not be substantial and would be within SCAG's planning projections.

The Project would comply with all SCAQMD rules and regulations that are in effect at the time of development; the Applicant is not requesting any exemptions from the currently adopted or

proposed SCAQMD rules. Because the Project would not exceed SCAQMD thresholds for construction or operational emissions, no mitigation measures are required per the AQMP.

Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the integration of regional land use programs, measures, and strategies. SCAQMD combines its portion of the AQMP with those prepared by SCAG. Appendix IV-C to the 2022 AQMP for the Air Basin includes the regional land use and transportation strategies and the transportation control measures contained in SCAG's 2020–2045 RTP/SCS. For land use developments such as the Flexibility Option, the AQMP's land use control measures (i.e., goals and policies) focus on the reduction of vehicle trips and VMT. As an infill development located in an area extensively served by transit, the Flexibility Option would advance the goals of the AQMP and RTP/SCS to reduce VMT and related vehicle emissions. The Flexibility Option would be located in an area well-served by public transit provided by Metro, as well as is in proximity to several transit investment projects in planning and construction phases, including the Regional Connector and Little Tokyo/Arts District Metro Station relocation, expansion of the West Santa Ana line into the Arts District, and recently added DASH stops by LADOT to improve service in the Arts District. The Flexibility Option would include short-term and long-term bicycle facilities and create a pedestrian-friendly environment by providing commercial uses along 5th Street and Seaton Street.

The Flexibility Option would be consistent with population and employment growth projections upon which AQMP forecasted emission levels are based, includes air quality mitigation measures as required by the AQMP; and is consistent with AQMP land use policies. Therefore, the Flexibility Option is found to be consistent with the AQMP for the second criterion**.**

Based on the above, the Flexibility Option will not result in an inconsistency with the AQMP. In addition, for the same reasons detailed for the Project, the Flexibility Option would be consistent with the goals, objectives, and policies set forth in the City's General Plan Air Quality Element, as it would be generally consistent with the applicable air quality policies discussed In **Table IV.A-5**, above. The Flexibility Option would redevelop the site with compatible and complimentary land uses, and would be well served by existing public transit. **Therefore, the Flexibility Option would not conflict with the 2022 AQMP or the City of Los Angeles General Plan Air Quality Element and, as such, would not conflict with or obstruct applicable air quality plans, and this impact would be less than significant.**

(2) Mitigation Measures

The Project and the Flexibility Option would not conflict with the 2022 AQMP or the City of Los Angeles General Plan Air Quality Element and, as such, would not conflict with or obstruct implementation of applicable air quality plans. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

The Project and the Flexibility Option would not conflict with the 2022 AQMP or the City of Los Angeles General Plan Air Quality Element and, as such, would not jeopardize attainment of state and national ambient air quality standards in the area under the jurisdiction of the SCAQMD and would be less than significant without mitigation.

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

Numerical differences exist for this threshold because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

(1) Impact Analysis

(a) Project

(i) Construction

The Project would involve the demolition of the existing warehouses and surface parking lot, and the construction of an up to 249,758-square-foot mixed-use building including up to 220 live/work units, approximately 22,725 square feet of open space for residents, up to 46,548 square feet of commercial uses. A minimum of 381 parking spaces would be provided in three subterranean levels.

Construction activities associated with the Project would have the potential to generate air emissions, toxic air contaminant emissions, and odor impacts. Assumptions for the phasing, duration, and required equipment for the construction of the Project were obtained from the Project applicant. The construction activities for the Project are anticipated to include: demolition of three existing warehouse building totaling 35,445 square feet; site preparation of 18,564 square feet (approximately 0.43 acres) of existing paved parking/concrete surfaces; grading of approximately 1.24 acres; construction of a 249,758 square foot 8 story mixed-use building with 220 live/work apartment dwelling units, 4,350 square feet of live/work office use, 17,810 square feet of general office use, 19,609 square feet of restaurant use, and 9,129 square feet of retail use; on top of 3 level subterranean parking lot with 381 parking spaces; and application of architectural coatings. The Project would be constructed over approximately 24 months. Demolition activities are anticipated to start in 2024, and construction completion and occupancy is anticipated in 2025. Construction activities associated with the Project would be undertaken in four main steps: (1) demolition, (2) grading/excavation/foundation preparation, (3) building construction, and (4) application of architectural coatings. Demolition would occur for approximately one month and include to removal of the existing uses. Grading, excavation and foundation preparation would occur for approximately three months and this analysis assumes 81,000 cubic yards of soil will be exported. Building construction would occur for approximately

20 months, and would include the construction of the proposed structure, connection of utilities, laying irrigation for landscaping, then installation of landscaping. Application of architectural coatings would occur for approximately 2 months and would overlap the building construction phase.

These construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Construction activities involving demolition and grading would primarily generate $PM_{2.5}$ and PM_{10} emissions.

The SCAQMD has developed strategies (e.g., SCAQMD Rule 403 – Fugitive Dust) to reduce criteria pollutant emissions outlined in the AQMP pursuant to Federal CAA mandates. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes (up to three times per day), applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project Site, and maintaining effective cover over exposed areas. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the Project area (approximately 1.03 acres) and daily movement of approximately 1,350 cubic yards of soil per day[54], a Fugitive Dust Control Plan or Large Operation Notification would not be required. The calculations of peak daily emissions assume that appropriate dust control measures would be implemented as part of the Project during each phase of development, as required by SCAQMD Rule 403 - Fugitive Dust.

The Project will be required to comply with SCAQMD Rule 1113 as amended on June 3, 2011. Under this Rule, the VOC content of architectural coatings applied to buildings after January 1, 2014 must be limited to an average of 50 grams per liter or less.

Mobile sources (such as diesel-fueled equipment onsite and traveling to and from the Project Site) would primarily generate NO_x emissions. The amount of emissions generated on a daily basis would vary, depending on the amount and types of construction activities occurring at the same time.

The construction-related criteria pollutant emissions are shown below in **Table IV.A-6, Construction Related Regional Pollutant Emissions for the Project**. The maximum daily emissions are predicted values for a representative worst-case day, and do not represent the actual emissions that would occur for every day of construction, which would likely be lower on many days. Nonetheless, **Table IV.A-6, Construction-Related Regional Pollutant Emissions for the Project,** identifies daily emissions that are estimated to occur on peak construction days for the most impactful construction phases of the Project. Emissions associated with other construction phases would be below the Maximum Daily Emissions shown in Table IV.A-6.

[54] 81,000 cubic yards total export over 3 months (60 working days) = 1,350 cubic yards daily export.

Table IV.A-6
Construction-Related Regional Pollutant Emissions for the Project

Activity	Pollutant Emissions (pounds/day)					
	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions[1,2]	35.3[3]	78.8[4]	33.7[4]	0.25[4]	14.0[4]	5.18[4]
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

1 Includes both on-site and off-site emissions. On-site emissions are from equipment operated on-site that is not operated on public roads. Demolition, site preparation, and grading PM-10 and PM-2.5 emissions include compliance with SCAQMD Rule 403.
2 Construction and painting phases may overlap.
3 Maximum daily emissions that would occur during the Building Construction/Architectural Coating Phases.
4 Maximum daily emissions that would occur during the Demolition, Site Preparation and Grading Phases.
Source: CalEEMod Version 2022.1. Output, available in Appendix B of this Draft EIR.

Table IV.A-6 shows that none of the Project's emissions will exceed regional thresholds. **Therefore, regional construction emissions resulting from the Project would result in a less than significant impact.**

(ii) Operation

The on-going operation of the Project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the Project-generated vehicle trips and through operational emissions from the ongoing operation of the Project. The following section provides an analysis of potential long-term air quality impacts due to regional air quality and local air quality impacts with the ongoing operations of the Project.

The Project would involve the demolition of the existing warehouses and surface parking lot, and the construction of an up to 249,758-square-foot mixed-use building including up to 220 live/work units, approximately 22,725 square feet of open space for residents, up to 46,548 square feet of commercial uses. A minimum of 381 parking spaces would be provided in three subterranean levels. The potential operations-related air emissions have been analyzed below for the criteria pollutants and cumulative impacts. The worst-case summer or winter criteria pollutant emissions created from the Project's long-term operations have been calculated and are shown below in **Table IV.A-7, Regional Operational Pollutant Emissions for the Project**. The results show that none of the SCAQMD regional thresholds would be exceeded. **Therefore, regional operational emissions resulting from the Project would result in a less than significant impact.**

Table IV.A-7
Regional Operational Pollutant Emissions for the Project

Operational Activities	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	18.6	14.4	91.7	0.18	5.67	1.56
- Maximum Daily Emissions from Existing Industrial Use (being removed)	-1.56	-0.92	-5.46	-0.01	-0.39	-0.10
Net Maximum Daily Emissions	**17.04**	**13.48**	**86.24**	**0.17**	**5.28**	**1.46**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod Version 2022.1 the higher of either summer or winter emissions for the project and the lower of either summer or winter emissions for the existing uses. CalEEMod Output available in Appendix B of this EIR.

Based on the analyses above, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, and impacts would be less than significant.

(b) Flexibility Option

(i) Construction

Under the Flexibility Option, the commercial square footage provided would be increased to 64,313 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 200 units. The construction schedule would be similar under both scenarios, however, while the Flexibility Option would have similar construction assumptions, construction emissions may vary due to the alternative square footages for residential and office uses. The worst-case summer or winter criteria pollutant emissions created from the construction-related criteria pollutant emissions for each phase have been calculated and are provided in **Table IV.A-8, Construction-Related Regional Pollutant Emissions for the Flexibility Option.**

Table IV.A-8
Construction-Related Regional Pollutant Emissions for the Flexibility Option

Activity	Pollutant Emissions (pounds/day)					
	ROG	NOx	CO	SO_2	PM10	PM2.5
Maximum Daily Emissions[1,2]	38.8[3]	78.8[4]	33.7[4]	0.25[4]	14.0[4]	5.18[4]
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

1 Includes both on-site and off-site emissions. On-site emissions are from equipment operated on-site that is not operated on public roads. Demolition, site preparation, and grading PM-10 and PM-2.5 emissions include compliance with SCAQMD Rule 403.
2 Construction and painting phases may overlap.
3 Maximum daily emissions that would occur during the Building Construction/Architectural Coating Phases.
4. Maximum daily emissions that would occur during the Demolition, Site Preparation and Grading Phases.
Source: CalEEMod Version 2022.1. Output, available in Appendix B of this Draft EIR.

Table IV.A-8 shows that none of the Flexibility Option's emissions will exceed regional thresholds. **Therefore, regional construction emissions resulting from the Flexibility Option would result in a less than significant impact.**

(ii) Operation

Under the Flexibility Option, the commercial square footage provided would be increased to 64,313 square feet within the same building parameters and, in turn, there would be a reduction in the overall number of live/work units for a total of 200 units. The daily operational emissions associated with the Flexibility Option are presented in **Table IV.A-9, Regional Operational Pollutant Emissions for the Flexibility Option**.

Table IV.A-9
Regional Operational Pollutant Emissions for the Flexibility Option

Operational Activities	Pollutant Emissions (pounds/day)					
	VOC	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	19.4	13.8	92.8	0.18	5.77	1.56
- Maximum Daily Emissions from Existing Industrial Use (being removed)	-1.56	-0.92	-5.46	-0.01	-0.39	-0.10
Net Maximum Daily Emissions	**17.84**	**12.88**	**87.34**	**0.17**	**5.38**	**1.46**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod Version 2022.1 the higher of either summer or winter emissions for the project and the lower of either summer or winter emissions for the existing uses. CalEEMod Output available in Appendix B of this EIR.

The potential operations-related air emissions have been analyzed below for the criteria pollutants and cumulative impacts. The worst-case summer or winter criteria pollutant emissions created from the Flexibility Option's long-term operations have been calculated and are shown in **Table IV.A-9, Regional Operational Pollutant Emissions for the Flexibility Option**. The results show that none of the SCAQMD regional thresholds would be exceeded. **Therefore, regional operational emissions resulting from the Flexibility Option would result in a less than significant impact.**

Based on the analyses above, the Flexibility Option's contribution to regional emissions would not be cumulatively considerable and, thus, would be less than significant.

(2) Mitigation Measures

The Project and the Flexibility Option would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

The Project and the Flexibility Option would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project Site region is non-attainment under an applicable federal or state ambient air quality standard and would be less than significant without mitigation.

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

Numerical differences exist for this threshold because of the differences in project parameters between the Project and Flexibility Option, therefore these analyses are presented separately.

(1) Impact Analysis

(a) Project

(i) Construction

a. Localized On-Site Daily Emission Impacts

Emissions from construction activities have the potential to generate localized emissions that may expose sensitive receptors to harmful pollutant concentrations. SCAQMD has developed localized significance threshold (LST) look-up tables for project sites that are one, two, and five acres in size to simplify the evaluation of localized emissions at small sites. LSTs are provided for each Source Receptor Area (SRA) and various distances from the source of emissions. In the case of this analysis, the Project Site is located within SRA 1[55] covering the Central Los Angeles area.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. These ambient air quality standards were established at levels that provide public health protection and allow adequate margin of safety, including protecting the health of sensitive populations such as asthmatics, children, and the elderly.

Construction-related air emissions may have the potential to exceed the state and federal air quality standards in the Project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Basin. The Project has been analyzed for the potential local air quality impacts created from: fugitive dust and diesel emissions; from toxic air contaminants; and from construction-related odor impacts.

[55] SCAQMD, Air Quality Analysis Handbook, Localized Significance Thresholds, http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed August 23, 2022.

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds"[56]. CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the localized significance threshold lookup tables, the CEQA document should contain in its Project design features or its mitigation measures the following parameters:

1. The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.

2. The maximum number of acres disturbed on the peak day.

3. Any emission control devices added onto off-road equipment.

4. Specific dust suppression techniques used on the day of construction activity with maximum emissions.

The CalEEMod output in **Appendix B** of this Draft EIR show the equipment used for this analysis.

As shown in **Table IV.A-10, Maximum Number of Acres Disturbed Per Day,** the maximum number of acres disturbed in a day would be two acres during demolition. The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance Threshold Methodology prepared by SCAQMD (revised July 2008). The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM_{10}, and $PM_{2.5}$ from the Project could result in a significant impact to the local air quality. The emission thresholds were calculated based on the Central Los Angeles SRA 1.

Table IV.A-10
Maximum Number of Acres Disturbed Per Day

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Demolition	Rubber Tired Dozers	1	0.5	0.5
	Tractors/Loaders/Backhoes	3	0.5	1.5
Total for phase		**-**	**-**	**2**
Site Preparation	Tractors/Loaders/Backhoes	1	0.5	0.5
Total for phase		-	-	**0.5**
Grading	Rubber Tired Dozers	1	0.5	0.5
	Graders	1	0.5	0.5
	Tractors/Loaders/Backhoes	1	0.5	0.5
Total for phase		-	-	**1.5**
Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.				

[56] SCAQMD, Air Quality Analysis Handbook, Localized Significance Thresholds, http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed August 23, 2022.

According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. The nearest sensitive receptors are the residential portions of the mixed-use land uses located approximately 55 feet north of the Project Site; therefore, the SCAQMD Look-up Tables for 25 meters was used. **Table IV.A-11, Local Construction Emissions at the Nearest Receptors**, shows the on-site emissions from the CalEEMod model for the different construction phases and the LST emissions thresholds.

Table IV.A-11
Local Construction Emissions at the Nearest Receptors

Activity	On-Site Pollutant Emissions (pounds/day)			
	NO_x	**CO**	**PM_{10}**	**$PM_{2.5}$**
Demolition	18.5	17.3	1.54	0.88
Site Preparation	16.8	14.1	3.25	1.91
Grading	18.2	15.1	3.64	2.14
Building Construction	9.81	10.2	0.41	0.38
Architectural Coating	0.91	1.15	0.03	0.03
Maximum Unmitigated Daily Localized Emissions	**18.5**	**17.3**	**3.64**	**2.14**
SCAQMD Thresholds[a]	**108**	**1,048**	**8**	**5**
Exceeds Threshold?	No	No	No	No

[a] *The nearest sensitive receptors to the project include the residential portions of the mixed-use land uses located approximately 55 feet (~17 meters) to the north (across East 5th Street); therefore, the 25 meter threshold was used. Note: The Project would disturb up to a maximum of 2 acres a day (see Table IV.A-12).*

Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres at a distance of 25 m in SRA 1 Central Los Angeles.

The data provided in **Table IV.A-11** shows that none of the analyzed criteria pollutants would exceed the calculated local emissions thresholds at the nearest sensitive receptors. **Therefore, localized construction emissions resulting from the Project would result in a less than significant impact.**

b. Toxic Air Contaminants

With respect to TACs, the greatest potential for TAC emissions resulting from construction of the Project would involve diesel particulate emissions associated with trucks and heavy equipment. Based on SCAQMD guidance, health effects from TACs are usually described in terms of individual cancer risk, which is the likelihood that a person exposed to TACs over a 70-year lifetime will contract cancer. Project construction activity would not result in long-term substantial sources of TAC emissions (i.e., 30 or 70 years) and would not generate ongoing construction TAC emissions. Given the temporary and short-term construction schedule (approximately 24 months), the Project would not result in a long-term (i.e., lifetime or 30-year) exposure as a result of Project construction. Additionally, the SCAQMD CEQA guidance does not require a health risk assessment (HRA) for short-term construction emissions. It is, therefore, not necessary to evaluate long-term cancer impacts from construction activities which occur over a relatively short duration. In addition, there would be no residual emissions or corresponding individual cancer risk after construction. Furthermore, as shown in **Tables IV.A-6** and **IV.A-11** above, construction-

based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds.

In addition, the construction activities associated with the Project would be similar to other development projects in the City, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, state, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. The Project would be consistent with applicable AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. The Project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. The Project would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the demolition activities. **Project construction activities would not expose sensitive receptors to substantial concentrations of TACs**. **Thus, TAC emissions from construction of the Project would be less than significant.**

(ii) Operations-Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the state and federal air quality standards in the Project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. The Project has been analyzed for the potential local CO emission impacts from the Project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analysis analyzes the vehicular CO emissions, local impacts from onsite operations per LST methodology, and odor impacts.

a. Localized Carbon Monoxide Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the state and federal CO standards which were presented above.

The Traffic Study showed that the Project would generate a maximum of approximately 2,750 trips. The intersection with the highest traffic volume near the Project Site is located at the intersection of 4th Street /Alameda Street and has a Future Cumulative with Project evening peak hour volume of 1,767 vehicles. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. Therefore, as the highest traffic volumes for the Project would fall far short of 100,000 vehicles, no CO "hot spot" modeling was performed**. Project off-site operational activities 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.**

b. Local Air Quality Impacts from On-Site Operations

The nearest sensitive receptors that may be impacted by the proposed Flexibility Option are the multi-family live/work units located approximately 55 feet north (across 5th Street), the Arts District Park located approximately 365 feet east, and the multi-family attached residential uses located approximately 590 feet to the east of the Project Site.

The local air quality emissions from on-site operations were analyzed according to the methodology described in *Localized Significance Threshold Methodology*, prepared by SCAQMD, revised July 2008. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. Per SCAQMD staff, the Look-up Tables can be used as a conservative screening analysis for on-site operational emissions to determine whether more-detailed dispersion modeling would be necessary. The Project was analyzed based on the Central source receptor area (SRA) 1 and, as the site is 1.02 acres, the thresholds for a 1-acre project site was used.

Table IV.A-12 shows the on-site emissions from the CalEEMod model that includes natural gas usage, landscape maintenance equipment, vehicles operating on-site, and the emergency back-up generator, and the calculated emissions thresholds. Per LST methodology, mobile emissions include only on-site sources which equate to approximately 10 percent of the project-related new mobile sources.[57] The data provided in **Table IV.A-12** shows that the on-going operations of the proposed project would not exceed SCAQMD local operational thresholds of significance discussed above. **Therefore, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to on-site emissions and no mitigation would be required.**

The Project would consist of the development of live-work apartments, offices, and retail/restaurant land uses, and would not include any industrial or other land uses involving the use, storage, or processing of carcinogenic or non-carcinogenic toxic chemicals or air contaminants, or the generation of high levels of diesel truck activity.

[57] The Project Site is approximately 0.07 miles in length at its longest point; therefore, the on-site mobile source emissions represent approximately 1/90th of the shortest CalEEMod default distance of 6.39 miles. Therefore, to be conservative, 1/10th the distance (dividing the mobile source emissions by 10) was used to represent the portion of the overall mobile source emissions that would occur on-site.

Table IV.A-12
Local Operational Emissions at the Nearest Receptors

On-Site Emissions Source	On-Site Pollutant Emissions (pounds/day)[a]			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Area Sources[b]	3.48	22.7	0.27	0.27
Energy Usage[c]	1.89	1.06	0.15	0.15
Vehicle Emissions[d]	0.65	6.55	0.51	0.10
Stationary Source[e]	2.75	2.51	0.14	0.14
Total Daily Localized Emissions	**8.77**	**32.82**	**1.07**	**0.66**
SCAQMD Thresholds	**74**	**680**	**2**	**1**
Exceeds Threshold?	No	No	No	No

[a] *The nearest sensitive receptors to the project include the residential portions of the mixed-use land uses located approximately 55 feet (~17 meters) to the north (across East 5th Street); therefore, the 25 meter threshold was used.*
[b] *Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.*
[c] *Energy usage consists of emissions from on-site natural gas usage.*
[d] *On-site vehicular emissions based on 1/10 of the gross vehicular emissions and road dust.*
[e] *On-site emissions from testing and infrequent use of emergency back-up generator.*
Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 1 acre at a distance of 25 m in SRA 1 Central Los Angeles.

The SCAQMD recommends that operational health risk assessments be conducted for substantial sources of operational DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.[58] Project operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance activities. The Project would not include these types of land uses and is not considered to be a substantial source of DPM warranting a refined HRA since daily truck trips to the Project Site would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. Furthermore, Project trucks are required to comply with the applicable provisions of the CARB 13 CCR, Section 2025 (Truck and Bus regulation) to minimize and reduce PM and NOx emissions from existing diesel trucks. Therefore, the Project operations would not be considered a substantial source of diesel particulates.

In addition, Project operations would only result in minimal emissions of air toxics from maintenance or other ongoing activities, such as from the use of architectural coatings and other products. Area sources that would generate TAC emissions include charbroiling activities associated with the restaurant uses and consumer products associated with re-applying architectural coatings and cleaning building surfaces. Charbroiling has the potential to generate small amounts of chemicals that are known or suspected by the State of California to cause human health impacts. However, restaurants incorporating charbroiling in the Air Basin would be

[58] SCAQMD, Air Quality Analysis Handbook, Mobile Source Toxics Analysis, http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. Accessed August 23, 2022.

required to comply with SCAQMD Rule 1138 (Control of Emissions from Restaurant Operations), which requires the installation of emissions controls on charbroilers.

With respect to the use of consumer products and architectural coatings, the residential and retail uses associated with the Project would be expected to generate minimal emissions from these sources. The Project's land uses would not include installation of industrial-sized paint booths or require extensive use of commercial or household cleaning products. As a result, toxic or carcinogenic air pollutants are not expected to occur in any substantial amounts in conjunction with operation of the proposed land uses within the Project Site. Based on the uses expected on the Project Site, potential long-term operational impacts associated with the release of TACs would be minimal, regulated, and controlled, and would not be expected to exceed the SCAQMD numerical indicator of significance.

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.

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

(b) Flexibility Option

(i) Construction

Similar to the Project, peak daily emissions during construction for the Flexibility Option would not exceed the applicable construction LSTs for 2-acres of disturbance in SRA 1.

As shown in **Table IV.A-13, Maximum Number of Acres Disturbed Per Day Flexibility Option**, the maximum number of acres disturbed in a day would be 2 acres during demolition. The local air quality emissions from construction of the Flexibility Option were analyzed using same methodology as was used for the Project.

Table IV.A-13
Maximum Number of Acres Disturbed Per Day for the Flexibility Option

Flexibility Option				
Demolition	Rubber Tired Dozers	1	0.5	0.5
	Tractors/Loaders/Backhoes	3	0.5	1.5
Total for phase		-	-	**2**
Site Preparation	Tractors/Loaders/Backhoes	1	0.5	0.5
Total for phase		-	-	**0.5**
Grading	Rubber Tired Dozers	1	0.5	0.5
	Graders	1	0.5	0.5
	Tractors/Loaders/Backhoes	1	0.5	0.5
Total for phase		-	-	**1.5**

Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2011b.

The nearest sensitive receptors to the Flexibility Option are the same as for the Project Site. **Table IV.A-14, Local Construction Emissions at the Nearest Receptors Flexibility Option** shows the on-site emissions from the CalEEMod model for the different construction phases and the LST emissions thresholds.

Table IV.A-14
Local Construction Emissions at the Nearest Receptors for the Flexibility Option

Activity	On-Site Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Demolition	18.5	17.3	1.54	0.88
Site Preparation	16.8	14.1	3.25	1.91
Grading	18.2	15.1	3.64	2.14
Building Construction	9.81	10.2	0.41	0.38
Architectural Coating	18.5	17.3	1.54	0.88
SCAQMD Thresholds[a]	**108**	**1,048**	**8**	**5**
Exceeds Threshold?	No	No	No	No

[a] *The nearest sensitive receptors to the project include the residential portions of the mixed-use land uses located approximately 55 feet (~17 meters) to the north (across East 5th Street); therefore, the 25 meter threshold was used. Note: The Base Scheme and Increased Flexibility Option will both disturb up to a maximum of 2 acres a day during demolition (see Table IV.A-14).*

Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres at a distance of 25 m in SRA 1 Central Los Angeles.

The data provided in **Table IV.A-14,** shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. **Therefore, localized construction emissions resulting from the Flexibility Option would result in a less than significant impact.**

With respect to TACs, similar to the Project, the Flexibility Option would not result in a long-term (i.e., lifetime or 30-year) exposure as a result of construction. Furthermore, as shown above in **Tables IV.A-8** and **IV.A-13**, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds.

The construction activities associated with the Flexibility Option would be similar to other development projects in the City, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, state, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. **Thus, TAC emissions from construction of the Flexibility Option would be less than significant.**

(ii) Operation-Related Local Air Quality Impacts

Similar to the Project, the Flexibility Option has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analysis analyzes the vehicular CO emissions, local impacts from onsite operations per LST methodology, and odor impacts.

The local air quality emissions from on-site operations of the Flexibility Option were analyzed according to the methodology described in *Localized Significance Threshold Methodology*, prepared by SCAQMD, revised July 2008. The proposed Project was analyzed based on the Central source receptor area (SRA) 1 and the thresholds for a 1-acre project site was used.

Table IV.A-15 shows the on-site emissions from the CalEEMod model that includes natural gas usage, landscape maintenance equipment, vehicles operating on-site, and the emergency back-up generator, and the calculated emissions thresholds. Per LST methodology, mobile emissions include only on-site sources which equate to approximately 10 percent of the Flexibility Option-related new mobile sources.[59] The data provided in **Table IV.A-15** shows that the on-going operations of the Flexibility Option would not exceed SCAQMD local operational thresholds of significance discussed above either. **Therefore, the Flexibility Option's contribution to local operational air quality emissions would not be cumulatively considerable and, thus, would be less than significant. No mitigation measures are required.**

Table IV.A-15
Local Operational Emissions at the Nearest Receptors for the Flexibility Option

	On-Site Pollutant Emissions (pounds/day)[a]			
On-Site Emissions Source	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area Sources[b]	3.18	22.2	0.26	0.26
Energy Usage[c]	1.87	1.10	0.15	0.15
Vehicle Emissions[d]	0.66	6.70	0.52	0.10
Stationary Source[e]	2.75	2.51	0.14	0.14
Total Daily Localized Emissions	**8.46**	**32.51**	**1.07**	**0.24**
SCAQMD Thresholds	**74**	**680**	**2**	**1**
Exceeds Threshold?	No	No	No	No

[a] *The nearest sensitive receptors to the Flexibility Option include the residential portions of the mixed-use land uses located approximately 55 feet (~17 meters) to the north (across East 5th Street); therefore, the 25 meter threshold was used.*
[b] *Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.*
[c] *Energy usage consists of emissions from on-site natural gas usage.*
[d] *On-site vehicular emissions based on 1/10 of the gross vehicular emissions and road dust.*
[e] *On-site emissions from testing and infrequent use of emergency back-up generator.*
Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 1 acre at a distance of 25 m in SRA 1 Central Los Angeles.

(iii) Localized Carbon Monoxide Impacts from Flexibility Option-Generated Vehicular Trips

The Traffic Study showed that the Flexibility Option would generate a maximum of approximately 2,797 total trips. The intersection with the highest traffic volume near the Project Site is located at the intersection of 4th Street/Alameda Street and has a Future Cumulative with Project evening

[59] The Project Site is approximately 0.07 miles in length at its longest point; therefore, the on-site mobile source emissions represent approximately 1/90th of the shortest CalEEMod default distance of 6.39 miles. Therefore, to be conservative, 1/10th the distance (dividing the mobile source emissions by 10) was used to represent the portion of the overall mobile source emissions that would occur on-site.

peak hour volume of 1,767 vehicles. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. **Therefore, as the highest traffic volumes at this intersection would fall short of 100,000 vehicles, no CO "hot spot" modeling was performed and no significant long term air quality impact is anticipated to local air quality with the ongoing use of the Flexibility Option.**

(iv) Toxic Air Contaminants

The Flexibility Option would consist of the development of live-work apartments, offices, and retail/restaurant land uses, and would not include any industrial or other land uses involving the use, storage, or processing of carcinogenic or non-carcinogenic toxic chemicals or air contaminants, or the generation of high levels of diesel truck activity.

In addition, Flexibility Option operations would only result in minimal emissions of air toxics from maintenance or other ongoing activities. Area sources that would generate TAC emissions include charbroiling activities associated with the restaurant uses and consumer products associated with re-applying architectural coatings and cleaning building surfaces. However, restaurants incorporating charbroiling in the Air Basin would be required to comply with SCAQMD Rule 1138 (Control of Emissions from Restaurant Operations), which requires the installation of emissions controls on charbroilers.

With respect to the use of consumer products and architectural coatings, the residential and retail uses associated with the Flexibility Option would be expected to generate minimal emissions from these sources. Similar to the Project, based on the uses expected on the Project Site under the Flexibility Option, potential long-term operational impacts associated with the release of TACs would be minimal, regulated, and controlled, and would not be expected to exceed the SCAQMD numerical indicator of significance. **Therefore, impacts to sensitive receptors associated with the release of TACs from the Flexibility Option would be less than significant. No mitigation measures are required.**

(2) Mitigation Measures

The Project and the Flexibility Option would not expose sensitive receptors to substantial pollutant concentrations. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

The Project and the Flexibility Option would not expose sensitive receptors to substantial pollutant concentrations and would be less than significant without mitigation.

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

(1) Impact Analysis

As discussed in the Initial Study (**Appendix A.2**), the Project and the Flexibility Option would have no impact with respect to Threshold (d).

Furthermore, according to the SCAQMD *CEQA Air Quality Handbook*, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. As the Project and the Flexibility Option would not include operational elements related to industrial projects, no long-term operational objectionable odors are anticipated. **Therefore, potential impacts associated with objectionable odors would be less than significant**.

(2) Mitigation Measures

The Project and the Flexibility Option would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

The Project and the Flexibility Option would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people and would have no impact

4. 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 17 related projects are located in the vicinity of the Project Site. A map of the related project locations is provided in **Figure III-2, Location of Related Projects** in **Section III, Environmental Setting**, of this Draft EIR.

a) Impact Analysis

Due to the similarity in land uses, operational characteristics and project design features between the Project and the Flexibility Option, the impacts of the Project and the Flexibility Option related to cumulative air quality impacts would be essentially the same. Therefore, the conclusions regarding the impact analysis and impact significance determination presented below for the Project would be the same under the Flexibility Option.

(1) Construction

As discussed under the thresholds above, the Project's construction-related air quality emissions and cumulative impacts would be less than significant. The Project would comply with regulatory requirements. Furthermore, 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 contribution of the Project and Flexibility Option to cumulative air quality impacts from construction emissions would not be cumulatively considerable and, therefore, would be less than significant.**

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 toxic emission impacts of the Project and Flexibility Option during construction would be less than significant.**

(2) Operation

Cumulative projects include local development as well as general growth within the Project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. Accordingly, the cumulative analysis for the Project's air quality is regional in nature.

The Project area is out of attainment for ozone and in 2018 was out of attainment for PM_{10}. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the Basin. The greatest cumulative impact on the quality of regional Basin will be the incremental addition of pollutants mainly from increased traffic volumes from residential, commercial, and industrial development. However, in accordance with the SCAQMD methodology, emissions from individual projects that do not exceed the SCAQMD criteria, or can be mitigated to less than criteria levels, are not significant. A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant.

Project operations would generate emissions of NO_x, ROG, CO, PM_{10}, and $PM_{2.5}$, that would not exceed the SCAQMD regional or local thresholds.

Since the Project would not introduce any substantial stationary sources of emissions, CO is the benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations. As indicated earlier, no violations of the state and federal CO standards are projected to occur for the Project, based on the magnitude of traffic the Project is anticipated to create. **Therefore, operation of the Project and the Flexibility Option would not result in a cumulatively considerable net increase for non-attainment of criteria pollutants or ozone precursors. As a result, the Project and the Flexibility Option would result in a less than significant cumulative impact for operational emissions.**

b) Mitigation Measures

Under both the Project and the Flexibility Option, cumulative impacts related to Air Quality impacts would be less than significant. Therefore, no additional mitigation would be required.

c) Level of Significance After Mitigation

Under both the Project and the Flexibility Option, cumulative impacts related to Air Quality impacts would be less than significant. Therefore, no additional mitigation would be required.